

**Dietetics in
Health Care
Communities**

a dietetic practice group of the
 **eat
right.**™ American Dietetic
Association

Dietetics In Health Care Communities (DHCC) Inservice Manual 2010

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PREFACE

Dietetics in Health Care Communities (DHCC), a dietetic practice group of the American Dietetic Association recognizes the importance of quality in-service education for all staff of long term care facilities, sub-acute units, home health care associations, hospice agencies, correction facilities and other food service settings. Our Inservice Manual was designed to be comprehensive and user-friendly and consequently has been a well-received teaching tool by dietetic practitioners working in these areas.

Inservice education is an ongoing process, in part due to staff turnover as well as the need to review information to obtain improved understanding of the topic. The target audiences for these inservices are food service workers, nursing assistants, all facility staff and licensed nursing staff.

Many contributors and reviewers have worked on this publication, now in its 3rd revision to ensure its contents will meet the educational needs of food service, nursing and staff personnel in the facilities we serve.

We wish to thank the authors and reviewers for their dedication and countless hours writing and reviewing this material. A special thanks Kathy Weigand, RD, LD/N, and Cindy Thomas, RD, CD, for their work as project managers and editors.

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Dietetics in Health Care Communities

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Additional Information and Updates

With this initial offering, there are 2 PowerPoint presentations that staff members will be able to view at their convenience or that can be used for the inservice presentation. There will be more available as the year goes on.

Purchasing this download will allow the purchaser to download the entire **Inservice Manual** a total of five (5) times. Updates, additions and further PowerPoint presentations may be downloaded for a year after purchase without further cost.

Dietetics in Health Care Communities

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Sanitation and Infection Control



F-Tags for Nutrition Services

Survey Readiness-

- F-tags associated with the survey process
- The information provided in this section is from the CMS State Operations Manual (SOM) that is available in every nursing home facility. Review the F-tags for complete details under Guidance for Surveyors.
- Check your state regulations for differences from the CMS F-tags.
- Notes are not part of the SOM but authors enhancement of subject.
- State Operations Manual (SOM) http://cms.gov/manuals/Downloads/som107ap_pp_guidelines_ltcf.pdf Appendix PP

1. Infection control, Standard precautions, HIV, Hepatitis, Food borne illness and Hand washing are covered under F-tag 441. The tags pertaining to food service are **F-441, F-443 and F-444**. These are found on pages pp-559-597 of SOM. http://cms.gov/manuals/Downloads/som107ap_pp_guidelines_ltcf.pdf Appendix PP

F- 441 the facility must establish and maintain an infection control program designed to provide a safe, sanitary and comfortable environment and to help prevent the development and transmission of disease and infection.

Guideline to surveyor: (This is what the surveyor uses to interpret the regulation) The intent of this regulation is to assure that the facility has an infection control program, which is effective for investigating, controlling and preventing infections. Also, maintains a record of infections and corrective actions related to infections.

F-443 The facility must prohibit employees with a communicable disease or infected skin lesions from direct contact with residents or their food, if direct contact will transmit the disease.

Guideline to surveyor: (This is what the surveyor uses to interpret the regulation)

The intent of this regulation is to prevent the spread of communicable diseases from employees to residents by transmitting the disease or by skin lesions.

F-444 The facility must require staff to wash hands after each direct resident contact for which hand washing is indicated by accepted practice. **F-371** also mentions hand washing in relation to food preparation. The facility must have a written protocol describing handwashing practices that is consistent with the latest published standards. Do the staff follow these procedures?

Note: the guidelines to surveyors does not mention in detail the food service employee specific times to wash hands. This is covered in the Federal Food Code 2009 under Special Hand washing Procedures and under the hand washing inservices. <http://www.fda.gov/Food/FoodSafety/RetailFoodProtection/FoodCode/FoodCode2009/>

NOTE: The Food Code is not a regulations and cannot be enforced as such. They are recommendations. (Reference 2005 Long Term Care Survey Resource Guide Version 2005.3. States require various regulations; the most restrictive regulation is always enforced. Be certain to check state regulations;

2. Safe Food Handling Practices: Food temperatures, Cleaning & sanitizing of dishes and utensils, Kitchen sanitation, Food borne illness, HACCP, Hazardous Chemicals and Standard Precautions

F-371 Store, prepare, distribute, and serve food under sanitary conditions. This is found on pp 465 of SOM.

Guideline to surveyor: (This is what the surveyor uses to interpret the regulation)

This section is extensive and Food Service Managers should know the contents and be able to discuss it with a surveyor.

“Sanitary conditions is defined as storing, preparing, distributing and serving food properly to prevent food borne illness. Potentially hazardous foods must be subject to continuous time/temperature controls in order to prevent either the rapid and progressive growth of infectious or toxigenic micro-organisms such as Salmonella or the slower growth of Clostridium Botulism.” In addition, foods of plant origin become potentially hazardous when the skin, husk, peel or rind is breached, thereby possibly contaminating the fruit or vegetable with disease causing microorganisms. Potentially hazardous food tends to focus on animal products, including but not limited to milk, eggs and poultry.

The other areas covered under F-371 guidelines are:

- Improper holding temperatures,
- HACCP (hazard analysis critical control point),
- Refrigerator storage,
- Hot foods above 135° F, cold foods 41 degrees F or below and frozen foods 0 ° For lower
- Observe storage and cooking, cooling of foods
- Food preparation
- Hand washing and hand sinks
- Taking food temperatures
- Food distribution
- Pest control
- Chemical storage
- Food storage rooms
- Dishwasher temperatures, chemicals and operation
- 3 compartment sink, hot water and set up

Note: it is imperative you understand this F-tag because this violation is given more than any other in the nation.

3. Cleaning and Sanitizing of Dishes and Utensils

F-456 The facility must maintain all essential mechanical, electrical and patient care equipment in safe operating condition.

Note: This tag is used to determine water temperature. It is important to monitor, hand sinks, pot and pan sinks and dishwater to assure that water is above 110 degrees F. but not so hot as to burn employee hands when hand washing. The dishwasher temp will depend on whether it is a low temp (120 degrees) or high temp machine (180 degrees).

F-466 The facility must establish procedures to ensure that water is available to essential areas when there is a loss of water supply . Water must be available to essential areas when there is a loss of normal water supply.

Note: Potential for this tag to be used depending on circumstances during survey.

Guideline to surveyor: (This is what the surveyor uses to interpret the regulation)

The facility should have a written protocol which defines the source of water provisions for storing the water, both potable and non-potable, a method of distributing water and a method for estimating the volume of water required.

Guideline to surveyor: (This is what the surveyor uses to interpret the regulation)

This section is extensive and Food Service Managers should know the contents and be able to discuss it with a surveyor.

4. Pest Control

F- 469 The facility must maintain an effective pest control program so that the facility is free of pests and rodents.

Guideline to surveyor: (This is what the surveyor uses to interpret the regulation)

An “effective pest control program” is defined as measures to eradicate and contain common household pests (e.g., rodents, roaches, ants, mosquitoes, flies)

Standard Precautions

Learning Objectives:

Upon completion of this inservice, the participant will be able to:

1. List potentially hazardous body fluids;
2. List personal protective equipment and recognize symbols;
3. Demonstrate correct cleaning and handling procedures.

What Are Standard Precautions?

- A. Preventative measures that are designed to reduce the risk of transmission of bloodborne pathogens.
- B. Applies to blood and other body fluids, which are considered to be potentially hazardous. Body fluids are defined as semen/vaginal secretions, urine, feces, wound drainage, emeses, mucous membrane or saliva and sputum. Non-intact skin is also potentially hazardous.
- C. Applies to all residents/patients and staff.

Barrier Precautions

- A. **Hand Washing** – Hand washing is considered the single most important procedure for preventing infections. (See hand washing inservice.) Hand washing is necessary.
 - a. Immediately after contact with blood or body fluids, non-intact skin or objects that may be contaminated.
 - b. Before and after removal of gloves and barriers.
 - c. Before and after direct patient contact (i.e., after assisting with oral care but not delivering meal trays).



- B. **Personal Protective Equipment (PPE)**--PPE is specialized equipment and clothing worn by employees for to prevent infection through eyes, nose, mouth, or non-intact skin.
 - a. Gloves.
 - b. Used to protect from blood or body fluids, change often.
 - c. Do not reuse surgical type gloves.
 - d. Heavy-duty dietary gloves can be reused if intact and properly sanitized.



C. **Protective Eyewear, Mask:**

- a. When strong chemicals are used for cleaning.
- b. Droplets of blood or body fluid are present.
- c. Prevent exposure from mucous membrane of mouth, nose, eyes, etc.



D. **Gowns:**

- a. Worn during procedures that generate blood or body fluids in the air or skin contact.



- E. **Work Practice Controls**--Work practice controls involve altering the way a task is performed to reduce the likelihood of exposure to potentially hazardous fluids/tissues.

- a. Wash hands when gloves are removed and as soon as possible following contact with blood or other infectious materials.

- b. Do not eat, drink, smoke, apply cosmetics or handle contact lenses in areas of potential occupational exposure. (Note: use of hand lotions is acceptable).
- c. Do not store food or drink in refrigerators or on shelves where blood or potentially infectious materials are present.
- d. Know where eye wash stations are located and how to use them.

Implementation of Standard Precautions

A. Category I:

- a. All job related tasks that involve an inherent potential for mucous membrane or skin contact with blood, body fluids or potential for spills or splashes.
- b. Use of appropriate protective measures are required for every employee engaged in Category I tasks. For dietary it is usually gloves only that are worn.

B. Category II:

- a. Tasks that involve *no exposure* to blood, body fluids or tissues.
- b. No need for protective barriers but be prepared to provide protection on short notice, if needed.

Dietary Services: Review Policy and Procedures for the Following

A. Category I Services:

- a. Cleaning dining room furniture
- b. Food Service Isolation
- c. Handling soiled food or nursing equipment
- d. Cleaning food carts, dishes, trays, cups, glasses, etc.
- e. Accidents within the dietary department causing the flow of blood or body fluids
- f. Tasks for other departments
- g. Other

B. Category II Services:

- a. Administrative tasks
- b. Routine cleaning tasks within the kitchen
- c. Other

Cleaning/Sanitizing and Handling Procedures

- A. Cleaning is generally designed to remove rather than kill microorganisms. Large spills of blood or body fluids can be cleaned with disposable paper towels, while wearing gloves and other PPE if splattering is expected. Contaminated waste must be disposed of in red or biohazard bags. Contaminated tablecloths, clothing, etc can be washed by laundry, and transported correctly. Review facility policy.
- B. All contaminated surfaces must be decontaminated with a disinfectant. Disinfectants kill microorganisms, reducing the number significantly (note only sterilization kills all microorganisms). A suitable disinfectant is 5.25% sodium hyperchloride (bleach) diluted to 1:10-1:100 or other approved disinfectant (use appropriate PPE as designated on the chemical container).
- C. Wash contaminated dishes, glasses, cups or eating utensils last. Check temperature and/or chemical levels to be certain that machine is sanitizing properly.

STANDARD PRECAUTIONS TEST

1. A standard precaution system helps protect the employee from all blood, body fluid and tissue contamination. True or False
2. What is the most effective infection control procedure?
3. It is not necessary to change gloves after each patient contact. True or False
4. Infection control is only an issue in the resident areas, not the kitchen. True or False
5. Name 3 body fluids that are a potential hazard.
6. Cleaning is the removal of microorganisms while disinfecting reduces the number of microorganisms. True or False
7. Disinfecting is the same as sterilizing. True or False

ANSWER KEY: STANDARD PRECAUTIONS TEST

1. A standard precaution system helps protect the employee from all blood, body fluid and tissue contamination.

True

2. What is the most effective infection control procedure?

Hand washing

3. It is not necessary to change gloves after each patient contact.

False

4. Infection control is only an issue in the resident areas, not the kitchen

False

5. Name 3 body fluids that are a potential hazard.

Blood, seminal/vaginal secretions, urine, feces, wound drainage, emeses, mucus membrane, saliva, sputum

6. Cleaning is the removal of microorganisms while disinfecting reduces the number of microorganisms.

True

7. Disinfecting is the same as sterilizing.

False

ACTIVITY:

Copy this sheet and cut along dashed line, fold and mix. Have employees pick a scenario and tell the group what they would do and any PPE needed.

A resident vomits in the Dining Room.

The cook cuts his/her finger and gets blood on his/her apron, the cutting board and the floor.

A resident spits on his/her plate.

The dishwasher discovers a cloth bib in the food cart with a bloodstain.

A resident has an incontinent episode in Dining Room chair.

Items to discuss for instructor: Facility policy on who is responsible for what task; be sure areas are clear of residents/patients before applying disinfectant; OSHA regulations.

Hand Washing Importance and Technique

Materials:

1. Timer or watch that counts seconds
2. Sink
3. Glitter (germs)
4. Soap
5. Towels

Additional Resource: CDC Podcast: All you have to do is wash your hands.
<http://www2c.cdc.gov/podcasts/player.asp?f=11072>



Learning Objectives:

Upon completion of this inservice, the participant will be able to:

1. Understand the importance of hand washing;
2. List situations where hands may become contaminated and when hand washing is indicated;
3. Demonstrate the proper hand washing technique;
4. State the proper procedure for drying hands;
5. Identify other aspects of hand care and protection.

Why Is Proper Hand Washing Important?

1. To remove dirt and grime
2. To reduce harmful bacteria that may cause food-borne illness
3. To lessen the possibility of cross contamination
4. To reduce the spread of germs

When Is Hand Washing Indicated?

1. When beginning a work shift
2. Before handling or serving food
3. After handling uncooked foods including raw meat, fish, poultry and produce
4. During food preparation, as often as necessary
5. After returning to the kitchen area from any other area
6. After using the rest room
7. After blowing your nose, coughing, or sneezing
8. After touching any areas of the body especially ears, nose, eyes, mouth, skin, hair
9. After touching sores or bandages
10. After handling soiled equipment, dishes, or utensils
11. After handling the garbage
12. After smoking, eating food, or drinking beverages
13. Before putting gloves on and after removing gloves
14. As often as necessary to keep hands clean
15. After caring for or handling animals

What Is The Proper Hand Washing Technique?

1. Use a dedicated hand-washing sink supplied with a soap dispenser and disposable paper towels and/or heat/air drying methods. Food preparation or warewashing sinks are not to be used for handwashing. (Pre-moistened cleaning towelettes do not effectively clean hands and **DO NOT** take the place of hand washing.)
2. Wet hands thoroughly under warm running water (as warm as tolerated, usually 110-115° F. Water should not be too hot since this can cause cracked, dry hands which lead to cuts and then infection control issues.).
3. Apply a sufficient amount (dime to quarter size) of liquid soap to hands.
4. Using friction, rub hands together until a soapy lather appears. This should be done away from running water so the bubbles are not washed away.
5. Continue this for at least 20 seconds (singing one chorus of “Happy Birthday” or counting to 20). Be sure to wash between fingers and underneath fingernails.
6. When the lather is gone, rinse hands thoroughly under warm running water. Shake hands to remove excess water.
7. Leave the water running while drying hands. Dry hands with a clean, disposable towel being careful to avoid touching the faucet handles or towel holder with clean hands. Discard the towel.
8. Use a clean disposable towel as a barrier between your hands and the faucet handles to turn the water off. Discard the second disposable towel.
9. Trashcans with foot-pedal operated lids are preferable. Check state regulations as they may be mandated.
10. Hand sanitizers do not take the place of proper handwashing. Antimicrobial gel cannot be used in place of proper hand washing techniques in a foodservice setting.

What Are Some Other Aspects Of Hand Care And Protection?

1. Hands may become dry and irritated with frequent hand washing and personnel tend to want to use hand lotions. This is discouraged in food service operations because direct contact with the container spout could contaminate the lotion inside.
2. If gloves are being used, hands should be washed before and immediately after gloves are removed even if hands are not visibly contaminated. Use of gloves alone **WILL NOT** prevent contamination of hands or spread of germs and should not be considered a substitute for hand washing.
3. Be aware of the correct procedure/ way to remove gloves to avoid potential spreading of bacteria.

Hand Washing Activity and Demonstration of Proper Hand Washing Technique

1. Pick one person to be the hand washer and one person to be the timekeeper.
2. The hand washer should wet his hands and shake them to remove excess water.
3. The timekeeper should generously apply the glitter (germs) to the hand washer’s hands including the backs of the hands. Allow hands to dry completely for approximately one minute.
4. Turn on warm water and have hand washer rinse his hands without using soap for five seconds.
5. Have the timekeeper blot dry the hand washer’s hands by very lightly touching the towel to the skin. **Do not rub.**
6. Record the cleanliness on a scale from 1-5 with 5 being the cleanest.
7. Then have the hand washer demonstrate the proper hand washing technique (See C steps 1-9).
8. Record the cleanliness on a scale from 1-5. Note the difference between the two scores.

As the experiment showed, germs were present on the hand washer’s hands washed for less than 20 seconds with water alone. Unless germs are removed from hands by washing with soap and water using mechanical friction for at least 20 seconds, the spread of pathogenic microorganisms may occur.

Two Common Ways Germs Can Be Transmitted By Contaminated Hands.

1. **Unclean Hands to Food:** Germs are transmitted usually by an infected food preparer who did not wash his/her hands after using the restroom. The germs are then passed to those who eat the food.
2. **Tainted Foods to Hands to Food:** Germs are transmitted from raw, uncooked foods, such as meat or chicken, to hands. If the food service worker does not wash his/her hands before preparing another food item, the germs are then transferred to that second food item, such as fresh vegetables or salad. Cooking the raw food kills the initial germs but the fresh vegetables or salad remains contaminated.

HANDWASHING TEST

1. How many seconds does it take to correctly wash hands?
2. Why is it vital to wash hands in a food service operation?
3. List three situations where hands may become contaminated and when hand washing is indicated.
4. What is the proper procedure for drying hands?
5. When should you change gloves?
6. Wash hands after handling raw meat. True or False
7. You can smoke a cigarette on break without washing your hands afterwards. True or False
8. If gloves are used, hand washing is not necessary. True or False
9. If you cough into your hand, there is no food safety problem. True or False
10. Pre-moistened cleaning towelettes or sanitizing gels effectively clean hands and may take the place of hand washing. True or False

ANSWER KEY: HANDWASHING TEST

1. How many seconds does it take to correctly wash hands?
20 seconds
2. Why is it vital to wash hands in a food service operation?
To prevent the spread of disease
3. List three situations where hands may become contaminated and when hand washing is indicated.
Any of the list in Section B
4. What is the proper procedure for drying hands?

Leave water running

Dry with clean, disposable towel and discard and/or heat/air drying method

Use a clean disposable towel to turn off the faucet

Discard the second towel

1. When should you change gloves?

Any answers in section B

5. **True** Wash hands after handling raw meat.
6. **False** You can smoke a cigarette on break without washing your hands afterwards.
7. **False** If gloves are used, hand washing is not necessary.
8. **False** If you cough into your hand, there is no food safety problem.
9. **False** Pre-moistened cleaning towelettes effectively clean hands and may take the place of hand washing.

HANDWASHING**

Objectives: The employee will be able to:

- Explain why proper handwashing is important
- List the proper steps involved in hand washing

- 1- Handwashing is among the most important factors for reducing the spread of illness. Poor personal hygiene (poor hand washing) is the second leading cause of foodborne illness outbreaks. Most foodservice workers know they should wash their hands, but many fail to wash properly or as often as needed. Some foodservice workers believe it is just as effective to put on gloves or use sanitizers. The truth is neither is effective unless you wash your hands first.
- 2- According to the 2009 Food Code: Handwashing sinks shall be provided with a supply of hand cleaning liquid, individual, disposable towels, a continuous towel system that supplies the user with a clean towel or a heated-air hand drying device. A sign or poster that notifies FOOD EMPLOYEES to wash their hands shall be provided at all handwashing sinks. It also states that a sink used for FOOD preparation or UTENSIL washing, or a service sink used for disposal of mop water or similar wastes, may not be provided with handwashing aids and devices required for a HANDWASHING SINK.

3- Steps and Keys to Proper Handwashing

A- When To Wash Your Hands:

The first step in proper handwashing is to know when to wash and why to wash. You should always wash your hands after using the restroom, and if you use a public restroom you should wash your hands again when you return to the kitchen. You should wash your hands after touching any part of the body, including your hair, and after touching clothing, aprons, or shoes. Hands should also be washed after sneezing or coughing, even if a tissue was used. You should always wash your hands after eating, drinking, smoking, and chewing gum or tobacco. Saliva, which contains bacteria, from your mouth can be transferred to your hands during any of these activities. Washing hands after cleaning tables, bussing dirty dishes, taking out garbage, or handling chemicals is imperative. Another time hands should be washed is before and after handling any food, especially raw meat, poultry, fish, eggs, or produce. Hands should also be washed *between* the handling of these products such as chicken and fresh produce. If your job requires you to handle money, your hands should be washed before touching any food or food surface.

B- Steps To Proper Handwashing:

- 1) Wet your hands with running water as hot as you can handle it. The CDC (Centers for Disease Control) estimates that the temperature should be at least 100 degrees F.
- 2) Apply soap. Do not use a bar soap. Bar soaps harbor bacteria.
- 3) Vigorously scrub hands and arms for twenty seconds. Clean under fingernails and between fingers. Some helpful hints: Sing, Twinkle, Twinkle Little Star or the Happy Birthday Song, twice at a normal pace.
- 4) Rinse hands and arms thoroughly under running water.
- 5) Dry hands and arms with a single use paper towel or warm-air hand dryer. Use a paper towel to turn off the faucet. When in a restroom use a paper towel to open the door.
- 6) Hand sanitizer may now be applied. You must wait until the sanitizer is completely dry before touching any food. Sanitizers should not be used as a replacement for handwashing.

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C- Gloves and Sanitizers:

According to the Food Code: Gloves, if used, SINGLE USE gloves shall be used for only one task such as working with READY-TO-EAT FOOD or with raw animal FOOD, used for no other purpose, and discard when damaged or soiled, or when interruptions occur in the operation.

Gloves and sanitizers are not meant to be used as a replacement for handwashing. They are only effective if proper handwashing is completed. When someone wears gloves they should remove and throw away the gloves after completing any of the above mentioned tasks then wash their hands, and put on a new pair of gloves before starting their next task.











Pre/Post Test

Name _____

- T or F 1. Poor personal hygiene or handwashing is the second leading cause of foodborne outbreaks.
- T or F 2. The hand scrubbing process during handwashing only takes 5-10 seconds.
- T or F 3. Hand sanitizers should not be used as a replacement to handwashing.
- T or F 4. When wearing gloves, handwashing prior to wearing them is necessary.
- T or F 5. The recommended temperature for handwashing is 100 degrees F. per the CDC.
6. Put the handwashing steps in order by placing a number of the step in the space provided.
- ___A. Vigorously scrub hands and arms for at least 20 seconds.
 - ___B. Wet hands with running water as hot as can be comfortable (at least 100degrees F).
 - ___C. Rinse thoroughly under running water.
 - ___D. Clean under fingernails and between fingers.
 - ___E. Apply soap.
 - ___F. Dry hands and arms with a single-use paper towel or warm-air hand dryer.
7. Hands should be washed after which of the activities?
- A. Touching hair
 - B. Eating
 - C. Smoking
 - D. All of the above
8. Janine was assigned to dish hot foods at the tray line. She had the right utensils and waited for the scheduled time of 12:00 to start the trayline. She then noticed that the ground beef was left on the food preparation table across from her station. She was worried that it might become contaminated. She went to the table and picked up the ground beef, wrapped it and placed it in the refrigerator. Then she noticed it was 12:00. She hurriedly wiped her hands on a dishcloth and served the customers. Which of the following action is correct?
- A. Janine did the right thing and prevented the beef from being contaminated.
 - B. Janine should have stayed at her station.
 - C. Janine should have washed her hands after taking the ground beef to the refrigerator and before serving the customers.
 - D. All of the above.

- T 1. Poor personal hygiene or handwashing is the second leading cause of foodborne outbreaks.
- F 2. The hand scrubbing process during handwashing only takes 5-10 seconds.
- T 3. Hand sanitizers should not be used as a replacement to handwashing.
- T 4. When wearing gloves, handwashing prior to wearing them is necessary.
- T 5. The recommended temperature for handwashing is 100 degrees F. per the CDC.
6. Put the handwashing steps in order by placing a number of the step in the space provided.
- 3 A. Vigorously scrub hands and arms for at least 20 seconds.
- 1 B. Wet hands with running water as hot as can be comfortable (at least 100degrees F).
- 5 C. Rinse thoroughly under running water.
- 4 D. Clean under fingernails and between fingers.
- 2 E. Apply soap.
- 6 F. Dry hands and arms with a single-use paper towel or warm-air hand dryer.
7. Hands should be washed after which of the activities?
- A. Touching hair
- B. Eating
- C. Smoking
- D. All of the above**
8. Janine was assigned to dish hot foods at the tray line. She had the right utensils and waited for the scheduled time of 12:00 to start the trayline. She then noticed that the ground beef was left on the food preparation table across from her station. She was worried that it might become contaminated. She went to the table and picked up the ground beef, wrapped it and placed it in the refrigerator. Then she noticed it was 12:00. She hurriedly wiped her hands on a dishcloth and served the customers. Which of the following action is correct?
- A. Janine did the right thing and prevented the beef from being contaminated.
- B. Janine should have stayed at her station.
- C. Janine should have washed her hands after taking the ground beef to the refrigerator and before serving the customers.**
- D. All of the above.

Hand Washing

	Use hot, running water. (Careful - not too hot to scald your hands.)
	Wet hands & arms up to elbows.
	Apply soap or detergent.
	Lather & rub front/back of hands & forearms vigorously for 20 seconds.
	Scrub between fingers and under nails (nail brush is good).
	Rinse thoroughly under hot running water.
	Dry hands and arms using a single-use or paper towel or hot air dryer.
	Use the towel to turn off the faucet to prevent recontamination.

Policy:

Foodservice employees follow procedures to keep hands clean at all times during the preparation and service of food.



Procedures:

1. Wash hands only in hand washing sinks.
2. Use water as hot as the hands can stand.
3. Using running water and dispenser soap, wet hands and exposed areas of wrists and arms.
4. Lather the hands, wrists and forearms making sure to interlock fingers and cover the back of the hands.
5. Use a nail brush to get under the fingernails.
6. Wash for a minimum of 20 seconds.
7. Rinse thoroughly from fingertips to wrists to forearms.
8. Dry hands carefully with single service paper towels.
9. Use an approved hand sanitizer only after the hands are clean.

**Two versions of
“Happy Birthday”
is approximately
20 seconds.
Wash in harmony!**

Proper Hand Washing Technique

1. Wet hands under warm running water.
2. Apply dime to quarter size liquid soap to hands.
3. Rub hands together until a soapy lather appears.
4. Continue this for 20 seconds.
5. Rinse hands under warm running water.
6. Dry hands with a clean disposable towel. Discard.
7. Take a clean disposable towel and using the towel as a barrier between your hands and the faucet handles to turn water off.
8. Discard the second used towel.

How to Handwash?

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

Duration of the entire procedure: 40-60 seconds

 0 Wet hands with water;	 1 Apply enough soap to cover all hand surfaces;	 2 Rub hands palm to palm;
 3 Right palm over left dorsum with interlaced fingers and vice versa;	 4 Palm to palm with fingers interlaced;	 5 Backs of fingers to opposing palms with fingers interlocked;
 6 Rotational rubbing of left thumb clasped in right palm and vice versa;	 7 Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;	 8 Rinse hands with water;
 9 Dry hands thoroughly with a single use towel;	 10 Use towel to turn off faucet;	 11 Your hands are now safe.

World Health Organization | Patient Safety | SAVE LIVES Clean Your Hands

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May 2009

Personal Hygiene

Learning Objectives:

Upon completion of this inservice, the participant will be able to demonstrate habits of good personal hygiene.

Overview

Every food service employee can, by developing daily habits of careful hygiene, aid in providing quality products to facility clients. High standards of personal cleanliness are essential to protect clients against potential food contamination. An impeccable, professional appearance contributes to efforts to assure clients of superior sanitation practices in the facility. The following procedures are defined to guide employees toward excellent personal hygiene habits.

Hand Washing And Bathing

Hands are the major source of food contaminants. Frequent hand washing with special attention under fingernails, can greatly reduce instances of foodborne illness.

Clean hands:

- Before handling or serving food
- After returning to kitchen area from any other area
- When beginning a work shift
- After using the rest room
- After blowing your nose, coughing, or sneezing
- After handling uncooked foods including raw meat, fish, poultry and produce
- After touching any areas of the body especially ears, nose, eyes, mouth, skin, hair
- After touching sores or bandages
- After handling soiled equipment, dishes, or utensils
- After handling the garbage
- After smoking, eating food, or drinking beverages
- After using the telephone
- As often as necessary to keep hands clean

To wash hands:

1. Use a dedicated hand-washing sink supplied with a soap dispenser and disposable paper towels. (Pre-moistened cleaning towelettes do not effectively clean hands and **DO NOT** take the place of hand washing).
2. Wet hands thoroughly under warm running water (as warm as tolerated, usually 110-115° F).
3. Apply a sufficient amount (dime to quarter size) of liquid soap to hands.
4. Using friction, rub hands together until a soapy lather appears. This should be done away from running water so the bubbles are not washed away.
5. Continue this for at least 20 seconds (singing one chorus of “Happy Birthday” or counting to 20). Be sure to wash between fingers and underneath fingernails.
6. When the lather is gone, rinse hands thoroughly under warm running water. Shake hands to remove excess water.
8. Leave the water running while drying hands. Dry hands with a clean, disposable towel being careful to avoid touching the faucet handles or towel holder with clean hands. Discard the towel.
9. Use a clean disposable towel as a barrier between your hands and the faucet handles to turn the water off. Discard the second disposable towel.
10. Trashcans with foot-pedal operated lids are preferable. Check state regulations as they may be mandated.
11. Hand sanitizers do not take the place of proper handwashing.

Fingernail Care:

- Unless wearing intact gloves in good repair, no fingernail polish or artificial nails are allowed when working with exposed food.

Body Care

- Bathe or shower daily.
- Use a deodorant daily.
- Avoid using perfumes at work.

Hair Care

- Hair completely restrained including beard restraints.
- Wear hair net or cap covering all hair.
- Keep hair off collar and neck.

Clothing/Jewelry

- Clean clothes, in good repair, free of stains or spots.
- Wash and change clothes and undergarments daily.
- Repair all rips and replace buttons as needed.
- Clean aprons.
- Change aprons when soiled.
- Clean, close-toed shoes.
- Wear shoes that are worn only at work.
- Clean shoes weekly or more frequently as needed.
- Minimum jewelry.
- Avoid wearing jewelry such as dangling earrings and rings (exception: wedding ring or watch).
- When preparing food, no jewelry is allowed on arms and hands except for a plain wedding band.

Food Handling

Sanitary foods are to be served to clients.

- When picking up foods or ice, use tongs, plastic gloves, or other suitable utensils.
- Follow handwashing standards and procedures.
- Do not sneeze, cough, or spit around food.
- Do not touch the face and scratch the head.
- Never smoke in food production, service or storage areas.
- Avoid using toothpicks or chewing gum in food production, service or storage areas.
- Do not handle foods when the symptoms of communicable disease are present, i.e., cold, sore throat, sinus infection, diarrhea, infected sores and cuts.
- Do not wet thumb with saliva to pick up trayliners, etc.
- Do not lean or sit on food preparation, storage surfaces and/or handwashing sinks.
- Do not lean, sit or put feet on table edges or lower shelves.
- No bare hand contact with ready to eat foods.

Proper Testing Of Food

Uncontaminated food.

- Use a clean utensil each time food is sampled for seasoning and taste.
- Do not taste over range or serving unit.

Staff Illness

Report illness.

- Report any illness to direct supervisor immediately.
- Report any cuts, sores or infections to direct supervisor immediately.

PERSONAL HYGIENE TEST

1. List three instances when it is crucial to wash hands:
2. How often should food service employees bathe or shower and use deodorant to meet facility standards of cleanliness?
3. Describe how hair should be worn in a food service facility.
4. It is permissible to wear dangling jewelry at work. True False
5. When and to whom should you report any illness, cuts or infection?
6. How often should you change the utensil used to test foods for taste and seasoning?

PERSONAL HYGIENE TEST ANSWER KEY

1. List three instances when it is crucial to wash hands:

Choose any 3

- **Before handling or serving food**
- **After returning to kitchen area from any other area**
- **When beginning a work shift**
- **After using the rest room**
- **After blowing your nose, coughing, or sneezing**
- **After handling uncooked foods including raw meat, fish, poultry and produce**
- **After touching any areas of the body especially ears, nose, eyes, mouth, skin, hair**
- **After touching sores or bandages**
- **After handling soiled equipment, dishes, or utensils**
- **After handling the garbage**
- **After smoking, eating food, or drinking beverages**
- **After touching the telephone**
- **As often as necessary to keep hands clean**

2. How often should food service employees bathe or shower and use deodorant to meet facility standards of cleanliness?

daily

3. Describe how hair should be worn in a food service facility.

All hair under a restraint

4. It is permissible to wear dangling jewelry at work.

False

5. When and to whom should you report any illness, cuts or infection?

supervisor

6. How often should you change the utensil used to test foods for taste and seasoning?

after each use

Handout

Personal Hygiene Procedure

Clean hands:

- Before handling or serving food
- After returning to kitchen area from any other area
- When beginning a work shift
- After using the rest room
- After blowing your nose, coughing, or sneezing
- After handling uncooked foods including raw meat, fish, poultry and produce
- After touching any areas of the body especially ears, nose, eyes, mouth, skin, hair
- After touching sores or bandages
- After handling soiled equipment, dishes, or utensils
- After handling the garbage
- After smoking, eating food, or drinking beverages
- After using the telephone
- As often as necessary to keep hands clean

To wash hands:

1. Use a dedicated hand-washing sink supplied with a soap dispenser and disposable paper towels. (Pre-moistened cleaning towelettes do not effectively clean hands and **DO NOT** take the place of hand washing).
2. Wet hands thoroughly under warm running water (110-115° F).
3. Apply a sufficient amount (dime to quarter size) of liquid soap to hands.
4. Using friction, rub hands together until a soapy lather appears. This should be done away from running water so the bubbles are not washed away.
5. Continue this for at least 20 seconds (singing one chorus of “Happy Birthday” or counting to 20). Be sure to wash between fingers and underneath fingernails.
6. When the lather is gone, rinse hands thoroughly under warm running water. Shake hands to remove excess water.
7. If any dirt remains, a fingernail brush may be used. Be sure to place the fingernail brush on a holder with the bristles facing up so that they may air dry. (Optional as per facility policy)
8. Leave the water running while drying hands. Dry hands with a clean, disposable towel being careful to avoid touching the faucet handles or towel holder with clean hands.
9. Use the towel as a barrier between your hands and the faucet handles to turn the water off. Discard the used towel. (Trash cans with foot-pedal operated lids are preferable).

Fingernail Care:

- Unless wearing intact gloves in good repair, no fingernail polish or artificial nails are allowed when working with exposed food.

Body Care

- Bathe or shower daily.
- Use a deodorant daily.
- Avoid using perfumes at work.

Hair Care

- Hair completely restrained including beard restraints.
- Wear hair net or cap covering all hair.
- Keep hair off collar and neck.

Clothing/Jewelry

- Clean clothes, in good repair, free of stains or spots.
- Wash and change clothes and undergarments daily.
- Repair all rips and replace buttons as needed.
- Clean aprons.
- Change aprons when soiled.

- Clean, close-toed shoes.
- Wear shoes that are worn only at work. For some workers, steel-toed shoes may be mandated; for others, boots may be necessary. Check facility policy.
- Clean shoes weekly or more frequently as needed.

- Minimum jewelry.
- Avoid wearing jewelry such as dangling earrings and rings (exception: wedding ring or watch).
- When preparing food, no jewelry is allowed on arms and hands except for a plain wedding band.

Food Handling

- When picking up foods or ice, use tongs, plastic gloves, or other suitable utensils.
- Follow handwashing standards and procedures.
- Do not sneeze, cough, or spit around food.
- Do not touch the face and scratch the head.
- Never smoke in food production, service or storage areas.
- Avoid using toothpicks or chewing gum in food production, service or storage areas.
- Do not handle foods when the symptoms of communicable disease are present, i.e., cold, sore throat, sinus infection, diarrhea, infected sores and cuts.
- Do not wet thumb with saliva to pick up trayliners, etc.
- Do not lean or sit on food preparation, storage surfaces and/or hand wash sinks.
- Do not lean, sit or put feet on table edges or lower shelves.

Proper Testing Of Food

- Use a clean utensil each time food is sampled for seasoning and taste.
- Do not taste over range or serving unit.

Staff Illness

- Report any illness to direct supervisor immediately.
- Report any cuts, sores or infections to direct supervisor immediately.

Food Service Professional

What is wrong
with this picture?



Answer Sheet

Food Service Professional

1. Straggly hair on neck with no hair restraint
2. Too much makeup
3. Dangling earrings
4. Long flowing sleeves
5. Long necklace
6. Painted, long fingernails
7. Big ring
8. Dirty apron
9. Hole in clothes
10. Open-toed shoes
11. Dirty shoes
12. Proper uniform?

Improved Kitchen Sanitation with Food Service Worker Involvement in Surveillance

Learning Objectives:

Upon completion of the inservice the participant will:

1. State standards of cleanliness and kitchen sanitation;
2. Demonstrate how to complete cleaning assignments effectively;
3. List current sanitation problems and solutions for each.

Discussion

Adherence to cleaning schedules may not be possible at all times. However, personnel need to take responsibility for completing cleaning tasks effectively. With their involvement in surveillance, results usually improve. Maintaining a sanitary workspace is an important work habit that reflects pride in oneself and one's skills.

Healthcare facilities are subject to unannounced visits by sanitarians and surveyors. Cleanliness maintains a positive first impression and instills consumer confidence.

Review the facility procedure for scheduling cleaning tasks and allotted time frames. Review cleaning and sanitizing procedures for various pieces of equipment, as time permits. Review facility procedure for documentation of employees' completion of cleaning duties and methods of accountability.

Activities

- A. Have each employee select at random, 2 or 3 pieces of equipment or areas of the dietary department.
- B. Each employee is instructed to role-play as state surveyors. They are to cite in writing all finds which do not meet sanitation standards.
- C. Concurrently, the consultant dietitian and dietary manager complete a survey of all areas and equipment within the department.
- D. The two observations are then compared, in discussion and by demonstration, with all staff present.
- E. Plans for correction, as needed, are made.

Additional Suggestion For Manager/Team Leader

- A. The "Team Leader Program" is available for the Dietary Manager to use in increasing the accountability of team members to department standards and expected routines.
- B. On the work schedule, the Dietary Manager denotes which individual on the a.m. shift is the A.M. Dietary Team Leader and which individual on the p.m. shift is the P.M. Dietary Team Leader. The positions are to be rotated so that everyone in the department can be a Team Leader. A special name badge can be worn during the assignment time.
- C. The designated team leaders complete the Team Leader Checklist while on duty. The checklist contains standards and routines that must be accomplished by delegation and can be modified to your program needs. The task assignments are delegated/assigned to different positions by the Dietary Manager. It is *not* the responsibility of the Team Leader to *do* the tasks rather to check to see if the task has been completed and, if not, inquire as to why it has not been accomplished. It is *not* the task of the Team Leader to supervise or demand that the task be completed – just to check and report if the tasks have been completed.
- D. The Team Leaders Check Lists are turned in daily to the Dietary Manager at the completion of each shift. The program is designed to increase the team's understanding of and compliance to the required systems that must be accomplished daily.

PRE/POST TEST: IMPROVED KITCHEN SANITATION WITH FOOD SERVICE WORKER INVOLVEMENT IN SURVEILLANCE

1. Give Food Service Worker the sanitation checklist and have them tour the kitchen and complete the form.
2. Repeat sanitation inspections by Food Service Worker acting as surveyors returning for recheck of correction of citations.

A.M. / P.M. DIETARY TEAM LEADER CHECK LIST

Date _____ Team Leader: _____

Menu Posted in Facility Y N Task Assigned to _____
If No, explain _____

Menu Prepared as Posted Y N Task Assigned to _____
If No, explain _____

Breakfast Started on Time Y N Task Assigned to _____
If No, explain _____

Breakfast temps logged? Y N Task Assigned to _____
If No, explain _____

Lunch Started on Time Y N Task Assigned to _____
If No, explain _____

Lunch Temps Logged Y N Task Assigned to _____
If No, explain _____

Dinner Started on Time Y N Task Assigned to _____
If NO, explain _____

Dinner Temps Logged Y N Task Assigned to _____
If NO, explain _____

Tray Cards for Each Resident Y N Task Assigned to _____
If No, explain _____

Hand Sink Stocked Y N Task Assigned to _____
If No, explain _____

Refrigerator Temps Logged AM/PM Y N Task Assigned to _____
If No, explain _____

Freezer Temps Logged AM/PM Y N Task Assigned to _____
If No, explain _____

Dishmachine Log Done every meal Y N Task Assigned to _____
If No, explain _____

Pot/Pan Log Done Y N Task Assigned to _____
If No, explain _____

Storeroom Temperature Log Y N Task Assigned to _____
If No, explain _____

Hand Sanitizer in DR Y N Task Assigned to _____
If No, explain _____

Cleaning Schedule Checked Y N Task Assigned to Each Team Member
If No, explain _____

Please give this Checklist to your supervisor. Thank you!

Supervisor Signature: _____ Date _____

ITEMS OBSERVED FOR SANITATION			FACILITY DATE		
Stoves, Ovens, Hoods, Vents, Grill	SAT	UN	Refrigerator & Freezer	SAT	UN
Stove (Top and Under) free of debris			Temp being maintained 41° F, Freezer, -0° F		
Grill (top & sides) free of grease & debris			Thermometers displayed & working		
Grease pan			Temp. checked daily and current		
Ovens, free of grease & debris			Refrig. clean, no mildew, no food on floor		
Hoods clean and free of grease			Freezer clean, no food on floor		
Vents clean			Fan motors free of dust and grease		
Light covers clean and not broken/chipped			Door handles clean		
Walls behind equipment, clean no grease			Food packaged, labeled & dated		
Steamer			Food discard procedure followed		
Steam Jacketed Kettle			ALL foods covered, labeled & dated		
Fryer; is oil clean?			No outdated food, no sign freezer burn		
Small Equipment			Produce fresh		
Meals trays, clean, dry and free of chips			All shelving clean, no rust		
Plastic dinnerware, free of chips, stains, covered					
China dinnerware, free of chips and stains			Nourishment Center		
Silverware, free of bends & debris, stored properly			Area clean & free of food debris		
Serving & portion utensils, in working order			Refrig. items labeled and dated		
Pots & pans, clean, air dried, stored properly			Juice dispenser clean		
Pot & pan rack, clean			Microwave clean		
Can openers, blade sharp, free of dirt					
Mixer, parts clean, no grease build-up			Dress code		
Blender, blades clean, no debris in or out			Uniforms & Shoes clean & neat		
Food processor, blade sharp, clean			Hair covering worn		
Toaster, free of crumbs, working properly			Good personal hygiene		
Coffee maker, clean tank, glass, spigots					
Hand carts, clean, are wheels clean?			Dishmachine		
Knives & rack, blades sharp, clean			Correct temps for chem or hot water		
Steamtable, working, clean			Free of lime deposits		
Cabinets, clean free of debris, grease			Stainless steel tables clean, no food debris		
Drawers & shelves clean & orderly			Jets clean		
Electrical cords, no fraying, working			Filters free of garbage		
Base warmers clean, no debris			Racks stored properly		
Condiment starter station, clean no debris			Dirty/clean procedure followed		
Cutting boards, sanitized, properly used (designated use)			Clean dishes appropriately stored		
Dish lowerators			Sprayer in working order		
Meal carts, clean, no grease, food, sanitized each meal			Garbage disposal working		
Ice machine/scoop, clean & stored safe			Chem. stored on shelves away from food		
Scales, clean no grease or food			Pot & pan washing procedure followed		
Utensils Clean - free of debris			Garbage cans clean inside & out		
			Vegetable prep sink - clean, proper drain		
Storeroom	SAT	UN	Storeroom	SAT	UN
No dented cans			Walls & Ceilings		
Food items rotated, FIFO Procedure			Clean & free from grease		
Shelves clean, no rust			Ceilings clean, no dust or grease		
Food storage bins clean, in & out			Sprinkler heads clean, no dust or grease		
Floors clean free from debris			Electrical outlets clean, no grease		
Food stored 6" off floor and 18" from ceiling					
Temperature of Storeroom cool (50-70° F)			Infection Control Areas		
			Cross contamination with cutting boards		
Janitor Closet			Following chill method: per facility policy & procedure		
Mops & brooms stored off floor & on rack			Sanitizer solution, strength meeting manufacturer specifications		
Mop bucket stored empty & clean			Bleach water made with cold water 50-100 ppm		
Chemicals stored off the floor			Comments		
Dustpan clean					
Floors					
Mopped daily according to schedule					
Corners and baseboards clean			Totals		
Floor clean, no debris					
Totals			Signature:		

Adapted from Pam Womack

Infection Control, Meal & Snack Service** Training Program

Objective: The employee will be able to understand the importance of Infection Control in the Dining Room and the employee will be able to give examples of Infection Control and Preventing Cross Contamination.

Why are the elderly more susceptible?

- 1) Reduced gastric acid secretion due to aging and the use of certain drugs and antacids
- 2) Decreased motility of the gastrointestinal tract
- 3) Reduced immune response
- 4) Residency in nursing homes or retirement communities with crowded conditions and
- 5) A possible decreased mucosal sensitivity to toxins.

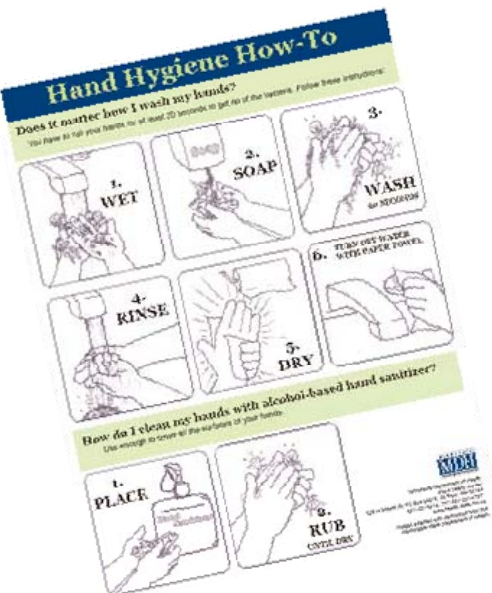
1- What are Potentially Hazardous Foods?

- High in protein or carbohydrates
- High in moisture
- Low in acidity
- Bacteria grow when the temperature is between 41 and 135 degrees,” THE DANGER ZONE”. THE LONGER THE FOOD SITS IN THE “DANGER ZONE”, THE MORE THE BACTERIA GROWS!



2- Important steps to preventing Cross Contamination.

- What you cannot see can cause food borne illness
- Good Hygiene
 - Proper Hand washing Procedures
 - Change your gloves whenever you would wash your hands
 - Hand sanitizers are not a substitute for hand washing



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DianeHall@DieteticServices.com

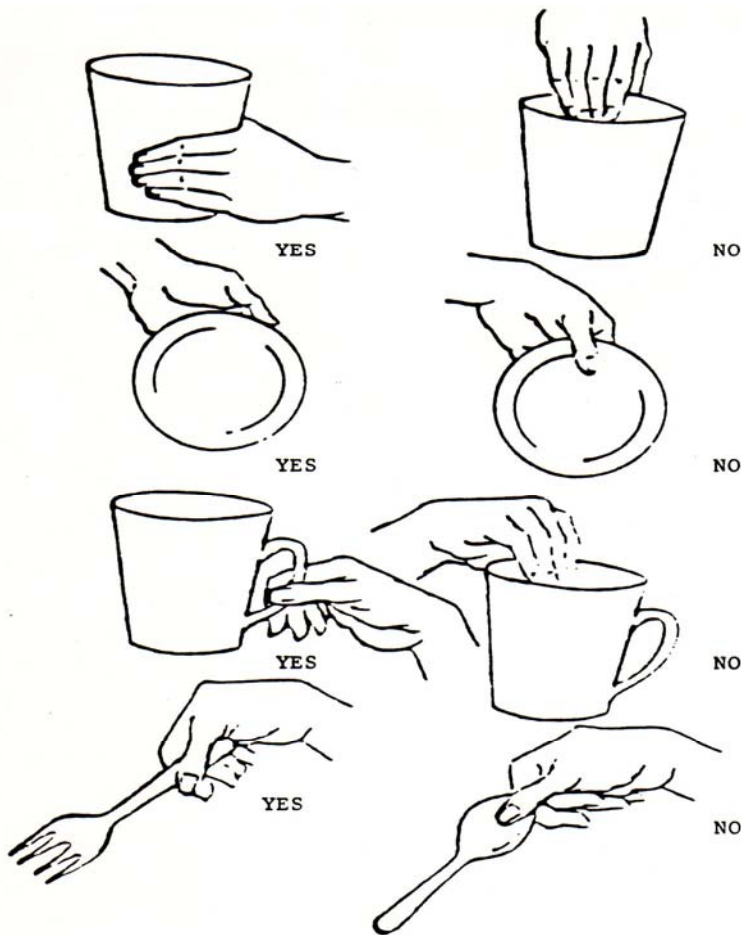
What is cross contamination?

- It is the transfer of a harmful substance to food by vehicles such as:
 - a- Chemicals
 - b- Bacteria
 - c- Hands
 - d- Utensils
 - e- Equipment

Bacteria are hitchhikers.



Proper Tableware Techniques



3- Other areas of concern for Preventing Cross Contamination



- **Resident Refrigerators:**

- a- Temperatures must be monitored,
- b- thermometers located at warmest part of refrigerator,
- c- items brought in by family members, must be covered, labeled and dated with an open date prevent food borne illness

- **Nourishment refrigerators:**

- a) Temperatures must be monitored
- b) thermometers located at warmest part of refrigerator
- c) items that are stored in these refrigerators must be covered, labeled, and dated with an open date

- **Beverage Carts:**

- a- Must be cleaned and sanitized daily
- b- Ice scoops must be stored in appropriate container with the handle facing down, and there is to be no standing water.

- **Med Carts:**

- a- Items such as Med Pass 2.0 or Resource 2.0, must be maintained at proper temperatures of 41degrees or below, dated when opened, discard 48 hours after opening.
- b- Applesauce & Magic Cups must be held at 41 degrees or less
- c- Commercial Milkshakes must be dated & held at 41 degrees or less

4- Serving Safe Food.

- Use utensils to serve food and avoid hand contact
- Do not touch the food contact surfaces of plates, bowls, utensils, and glasses
- Wash hands when they are soiled

5- Overview and Tips to Remember

- **All staff should be present in the dining room when meal service begins, to ensure that food is passed out in a timely manner to help with Temperature Control. Remember BACTERIA begin to grow between the temperatures of 41 to 135 degrees. If safe food temperatures are not maintained, the food must be REHEATED to internal temperature of 165 degrees.**

- Proper Hand



Washing and knowing when to wash your hands: Before you start passing out food and if you touch your face, hair, cough or sneeze.

- Do not clear the table until all Residents have finished eating. (unless meal is in courses)
 - All items on the room tray must be covered, before leaving the kitchen or dining room.
 - If there is more than one seating in the dining room, the tables and chairs must be sanitized prior to the next seating.
 - DO NOT sanitize tables while residents are still present in the dining room. Do not bus tables will residents are still eating.
 - According to the FDA (Food and Drug Administration)

cloths in use for wiping counters and other surfaces shall be:

- 1) Held between uses in a chemical sanitizer solution
 - 2) Laundered daily
- Do not touch the food contact surfaces of the utensils, bowls, plates, cups.
 - All items stored in refrigerators must be covered, labeled, and dated with an open/expiration date.
 - All cold items must be stored at temperatures below 41 degrees.

Name _____

Pre/Post Test

- T or F 1. Commercial shakes (i.e. Mighty Shakes) stored in the Nourishment Room refrigerator at 38 degrees, should be thrown out because they do not have a manufacturers date on the carton.
2. The proper Temperature for re-heating food is:
- a- 180 degrees
 - b- 135 degrees
 - c- 165 degrees
 - d- 150 degrees
- T or F 3. Food during distribution must be covered, but silverware does not have to be covered.
- T or F 4. The Nourishment refrigerators must be maintained at a temperature of 32 degrees or lower.
5. Nourishment Room refrigerators should have the temperature monitored and recorded:
- a. 1x month
 - b. 1x week
 - c. Daily
 - d. All of the above
6. All food items must be covered, labeled, & _____.
7. List 2 steps to preventing Cross Contamination in the Dining Room
8. When should the tables in the dining room be sanitized _____ and what should the cloth be stored in, between uses _____?

FOOD HANDLING QUIZ

1. Which of the following is the most important in preventing the spread of micro -organisms in a food establishment?
 - a. Wearing gloves when handling food
 - b. Removing all jewelry
 - c. Wearing a hair net
 - d. Effectively washing hands

2. Which of these diseases may be transferred from person to person through food?
 - a. Conjunctivitis
 - b. AIDS
 - c. Influenza
 - d. Hepatitis A

3. _____ is commonly found living in, and on, up to 50% of all people.
 - a. Trichinella Spiralis
 - b. Listeria monocytogens
 - c. Staphylococcus aureus
 - d. Shigella spp.

4. What is the proper food temperature for serving Spaghetti, per Food Code?
 - a. 180 degrees
 - b. 140 degrees
 - c. A “palatable” temperature (a temperature that is satisfactory to the resident)
 - d. All of the above

5. What is the proper temperature for reheating Spaghetti, per Food Code?

6. What is the single greatest threat to food safety?
 - a. Microorganisms
 - b. Unlabeled cleaning compounds
 - c. Food workers with poor personal hygiene

7. After washing your hands you should:
 - a. Dry your hands on your apron
 - b. Dry your hands on a cloth hand towel
 - c. Dry your hands with disposable paper towel or a hot air dryer

8. Food during distribution must be covered, but silverware does not have to be covered
 - a. True
 - b. False

9. Gloves must be worn when touching ready-to-eat food. There are no other options when touching ready-to-eat foods.
 - a. True
 - b. False

10. Commercial shakes (i.e. Mighty Shakes) stored in the Nourishment Room refrigerator at 38 degrees, should be thrown out because they do not have a manufacturer date on the carton.
 - a. True
 - b. False

Name _____

Pre/Post Test Key

T or F 1. Commercial shakes (i.e. Mighty Shakes) stored in the Nourishment Room refrigerator at 38 degrees, should be thrown out because they do not have a manufacturers date on the carton.

2. The proper Temperature for re-heating food is:

- a- 180 degrees
- b- 135 degrees
- c- 165 degrees**
- d- 150 degrees

T or F 3. Food during distribution must be covered, but silverware does not have to be covered.

T or F 4. The Nourishment refrigerators must be maintained at a temperature of 32 degrees or lower.

5. Nourishment Room refrigerators should have the temperature monitored and recorded:

- a. 1x month
- b. 1x week
- c. Daily**
- d. All of the above

6. All food items must be covered, labeled, & **dated**_____.

7. List 2 steps to preventing Cross Contamination in the Dining Room

- What you cannot see can cause food borne illness
- Good Hygiene
- Proper Hand washing Procedures
- Change your gloves whenever you would wash your hands
- Hand sanitizers are not a substitute for hand washing

8. When should the tables in the dining room be sanitized **between seatings/after residents leave**_____ and what should the cloth be stored in, between uses **in chemical sanitizer solution**_____?

FOOD HANDLING QUIZ Key

1. Which of the following is the most important in preventing the spread of micro -organisms in a food establishment?
 - a. Wearing gloves when handling food
 - b. Removing all jewelry
 - c. Wearing a hair net
 - d. Effectively washing hands**

2. Which of these diseases may be transferred from person to person through food?
 - a. Conjunctivitis
 - b. AIDS
 - c. Influenza
 - d. Hepatitis A**

3. _____ is commonly found living in, and on, up to 50% of all people.
 - a. Trichinella Spiralis
 - b. Listeria monocytogens
 - c. Staphylococcus aureus**
 - d. Shigella spp.

4. What is the proper food temperature for serving Spaghetti, per Food Code?
 - a. 180 degrees
 - b. 140 degrees
 - c. A “palatable” temperature (a temperature that is satisfactory to the resident)**
 - d. All of the above

5. What is the proper temperature for reheating Spaghetti, per Food Code? **165 degrees**

6. What is the single greatest threat to food safety?
 - a. Microorganisms
 - b. Unlabeled cleaning compounds
 - c. Food workers with poor personal hygiene**

7. After washing your hands you should:
 - a. Dry your hands on your apron
 - b. Dry your hands on a cloth hand towel
 - c. Dry your hands with disposable paper towel or a hot air dryer**

8. Food during distribution must be covered, but silverware does not have to be covered
 - a. True
 - b. False**

9. Gloves must be worn when touching ready-to-eat food. There are no other options when touching ready-to-eat foods.
 - a. True**
 - b. False

10. Commercial shakes (i.e. Mighty Shakes) stored in the Nourishment Room refrigerator at 38 degrees, should be thrown out because they do not have a manufacturer date on the carton.
 - a. True**
 - b. False**

Cleaning

Learning Objectives:

Upon completion of this inservice, the participant will be able to follow the cleaning schedules to maintain sanitary conditions within the department.

Overview

Cleaning is a never-ending chore, whether in long-term care or at home. Within the foodservice/dietary department, cleaning should be done on specific schedules including:

- After each use
- Daily
- Weekly
- Twice Monthly
- Monthly
- As needed

Please note, that for some articles, parts will be cleaned as used, parts cleaned at least daily, etc. These are noted within the guidelines.

This section can be split into several inservice sessions depending upon the staff members attending and the time allotted. Demonstrate how to clean various pieces of equipment. Handout included for Sample Cleaning Schedule.

Treating this section as a “hands on – learn as you do” set of inservices will result in double benefits. The employees will learn correct methods of cleaning and the kitchen will be cleaner. At the end of this section is a chart to evaluate employee understanding and participation.

AFTER EACH USE

- Can opener
- Coffee Machines
- Counters
- Cutting boards
- Dining room chairs
- Dining room tables
- Dishes
- Food carts
- Food preparation appliances
- Kitchen and dining room floors
- Mixers
- Pots and pans
- Range (Stove top)
- Steam Tables
- Toaster

Can Opener

A. Hand held can openers:

1. Remove can opener shaft from base.
2. Wash in sink filled with soapy water.
 - a. Pay special attention to blade and moving parts.
3. Rinse, sanitize.
4. Air dry.
5. Wash base thoroughly with hot detergent water.
 - a. Be sure to remove all food particles from blade and base.
6. Reassemble.
7. Repeat procedure after each meal.

B. Electric can openers:

1. Unplug the appliance.
2. Wipe all parts carefully with a clean cloth soaked in sanitizing solution. (Solution should be changed at least once per shift, when visibly dirty or when food particles are noticeable in the solution.)
 - a. Pay special attention to the blade and moving parts.
3. If blade can be removed, wash and sanitize thoroughly.
4. Air dry.

Coffee Machines

1. Rinse coffee maker with clear, hot water.
2. Urn cleaner should be used to clean the liner, gauge glasses, faucets and glass pots.
3. Rinse very carefully, first with hot and then cold water.
4. Invert glass pots to air dry.
5. De-scale inside of coffee maker.
6. Gauges should be cleaned every other day.
7. Inside of urn must be clean and free from stains and sediment.
8. Clean all exterior parts with warm detergent water, rinse and dry.

Counters

1. Wipe up spills as needed using a clean cloth and warm water.
2. To sanitize:
 - a. Remove small appliances from counter.
 - b. Wipe off debris.
 - c. Spray counter with sanitizing solution. (Solution should be changed at least once per shift, when visibly dirty or when food particles are noticeable in the solution.)
 - 1). Allow to sit as per instructions of sanitizing agent.
 - 2). Wipe.
 - d. Wipe outer surfaces of small appliances that usually sit on the counter.
 - e. Allow to air dry.

Cutting Boards

1. Keep cutting boards separate for raw and cooked or ready to serve foods.
2. After each use, wash in hot soapy water.
3. Rinse and sanitize.
4. Air dry.

Note: May be washed in dishwasher if dishwasher safe.

Floors, Tables, Chairs

1. Kitchen floors will be swept and cleaned after each meal.
 - a. A thorough cleaning using a disinfectant will be done at least twice a week.
 - b. Major appliances will be moved at least once a month in order to facilitate cleaning behind and underneath them.
2. Carpeted areas: vacuum after each meal.
3. Dining room tables cleaned and sanitized after each use.
4. Dining room chairs wiped off after each meal using a clean cloth and clean, hot soapy water.
 - a. Dining room chairs should be cleaned once a week with sanitizing solution. (Solution should be changed at least once per shift, when visibly dirty or when food particles are noticeable in the solution.)

Food Carts

1. After each use, the inside and outside of carts will be sanitized and wiped down.
2. Wheels and bumpers on the food carts should be cleaned as often as needed.
3. The outside of the food carts may be polished with stainless steel polish on occasion if applicable.

Food Preparation Appliances

1. Disconnect the electric power.
2. Empty food from the appliance.
3. Remove all removable parts.
4. Scrape solid food from parts into garbage.
5. Rinse parts with warm water and place in dishwasher or sink.
6. Wash and rinse following procedures for automatic or hand dish washing.
7. Air dry.
8. Clean outer surface of appliance with clean cloth wet with hot, soapy water.
9. Follow with water rinse.
10. **Do not** immerse the base of the appliance in water.
11. Allow to air dry.
12. Reassemble equipment.
13. Return to appropriate area.

Slicers

1. Turn off and disconnect from electrical power.
2. Remove food tray by loosening screw located at lower side.
3. Remove rectangular glide by lifting it out.
4. Remove shield.
5. Wash all parts in pot and pan sink.
6. Sanitize in chemical sanitizer, immersing for appropriate amount of time to sanitize.
7. Carefully wash remaining parts with hot detergent water, rinse and dry.
8. Pay special attention to any moveable parts, being very careful when cleaning blade. It is best to wear safety gloves when cleaning the slicer blade.
9. Reassemble and cover machine.
10. Wash and sanitize counter top on which slicer is located.

Note: Use extreme caution when removing parts around the blade and when cleaning the blade. If the slicer comes with cleaning instructions, please use them instead of the above.

Ranges

The cook on each shift is responsible for keeping the range as clean as possible during the preparation of the meal.

1. Wipe up spills and food particles as they occur.
2. Turn off range; allow to cool.
3. Scrape burned particles and grease off with scouring pad.
4. Wipe surface with clean cloth soaked in soapy water.
5. Wipe outside surface of the appliance using sanitizing solution. (Solution should be changed at least once per shift, when visibly dirty or when food particles are noticeable in the solution.)
6. Wash drip pans as needed and/or according to the cleaning schedule.

Steam Tables

1. Remove serving pans and wash according to procedure for pots and pans.
2. Send serving pans through dish machine for final cleaning and rinsing.
3. Clean inside and outside of each unit of the steam table, using hot water and a detergent.
4. Rinse and dry thoroughly.
5. If unit is heated by steam, drain the water and remove top section to clean. Water should be drained out and tank cleaned at least once a day. De-limer may be needed to remove lime deposit.
6. If units are heated by electricity, be careful not to get water into the sockets.
7. Carefully clean around electrical elements weekly or as spills occur.

Toaster

1. Unplug toaster.
2. Empty crumbs into garbage container.
3. Remove crumb tray and wash in warm soapy water.
4. Wash and rinse well in clear water. Air dry.
5. Move toaster and wash counter surface underneath.
6. Wash outside with soapy water, rinse, dry.
7. Replace crumb tray.

DAILY

- Exterior of dishwasher and other appliances
- Floors (kitchen and dining room)
- Kitchen sinks and faucets
- Kitchen towels and cloths
- Microwave (or as needed)
- Waste Disposal

Microwave Oven

1. Remove glass tray from inside oven, wash, rinse, sanitize and allow to air dry, if applicable.
2. Remove any food particles from interior of oven with a clean, wet cloth. If hard build up, microwave a cup of water for 45-60 seconds at full power.
3. Wipe the interior of the oven with hot sudsy water. Don't forget the top of the interior.
4. Rinse with clear water.
5. Sanitize.
6. Leave oven door ajar until interior dries.
7. Wipe exterior of oven including dials with clean, wet cloth. Wipe dry.
8. Clean the exterior of the glass door with an approved glass cleaner.
9. Replace glass tray (if applicable).

Cloths, Pads, Mops And Buckets

Maintain cleaning tools in clean, fresh, odor-free condition.

1. Wash cleaning cloths and pads in hot detergent water and rinse in clean hot water to which a sanitizer has been added. Do daily or as needed basis through the laundry department.
2. Keep cleaning cloths in a container of clean sanitized solution between uses.
3. Rinse mops thoroughly after each use in fresh, hot water to which a sanitizer has been added. Wash mops in the laundry on a daily basis. Start with fresh mop heads each day.
4. Wash mop buckets and wringers after each use, and store inverted to allow drainage. Store mops, wringers and buckets in an appropriate area away from food and food preparation.

Waste Disposal

1. All waste shall be kept in covered, leakproof, non-absorbent, fireproof containers before disposal.
2. Containers are emptied as often as necessary.
3. Seal trash bags prior to removal.
4. Deposit trash in sealed container outside the premises.
5. Clean each container after emptying as needed with a cloth soaked in soapy water.
6. Clean each container weekly or as needed.

WEEKLY

- Dish machine
- Garbage Containers
- Garbage Disposal
- Interior of Dishwasher
- Refrigerator
- Sanitize Dining Room Chairs
- Storeroom Floor
- Windows

Dish Machine

Dish machine will be properly maintained to assure proper functioning.

1. Dish machine will be regularly cleaned and de-limed as needed.
2. Clean according to manufacturer's directions, at least once per week. General procedure is as follows:
 - Turn off heat on wash and rinse tanks and drain water from tanks.
 - Remove any removable parts and any loose food particles from scrap trays.
 - Check and clean final rinse sprays if needed.
 - Close tank drain, refill tank, flush out pump and lines, running machine at least one minute and then drain.
 - Replace scrape trays, wash and rinse removable parts.
 - Leave all doors open.
 - Clean and refill detergent dispenser.
 - Check filler opening, final rinse and pump for leaks.
 - Clean dish tables with detergent sanitizer solution, rinse and dry.
3. De-lime as needed, and according to manufacturer's directions.

Ovens

1. Remove oven racks, and place on newspaper in a ventilated area.
2. Apply oven cleaner, and let stand per package directions.
3. Wipe off loosened grease and carbon with paper towels.
4. Place racks in sink with drain open.
5. Run water over racks to remove oven cleaner and dirt. Let water run down drain.
6. Wash and rinse racks.
7. Air dry.
8. Apply oven cleaner to oven. Let stand per package directions.
9. Wipe off loosened grease and carbon from inside oven and on door.
10. Rinse thoroughly.
11. Replace racks in oven.

Caution: Do not get oven cleaner on heating elements.

Note: For self-cleaning ovens, see oven instruction book.

Use appropriate personal protective equipment (PPE) according to MSDS when cleaning the oven.

Garbage Disposals

Clean weekly unless more frequent cleaning is needed due to heavy usage.

1. Rinse garbage disposal with cold water after each use.
2. Check to see that the disposal is in the “off” position.
3. Inspect for any paper, plastic or metal objects left in the disposal and remove carefully.
4. Wash down the disposal and surrounding area with detergent solution.
5. Rinse with sanitizing solution. (Solution should be changed at least once per shift, when visibly dirty or when food particles are noticeable in the solution.)

Garbage Containers

1. Rinse can and lid in cold water.
2. Wash/scrub the can, handles and lid, inside and out with hot soapy water.
3. Rinse the can and the lid with water.
4. Sanitize the can and lid with prepared sanitizing solution. (Solution should be changed at least once per shift, when visibly dirty or when food particles are noticeable in the solution.)
5. Invert to drain.
6. Air dry.
7. Fit with clean plastic liners and return to kitchen.
8. Report any leaks, cracks or dents in the can or lid to the Dietary Manager.

TWICE MONTHLY

- Kitchen cabinets and drawers

Kitchen Cabinets And Drawers

1. Remove food, utensils, equipment and other articles from cabinets and drawers.
2. If possible, remove drawers.
3. Wash shelves and drawers with a clean cloth soaked in mild detergent and water.
4. Rinse with water and air dry.
5. Replace drawers, food, utensils etc.

Note: Sticky shelf liner should not be used in drawers, cabinets or on storage shelves.

MONTHLY

- Clean Behind, Under Major Appliances
- Freezer Condenser Coils
- Freezer Condenser Pan
- Freezers
- Refrigerator Condenser Coils
- Refrigerator Condenser Pan
- Shelves
- Stove Hood and Filters
- Vacuum and/or Dust Back of Appliances

Freezers

Defrost monthly or as needed (when frost is ¼ inch thick, freezer should be defrosted).

1. Remove all food from the freezer.
2. Sort and throw away all that is not usable.
3. Store good food in another refrigerator or cooler until freezer is cleaned.
4. Turn freezer off 30-60 minutes prior to cleaning. (Walk-in freezers will need longer to defrost.)
5. Let freezer stand until ice has melted.

6. Be sure that drain plug is free so that water can flow freely.
 7. Do not scrape ice off with any sharp objects.
 8. Wash shelves and walls with warm sudsy water.
 9. Rinse and sanitize using a sanitizing solution. (Solution should be changed at least once per shift, when visibly dirty or when food particles are noticeable in the solution.)
 10. Allow to air dry.
 11. Turn freezer on.
 12. Once freezer has reached appropriate temperature, replace freezer inventory, placing older inventory to the front of the shelves.
 13. For walk-in freezers, mop floors, wash walls and ceilings at least every 3-6 months as needed. Store all foods at least 6 inches from floor.
- Note: Frostless freezers do not need to be defrosted. Follow steps 1-4; 8-13.

Hoods And Filters

1. Remove screens from hoods.
2. Place in soapy water in the sink.
3. Scrub thoroughly.
4. Rinse.
5. Or run through the dish machine if appropriate.
6. Remove and let screens air dry.
7. Replace screens over stove.
8. To clean interior and exterior of hood, use a clean cloth soaked in soapy detergent water. Rinse thoroughly and air dry. A more abrasive cleaning agent may be needed in some cases.

Refrigerators

Clean refrigerators at least monthly, or as needed. Wipe up spills and leaks as noticed.

1. Remove all food from the refrigerator.
2. Sort and throw away all that is not usable.
3. Store good food in another refrigerator or cooler until refrigerator is cleaned.
4. Remove shelves, drawers and other removable parts.
5. Wash in sink using hand dishwashing method.
6. Wash walls and base with warm detergent water.
7. Rinse and sanitize.
8. Allow to air dry.
9. Wipe exterior of refrigerator with approved cleaner or clean cloth, wet with sanitizing solution. (Solution should be changed at least once per shift, when visibly dirty or when food particles are noticeable in the solution.)
10. Replace removable parts and food from cooler.
11. For walk-in refrigerators, also mop floors, clean drains and wash walls and ceilings monthly. Store all foods at least 6 inches from the floor.

Note: Maintenance should clean condenser coils and condensation pans on a regular basis.

AS NEEDED

Ice Machine, Scoop and Tray

Clean ice machine and equipment (scoops and trays) on a regular basis to maintain clean, sanitary conditions. Every 6 months is a good standard of practice and is a regulatory requirement in some states.

1. Unplug machine.
2. Remove ice.
3. Wash interior thoroughly using detergent solution.
4. Rinse with clean hot tap water and drain.
5. Sanitize.
6. Air dry.
7. Turn machine on.
8. Clean exterior of machine with detergent solution.
9. Rinse and allow to air dry.
10. Ice scoop and tray will be washed and sanitized at least daily in the dishwasher and allowed to air dry.
11. Store ice scoop beside or on top of the machine in a clean, non-porous covered container that allows water to drain off (and not pool around the scoop).

SAMPLE WEEKLY CLEANING SCHEDULE FORM

ITEM	RESPONSIBLE PARTY	Initials & Date				
		WK 1	WK 2	WK 3	WK 4	WK 5

SAMPLE MONTHLY CLEANING SCHEDULE FORM

ITEM	RESPONSIBLE PARTY	Initial & Date											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

Handout

Sample Cleaning Schedule

After Each Use

- Can opener
- Coffee Machines
- Counters
- Cutting boards
- Dining room chairs
- Dining room tables
- Dishes
- Floors
- Food carts
- Food preparation appliances
- Kitchen and dining room floors
- Mixers
- Pots and pans
- Range (Stove top)
- Steam Tables
- Toaster

Weekly:

- Dish machine
- Oven
- Garbage Containers
- Garbage Disposal
- Interior of Dishwasher
- Refrigerator
- Sanitize Dining Room Chairs
- Storeroom Floor
- Windows

Monthly:

- Clean Behind, Under Major Appliances
- Freezer Condenser Coils
- Freezer Condenser Pan
- Freezers
- Refrigerator Condenser Coils
- Refrigerator Condenser Pan
- Shelves
- Stove Hood and Filters
- Vacuum and/or Dust Back of Appliances

Daily:

- Exterior of dishwasher and other appliances
- Floors (kitchen and dining room)
- Kitchen sinks and faucets
- Kitchen towels and cloths
- Microwave (or as needed)
- Waste disposal

Twice Monthly:

- Kitchen Cabinets and Drawers

Refer to Housekeeping:

- Ceilings
- Doors
- Fixtures
- Walls

As Needed

- Ice Machine

Inservice Completion Checklist

Employee Name _____ Date _____

Area/Item Cleaned _____

Person Completing Evaluation _____

	Satisfactory	Needs Improvement	Unsatisfactory
1. Participated willingly in the cleaning process			
2. Asked questions, as necessary, to complete the assigned task			
3. Followed directions			
4. Assigned area/item was clean following the exercise			

General Cleaning and Sanitation

Learning Objectives:

Upon completion of this inservice, the participant will be able to understand the role of planning, training and implementation to maintain standards of cleanliness.

General Information

A clean working environment is essential to good sanitation practices. Sanitation practices involve both cleaning and sanitation.

Cleaning is the physical removal of soil and food matter from a surface. Cleaning involves two steps:

- Washing with a detergent solution.
- Rinsing with water.

The basic standards of cleanliness can be achieved through careful planning and management.

Basic requirements include the following:

- All work and storage areas are kept clean, well lighted, free from dust and in good condition.
- All pipes are covered with a false ceiling or removed.
- All walls, floors and ceilings are cleaned thoroughly.
- Hoods and ventilation systems are cleaned regularly.
- All equipment and surfaces are washed, rinsed and sanitized after each use to prevent cross contamination.
- Surfaces that do not come in contact with food are cleaned as often as needed to prevent an accumulation of dust, dirt, food particles and food debris.
- A ready supply of hot water is always available (120° F, check state regulations).
- Adequate lighting (at least 30 foot-candles of light) is provided for all food production areas, equipment and ware washing areas.
- All lighting fixtures over food storage, preparation and serving areas have protective shields to prevent glass from broken light bulbs from falling into food.
- Procedures are in place to control rodents and insects.
- Tight-fitting and self-closing windows.
- Adequate screening or controlled air currents to protect openings to the outdoors.
- Adequate number of insect-proof, rodent-proof, and fireproof containers for garbage and refuse disposal are available, kept covered and cleaned frequently.

Sanitation Survey Form

Facility _____ Completed by _____ Date _____

	Yes	No		Yes	No
Cleaning Schedule:			Dishroom		
Posted, Current			Proper dish handling, storage		
Followed			No cross contamination		
Cleaning Supplies Stored Properly			Equipment		
General Sanitation			Clean & in good repair		
General appearance of Kitchen			Stored properly		
Walls, ceilings free of dust, grease			Cabinets & drawers clean, orderly		
Sprinkler heads free of dust, grease, rust			Hoods/vents clean & free of dust		
Elec. outlets, vents free of dust, grease			Storeroom		
Floors Clean			Clean, organized		
Refrigerators/ Freezers			Temperature $\leq 70^{\circ}$ F		
Temp. maintained, thermometer Displayed – both internal and external			Food dated, labeled, covered, 6" off floor		
			Stock rotated (FIFO)		
Clean (inside & out), no mildew			Cleaning supplies separate from food		
No food on floor			Scoops not stored in food		
Fan motors free of dust, grease			Dishes, cups, glasses, trays: clean, dry, stored properly, free of chips & cracks		
Food covered, labeled, dated					
Food rotated, old food discarded					
Stoves					
Free of dust, grease – inside & out			Serving utensils & cookware: clean & dry, in good repair, stored properly		
Hoods clean, free of dust, grease, rust					
Dishmachine			Can opener clean		
Correct temperatures – no blanks			Dining Room		
Filters clean/free of lime buildup			General appearance, clean, neat		
Dirty/Clean procedure followed			Vents, ceiling fans, furniture clean		
Area free of dirt, debris					
Sanitizer			Food Safety		
Racks stored properly			Avoidance of cross contamination		
			Leftovers stored promptly		
Garbage & Pest Control			Steam table at proper temperature		
Trash cans covered, clean			Cutting boards used properly		
Waste containers emptied regularly			Ice scoop, machine clean, scoop stored properly		
Dumpster clean, not overflowing, closed					
Pest control program in place			Personnel		
No sign of pests			Uniforms, shoes neat & clean		
			Hair acceptable, restrained		
3 Sink Area			Good personal hygiene		
Proper use of wash, rinse, sanitize sinks			Frequent handwashing		
			Proper use of gloves		
Sanitizer measured, correct amount			No nail polish, excessive jewelry		
Dishes allowed to completely air dry					
Sanitizer logs completed					

Dishmachine Washing

- Pre-scrape or pre-flush in the pre-rinse section of the machine.
- Presoak pans, and dishes and flatware, utensils as needed.
- Run flatware through twice: once on a flat rack with flatware separated; second in flatware containers with mouthpieces facing upward.(approximately 60 pieces)
- Flip flatware down for storage and/or bagging
- Final rinse pressure must be at least 15 pounds per square inch (psi), but not more than 25 psi.
- Temperature gauges should be mounted and visible.
- Alternate means, i.e., thermometer or test strips should monitor temperature.
- Record temperature of wash, rinse and sanitizer check if using low temp at every meal.
 - Best practice is to utilize heat sensitive strips to verify adequacy of temperatures.
- Equipment should be placed in racks, trays, or baskets so all food contact surfaces are exposed, and allow water to drain freely.
- Clean the dishmachine thoroughly after each meal.
- Air dry all dishes, and store properly.

Manual Warewashing

- State regulations must be followed, some states require three-compartment sinks; some require four-compartment sinks.
- Pre-rinse/pre-scrape all equipment and utensils.
- Wash in first sink with hot detergent solution. Temperature maintained at not less than 110° F (43° C).
- Rinse in second sink with clean hot water of at least 120° F (48.9° C).
- Sanitize in third sink by one of the following methods:
 - Immersing for 30 seconds in hot water maintained at 171° F (77° C), or above or
 - Immersing for 1 minute in solution containing 50ppm chlorine in a temperature of 75° F (25° C), or
 - Immersing for 1 minute in solution containing 12.5 PPM iodine with pH no higher than 5.0 and temperature of 75° F (25° C) - 120° F (48.9° C)
 - Immersing for at least 1 minute in solution containing 220 ppm quaternary ammonium in a temperature of 75° F (25° C)
- Record temperature and sanitizer solution results with every use.
- Air-dry all equipment and utensils

It is necessary to change and refill the sinks when:

- Soapsuds disappear in the first sink
- Soapsuds appear in the second sink
- Soapsuds appear in the third sink
- The water temperature cools
- Water becomes dirty and cloudy in any compartment
- Chemical sanitizer in third compartment is no longer at designated strength as determined by periodic checks with test strips

Storage

- Utensil drawers and dish shelves must be cleaned and sanitized before the newly sanitized dishes and utensils are stored.
- Everything must be thoroughly air dried prior to storage.
- Glasses, cups and dishware should be stored upside-down.
- Utensil should be stored with handles up.

- All equipment, utensils and food should be stored at least 6 inches off the floor and 18 inches from the ceiling.

Cleaning Programs

- Assist in planning the best use of employee time and use of supplies.
- Helps to distribute workload evenly and fairly.
- Specifies tasks.

Developing a Cleaning Program

- Develop a cleaning documentation form that assigns each piece of equipment or area to a specific employee (not to a position). However, if there is high turnover, may be assigned to a position.
- Post the cleaning documentation form weekly. Employee should document with date and initial when equipment is cleaned. Dietary Manager should inspect weekly and sign off on form also.
- Establish procedure for weekly, thorough cleaning of the assigned equipment by the specified employee. When equipment is used on a daily basis by another employee (such as use of the meat slicer or spilling something in the refrigerator) equipment should be cleaned after use by the employee who used it. This philosophy must be stressed to all employees at staff inservice.



Cleaning Documentation Form

Week of _____					
Equipment	Person To Complete	Day of Week Completed	Signature of Person Completing	Dietary Mgr. Signature	Date Checked

Used with permission: Jo Jo Dantone DeBarbieris, MS, RD, LD, CDE, Nutrition Education Resources, Inc.

Handout

Sample Cleaning Schedule

<p>Ongoing - as needed: Spills, Drips, etc. as they happen</p>		
<p>After every use: Can opener Coffee machines Counters Cutting boards Dining room chairs Dining room table Dishes Floors - kitchen and dining room Mixers Pots & pans Processors Stove / range top Toaster</p>	<p>Weekly: Garbage disposal Interior of dishwasher Refrigerator Sanitize dining room chairs Storeroom Floor Windows</p>	<p>Monthly Freezers Including condenser pan & coils Major appliances – clean behind & under Refrigerator condenser pan & coils Shelves Stove hood & filters Vacuum, dust back of appliances</p>
<p>Daily: Microwave (unless needed more often) Exterior of appliances Floors (kitchen, dining room) Kitchen sinks & faucets Towels & cloths – kitchen Garbage containers</p>	<p>Twice per Month Kitchen cabinets & drawers Oven</p>	<p>Refer to Housekeeping Ceilings Doors Fixtures Walls</p>

Warewashing

Learning Objectives:

Upon completion of this inservice, the participant will be able to:

1. Demonstrate how to properly set up the dish room and dish machine to receive soiled dishes and utensils;
2. Demonstrate the proper cleaning and sanitizing of dishes and utensils using:
A 3-compartment sink,
An automatic dish machine
3. Properly unrack, handle and store dishes and utensils;
4. Demonstrate the proper cleaning of the dish machine and dish room.

Discussion

Discuss with the employees how, in your facility, they monitor the temperature of your cleaning system - either the dish machine or 3-compartment sink.

Chemical Sanitizing

This is done in two ways - either by immersing a clean object in a specific concentration of sanitizing solution for a specific period of time; or by rinsing, spraying or swabbing the object with a specific concentration of sanitizing solution.

The most common types of sanitizers used in the food service industry are chlorine, iodine and quaternary ammonium compounds (quats). Each has advantages and disadvantages.

Activity: Have employees look at the type of chemical sanitizers used in your facility. Discuss how the advantages and disadvantages make that product appropriate for its use in your facility.

Machine Warewashing

Most pots and pans, tableware, and utensils can be cleaned and sanitized in dish machines. These machines sanitize by either using hot water or a chemical sanitizing solution.

Chemical Sanitizing Machines

These use chemicals, rather than hot water, to sanitize. They often wash at a much lower temperature than hot water machines, but this should not be less than 120° F. (49° C).

The rinse water temperature on a chemical sanitizing (cool water) machine should be between 75° F. and 120° F. (24° C to 49° C) for the sanitizer to be effective.

NOTE: Must follow the manufacturer's guidelines if more stringent than regulations. Follow state regulations if more stringent than Federal regulations

High Temperature Machines

These machines use hot water to clean and sanitize. The final sanitizing rinse must be at least 180° F (82° C). For stationary-rack single-temperature machines, the temperature of the final sanitizing rinse must be at least 165° F (74° C). The built-in thermometer on the machine should register the temperature of the water at the manifold, where it sprays into the tank.

Warewashing Machine Operation Guidelines:

- Check to make sure the machine is clean. It should be cleaned as often as necessary, but at least once a day. Fill the tank(s) with clean water. Make sure the detergent trays and spray nozzles are

clean of food and any other foreign objects. Instruct that an acid cleaner should be used in the machine at least once a week to remove mineral deposits caused by hard water.

- Make sure detergent and sanitizer dispensers are properly filled and connected.
- Scrape, rinse or soak items before washing. Pre-soak items that have dried-on food.
- Load racks properly and use the racks that are designed for the items to be washed.
- Do not overload the racks and make sure that all surfaces are exposed to the spray action of the water and cleaners.
- Check for proper temperatures and pressure. **Follow manufacturer's recommendations.**
- Check each rack for items that might not have gotten completely clean as they come out of the machine.
- Run dirty items back through again until they are completely clean. Most items will need only one pass if you use proper procedures.
- Air-dry all items. Towels may contaminate items.
- Keep machine in good repair. Have it checked regularly.

Demonstration

Do a mini-inspection of the dishwashing area with the employees. Check the following items and explain what you are doing and why:

1. Check the dishwasher thermometer gauges for the correct temperatures of the tanks: pre-wash (if there is a pre-wash tank.) 80° F to 110° F , wash – 140° to 160° F, rinse – 170° to 180° F, final rinse – 180° F (82° C) (or 165° F. {74° C} If a single tank stationary machine.)
2. Run a test thermometer through a high-temperature machine to check for a final rinse temperature of at least 180° F. To ensure proper sanitizing. Or use the test strips that check for proper temperature.
3. Check that the detergent and rinse additive dispensers are full and working.
4. Check that the dishwashing racks or conveyor belt are not overloaded.
5. When racks come through machine, tilt to drain any water that may have pooled in recessed area.
6. Check the cleanliness of the washed dishes.
7. Sanitize hands or remove gloves before handling sanitized dishes.
8. Air-dry all tableware and utensils.

Breaking Down and Cleaning Dishmachine (Warewashing Machine)

1. Turn off the machine and the heater(s).
 2. Drain all the tanks.
 3. Remove, clean, and replace the scrap trays.
 4. Remove clean, and replace the spray arms and curtains.
 5. Clean the pump screens and overflows.
 6. Scrub and spray the inside of the machine.
 7. Clean the dish tables on both sides of the machine and sanitize.
 8. Clean the top and sides of the machine.
 9. Descale with hard water remover at least once a week, if necessary.
 10. Refill the detergent and rinse additive dispensers, if necessary.
- Ask employee(s) to demonstrate ability to breakdown and clean machine.

Manual Warewashing

Facilities that do not have a warewashing machine may use a three-compartment sink to wash items. These sinks may also be used to wash larger items as well. A properly set up warewashing station will include:

- a. An area for scraping or rinsing food into garbage containers or disposer.
- b. Drainboards to hold both soiled and clean items.
- c. A thermometer in each sink to measure water temperature.
- d. A clock with a second hand to allow employees to time how long items have been immersed in the sanitizing sink.

Manual Warewashing Procedures Using a Three Compartment Sink:

Prepare to receive items to be washed by cleaning and sanitizing each sink and all work surfaces.

1. Rinse, scrape or soak all items before washing.
2. Add hot water to the first sink. Water temperature should be at least 110° F (43° C). Check state regulations and use thermometer to check temperature.
3. Add detergent in the proper concentration (follow manufacturer's recommendations).
4. Wash items in the first sink. Use a brush, cloth or nylon scrubber to loosen remaining soil. Do not use wire scrubbers as they can scratch surfaces of items being washed and leave them vulnerable to bacteria and they can leave small pieces of metal on the dishes that can be transferred to food.
5. Replace detergent solution when suds are gone, water is dirty or appears gray.
6. Immerse or spray-rinse items in second sink. Water temperature should be at least 110° F (43° C).
7. Remove all traces of food and detergent. If using immersion method, replace water when it becomes cloudy or dirty.
8. Immerse items in third sink in hot water or chemical sanitizing solution. Water temperature must be at least 110° F. (43° C) if hot water immersion is used. Some codes require a temperature of 180° F (82° C).
9. Items must be immersed for at least 30 seconds.
10. If using a chemical sanitizer, it must be mixed in the proper concentration according to the manufacturer's guidelines. (Check with a test kit at regular intervals). Water must also be at the correct temperature for the sanitizer being used.
11. Wash and sanitize hands or remove gloves before handling sanitized dishes.
12. Air-dry all items on a clean, sanitized drain board.

Pot and Pan Washing Using a Two-Compartment Sink

Many facilities still have two compartment sinks that they use for pot and pan washing. The procedure for this is similar to the three-compartment sink method:

1. Thoroughly scrape and pre-soak the pots and pans, removing all food particles.
2. Fill a clean and sanitized sink with hot water. Water temperature should be at least 110° F (43° C). Use thermometer to check temperature.
3. Add detergent in the proper concentration (follow manufacturer's recommendations).
4. Immerse the pots in the hot water. Thoroughly scrub both the inside and outside until it is free of all soil and grease. Use pot brush or nylon scrub pads. Steel or metal scrubbers may leave tiny pieces of steel on the pan surface that can then be transferred into food. They can also scratch the pot surface leaving them vulnerable to bacteria and are therefore discouraged in foodservice.
5. Change wash water often - when suds disappear or water looks gray.
6. Rinse the pot or pan in hot running water or by spraying. Any detergent residue will decrease the effectiveness of the sanitizer. Also, soap film can be transferred into food.
7. Sanitize in the second sink of hot water, (of the proper temperature for the sanitizer) to which sanitizer has been added in the proper concentration.
8. Immerse pot in water and leave for the length of time specified by sanitizer manufacturer (The amount of time depends on the temperature of the water and strength/effectiveness of the sanitizer).
OR *put the pot through the warewashing machine to sanitize.*
9. Air Dry. Moisture is a key ingredient for growth of bacteria, and towel drying can also transfer microorganisms back onto sanitized pan.
10. Store pots upside down to prevent contamination of the interior surface.

Storing Clean Dishes and Utensils

Store clean tableware, utensils and equipment out of the way of kitchen traffic and possible cross contamination and at least six (6) inches off the floor. They should be covered or otherwise protected from dirt and condensation.

1. Clean and sanitize drawers and shelves on which clean, sanitized equipment and tableware are to be stored.
2. Clean and sanitize trays and carts that are used to carry clean tableware and utensils to and from the storage area. This should be done daily, or more often if these items become soiled.
3. Store dishware, glasses and cups upside down - do not nest. Store flatware and utensils with the handles up or out so employees can pick them up by the handles.
4. Keep surfaces of equipment that comes in contact with food, covered until ready to use.



Handout

DISH MACHINE PROBLEMS AND SOLUTIONS

Problems	Reasons	Possible Solutions
Lime scale deposits	Water hardness	Water must be tested to determine hardness and then treated. Delime machine following specific machine and chemical instructions.
	Wrong type/ amount of detergent	Select detergent better for your situation (consult supplier). De-lime the machine.
Greasy film	Improper scrapping, not pre-rinsing	Instruct on proper procedures.
	Water not hot enough	Maintain proper wash temperatures.
Filming	Improper loading in racks	Instruct on proper procedures to insure water contact on all surfaces.
	Water Hardness	Water at hot water faucet should be 4-6 grains per gallon. If outside range, recommend water treatment.
	Final rinse jets clogged	Be sure jets are clean, that the spray reaches all dishes, that scrap trays are emptied and cleaned frequently.
	Detergent carry-over	Maintain adequate pressure and volume of rinse water.
Water spots and film on glasses and dishes	Water Temperature	Water above recommended temperature may cause filming.
	No rinse agent injected	If all else is proper, have rinse dispenser checked.
	Pressure of rinse	Adjust pressure. If pressure is too low, the rinse is poor. If pressure is too high, dishes tend to fog.
	Water hardness	Water at hot water faucet should be 4-6 grains/gallon. If outside range, recommend water treatment.
	Drying time	When conditions are right, approximate time to air dry is 60 seconds.
	Improper loading in the racks	Instruct on proper procedures to insure water contact on all surfaces.
Rinse water not correct temperature	Too high – flash drying and spots Too low – slow drying and spots	

More information can be found in the manuals from machine manufacturer.

TEST #1: WAREWASHING

1. Circle the 6 steps in Pot Washing
 - a. Pre-scrape
 - b. Polish
 - c. Rinse-Soak
 - d. Towel dry
 - e. Pre-rinse
 - f. Wash
 - g. Sanitize
 - h. Nest stack
 - i. Air dry

2. The temperature of the water and the strength of the cleaning product are important in making sure the pot or pan is properly cleaned. True False

3. The strength of the sanitizer decreases when food particles or soap come into the sanitizing solution. True False

4. Pots and pans can be dried with a clean, dry towel. True False

5. It's better to use too much soap or detergent than too little. True False

6. It is good practice to scrape loose or stuck on food off pots and pans and dispose of it before washing them. True False

7. Pots and pans should be stored wet. True False

8. The first step in getting ready to wash pots and pans is:
 - a. Roll up your sleeves.
 - b. Scrape all the food off the pots and pans and dispose of it.
 - c. Fill the sink with hot water and the proper amount of sanitizer.
 - d. Have the pots and pans stacked in the sink, ready to wash.

9. Wash water in the pot sink needs to be changed:
 - a. When suds disappear and the water looks gray.
 - b. Every 20 minutes.
 - c. Every 3 hours.
 - d. When it gets dirty.

10. When adding chemicals to water, the proper concentration should be:
 - a. 1 cup chemical to a gallon of water.
 - b. Follow the manufacturer's guidelines.
 - c. Ask the person who washes the dishes.
 - d. 2 Tbsp. is enough for the pot sink.

TEST #2: CLEANING AND SANITIZING TABLEWARE

1. Following are the steps to **setting up** the dishwasher. Number them according to the order in which you would do them.

- _____ Make sure the heater is turned on.
- _____ Check the water temperature before turning the machine on.
- _____ Make sure the arms, scrap trays and curtains are place correctly inside the machine.
- _____ Check that the detergent and rinse additive dispensers are full. Also check that the chemical sanitizer, if used, is filled.
- _____ Shut the drain valve(s) and fill the tanks with water to the proper level.
- _____ Check that the machine is clean.

2. Which type of dish machine is being used in your facility (check the correct answer)?

- _____ A chemical sanitizing machine.
- _____ A high-temperature machine.

3. Why do you need to wash your hands between loading the dirty dishes and putting away the clean dishes?

4. (If a three compartment sink is used in your facility)

Following are the steps for cleaning and sanitizing using a three-compartment sink. Number them according to the order in which they should be done.

- | | | | |
|----------------|-------------|-------------------------|------------|
| _____ Rinse | _____ Store | _____ Scrape | _____ Wash |
| _____ Sanitize | _____ Sort | _____ Drain and air dry | |

TEST #1 ANSWER KEY: WAREWASHING

1. Circle the 6 steps in Pot Washing
 - a. **Pre-scrape**
 - b. Polish
 - c. **Rinse-Soak**
 - d. **Towel dry**
 - e. **Pre-rinse**
 - f. **Wash**
 - g. **Sanitize**
 - h. Nest stack
 - i. **air dry**

2. **True** False The temperature of the water and the strength of the cleaning product are important in making sure the pot or pan is properly cleaned.

3. **True** False The strength of the sanitizer decreases when food particles or soap come into the sanitizing solution.

4. True **False** Pots and pans can be dried with a clean, dry towel.

5. True **False** It's better to use too much soap or detergent than too little.

6. **True** False It is good practice to scrape loose or stuck on food off pots and pans and dispose of it before washing them.

7. True **False** Pots and pans should be stored wet.

8. The first step in getting ready to wash pots and pans is:
 - a. Roll up your sleeves.
 - b. **Scrape all the food off the pots and pans and dispose of it.**
 - c. Fill the sink with hot water and the proper amount of sanitizer.
 - d. Have the pots and pans stacked in the sink, ready to wash.

9. Wash water in the pot sink needs to be changed:
 - a. **When suds disappear and the water looks gray.**
 - b. Every 20 minutes.
 - c. Every 3 hours.
 - d. When it gets dirty.

10. When adding chemicals to water, the proper concentration should be:
 - a. 1 cup chemical to a gallon of water.
 - b. **Follow the manufacturer's guidelines.**
 - c. Ask the person who washes the dishes.
 - d. 2 Tbsp. is enough for the pot sink.

TEST #2 ANSWER KEY: CLEANING AND SANITIZING TABLEWARE

1. Following are the steps to **setting up** the dishwasher. Number them according to the order in which you would do them.

- 6 Make sure the heater is turned on.
- 5 Check the water temperature before turning the machine on.
- 2 Make sure the arms, scrap trays and curtains are placed correctly inside the machine.
- 4 Check that the detergent and rinse additive dispensers are full. Also check that the chemical sanitizer, if used, is filled.
- 3 Shut the drain valve(s) and fill the tanks with water to the proper level.
- 1 Check that the machine is clean.

2. Which type of dish machine is being used in your facility (check the correct answer)?

- A chemical sanitizing machine.
- A high-temperature machine.

3. Why do you need to wash your hands between loading the dirty dishes and putting away the clean dishes?

To dispose of bacteria

4. (If a three compartment sink is used in your facility)

Following are the steps for cleaning and sanitizing using a three-compartment sink. Number them according to the order in which they should be done.

- | | | | |
|-------------------|----------------|----------------------------|---------------|
| <u>4</u> Rinse | <u>7</u> Store | <u>1</u> Scrape | <u>3</u> Wash |
| <u>5</u> Sanitize | <u>2</u> Sort | <u>6</u> Drain and air dry | |

Technical Requirements for Warewashing

Learning Objectives:

Upon completion of this inservice, the participant will be able to understand and check all thermometers and pressure devices regulating temperatures, etc., involved in warewashing.

Overview

The 2009 Food Code is very specific concerning devices that measure temperatures, water pressures and sanitizing solutions in warewashing processes. These measures help to insure that all food preparation, serving and dining articles used are clean and sanitary at all times.

This inservice deals only with these technical measures. See Warewashing for information on the total process of warewashing.

2009 Food Code

4-302.13 Temperature Measuring Devices, Manual Warewashing.

In manual WAREWASHING operations, a TEMPERATURE MEASURING DEVICE shall be provided and readily accessible for frequently measuring the washing and SANITIZING temperatures.

4-302.14 Sanitizing Solutions, Testing Devices.

A test kit or other device that accurately measures the concentration in mg/L of SANITIZING solutions shall be provided.

4-501.15 Warewashing Machines, Manufacturers' Operating Instructions.

- (A) A WAREWASHING machine and its auxiliary components shall be operated in accordance with the machine's data plate and other manufacturer's instructions.
- (B) A WAREWASHING machine's conveyor speed or automatic cycle times shall be maintained accurately timed in accordance with manufacturer's specifications.

4-501.19 Manual Warewashing Equipment, Wash Solution Temperature.

The temperature of the wash solution in manual WAREWASHING EQUIPMENT shall be maintained at not less than 43°C (110°F) or the temperature specified on the cleaning agent manufacturer's label instructions.

4-501.110 Mechanical Warewashing Equipment, Wash Solution Temperature.

(A) The temperature of the wash solution in spray type warewashers that use hot water to SANITIZE may not be less than:

- (1) For a stationary rack, single temperature machine, 74°C (165°F);
- (2) For a stationary rack, dual temperature machine, 66°C (150°F);
- (3) For a single tank, conveyor, dual temperature machine, 71°C (160°F); or
- (4) For a multitank, conveyor, multitemperature machine, 66°C (150°F).

(B) The temperature of the wash solution in spray-type warewashers that use chemicals to sanitize may not be less than 49°C (120°F).

4-501.111 Manual Warewashing Equipment, Hot Water Sanitization Temperatures.*

If immersion in hot water is used for SANITIZING in a manual operation, the temperature of the water shall be maintained at 77°C (171°F) or above.

4-501.112 Mechanical Warewashing Equipment, Hot Water Sanitization Temperatures.

(A) Except as specified in ¶ (B) of this section, in a mechanical operation, the temperature of the fresh hot water SANITIZING rinse as it enters the manifold may not be more than 90°C (194°F), or less than:

- (1) For a stationary rack, single temperature machine, 74°C (165°F); or
- (2) For all other machines, 82°C (180°F).

(B) *The maximum temperature specified under ¶(A) of this section, does not apply to the high pressure and temperature systems with wand-type, hand-held, spraying devices used for the in-place cleaning and SANITIZING of EQUIPMENT such as meat saws.*

4-501.113 Mechanical Warewashing Equipment, Sanitization Pressure.

The flow pressure of the fresh hot water SANITIZING rinse in a WAREWASHING machine As measured in the water line immediately downstream or upstream from the fresh, hot water sanitizing rinse control valve, shall be within the range specified on the machine manufacturer's data plate and may not be less than 35 kilo-pascals (5 parts per square inch) or more than 200 kilopascals (30 pounds per square inch).

4-501.114 Manual and Mechanical Warewashing Equipment, Chemical Sanitization - Temperature, pH, Concentration, and Hardness.*

A chemical sanitizer used in a SANITIZING solution for a manual or mechanical operation at exposure times specified under ¶ 4-703.11(C) shall meet the criteria specified under 7.204.11 sanitizers, criteria, shall be used in accordance with the Environmental Protection Agency (EPA) registered label use instructions and shall be used as follows: solutions, shall be used in accordance with the EPA-approved manufacturer's label use instructions, and shall be used as follows:

(A) A chlorine solution shall have a minimum temperature based on the concentration and pH of the solution as listed in the following chart:

Minimum Concentration	Minimum Temperature	
mg/L	pH 10 or less °C (°F)	pH 8 or less °C (°F)
25 – 49	49 (120)	49 (120)
50 - 99	38 (100)	24 (75)
100	13 (55)	13 (55)

(B) An iodine solution shall have a:

- (1) Minimum temperature of 2 20°C (68°F),

- (2) pH of 5.0 or less or a pH no higher than the level for which the manufacturer specifies the solution is effective, and
 - (3) Concentration between 12.5 mg/L and 25 mg/L;
- (C) A quaternary ammonium compound solution shall:
- (1) Have a minimum temperature of 24°C (75°F),
 - (2) Have a concentration as specified under § 7-204.11 and as indicated by the manufacturer's use directions included in the labeling, and
 - (3) Be used only in water with 500 mg/L hardness or less or in water having a hardness no greater than specified by the EPA registered label use instructions;
- (D) If another solution of a chemical specified under ¶¶ (A)-(C) of this section is used, the PERMIT HOLDER shall demonstrate to the REGULATORY AUTHORITY that the solution achieves sanitization and the use of the solution shall be APPROVED; or
- (E) If a chemical SANITIZER other than chlorine, iodine, or a quaternary ammonium compound is used, it shall be applied in accordance with the EPA registered label use instructions.

4-501.115 Manual Warewashing Equipment, Chemical Sanitization Using Detergent-Sanitizers.

If a detergent-sanitizer is used to sanitize in a cleaning and SANITIZING procedure where there is no distinct water rinse between the washing and SANITIZING steps, the agent applied in the SANITIZING step shall be the same detergent-sanitizer that is used in the washing step.

Department of Health and Human Services, Food and Drug Administration. *2009 Food Code*. Available at <http://www.fda.gov/Food/FoodSafety/RetailFoodProtection/FoodCode/FoodCode2009/>

Handout

Chemical Sanitizers

How much to use?

Chemical sanitizers are only effective if used in the proper concentration and for the proper amount of time.

Check manufacturer's instructions for amounts to use for these concentrations or as directed under the EPA registered label use instructions.

	Quaternary Ammonium	Iodine	Chlorine
Min. Concentration For Immersion For Spray Cleaning	220 Parts Per Million 220 PPM	12.5-25.0 PPM 12.5-25.0 PPM	50 Parts per million 50 PPM
Temperature of Solution	Above 75° F. (24° C.)	75° F. (24° C.) - 120° F Iodine will leave solution at 120° F (48.9° C)	Above 75° F. (24° C) Below 115° F.(48° C)
Contact Time For immersion For Spray Cleaning	1 minute or more: some products require longer contact time Follow directions on label	1 minute Follow Directions on label	10 seconds – 1 minute Follow directions on label
Corrosiveness	Noncorrosive	Noncorrosive	Corrosive to some substances
Reaction to Organic Contaminants in Water (Food)	Not easily affected	Made less effective	Quickly inactivated
Reaction to Hard Water	Some compounds inactivated - read label	Not affected	Not affected
Indication of Proper Strength	Test kit required	Amber color indicates presence. Use test kit to determine concentration	Test kit required

Updated from National Restaurant Association, Serving Safe Food and the 2009 Food Code

Activity

Working as a group, verify that all temperatures, pressures, sanitizing agents as listed in the Food Code sections are correct within your facility. Check state regulations.

If desired, a chart could be made to document the equipment used in the facility, the necessary temperatures, etc.

DAMP MOPPING

Learning Objective:

Upon completion of this inservice, the participant will be able to damp mop floors properly and efficiently.

Equipment Needed

1. Bucket (12 quart)
2. Mop (New mops should be washed before use)
3. Mop unit (bucket and wringer, small mopping unit or mop tank)
4. Putty knife (1 ¼")
5. Sweep mop, treated (as required)
6. Warning signs
7. Water hose (and floor mopping solution)



Prepare the Work Area

1. Sweep with treated mop if necessary to remove visible dirt and debris.
2. Remove tar, gum, etc., from floor surface with putty knife.
3. It is generally not required that furniture and equipment be cleared from floor area.

Place Warning Signs

1. Place signs warning of wet floors in conspicuous locations.



Damp Mop

1. Immerse mop in clean water; wring as dry as possible.
2. Draw mop parallel to baseboards and furnishings to avoid splashing these items before mopping open areas.
3. Turn the mop head over every 4-5 strokes to facilitate cleaning.
4. Rinse and wring mop frequently.
5. Change water as necessary to maintain a clean mop.
6. Mopping equipment should be kept ahead of the work area, in the area to be mopped next.

Mopping Strokes

1. Mopping strokes should give the greatest coverage and speed with the least amount of fatigue.
2. When possible, use approximately a 4-foot, side-to-side sculling stroke.
3. Stop approximately 4 inches from baseboards and furnishings.
4. Random or forward/backward strokes can be used under and/or around furnishings.

After Mopping

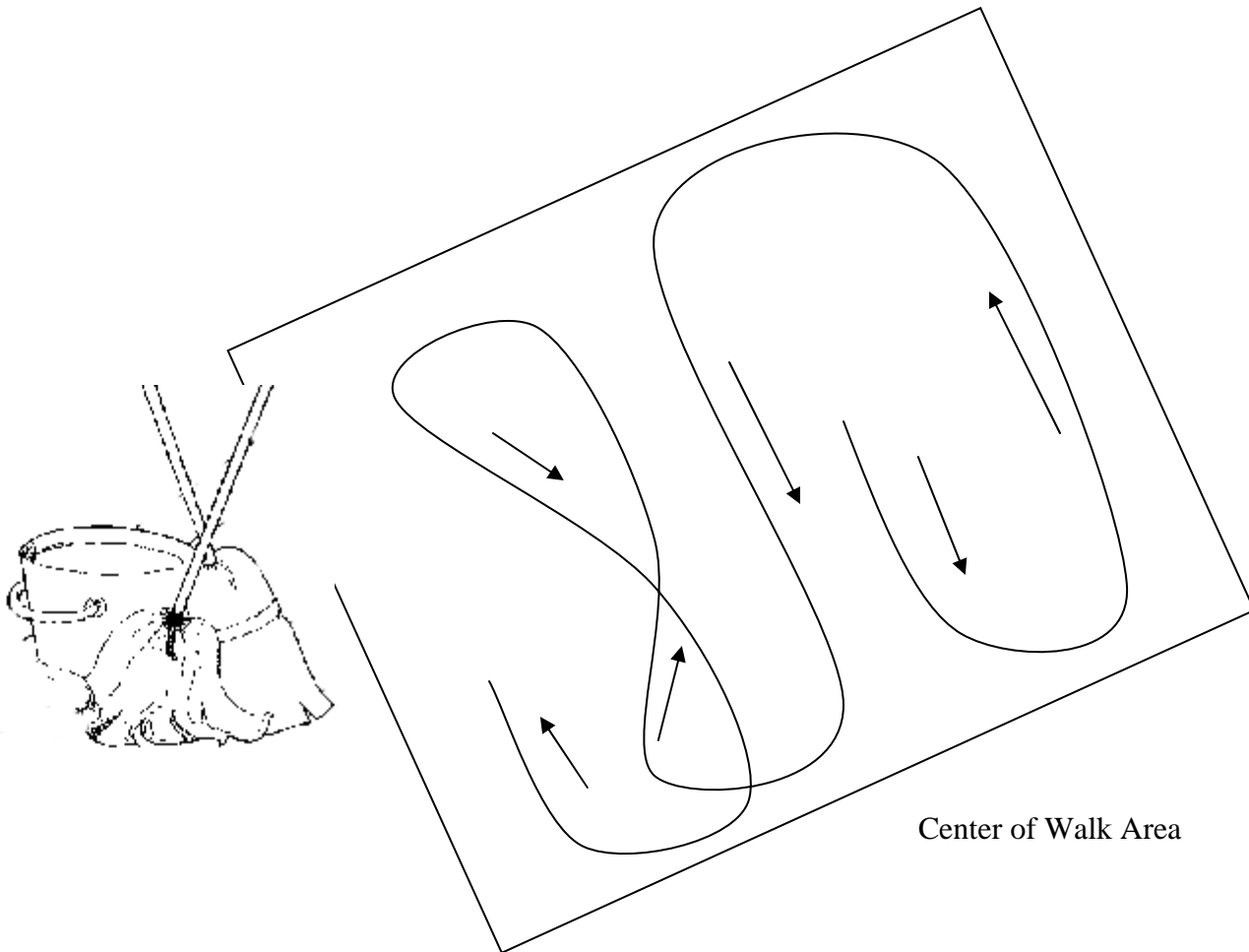
1. Replaced any furniture moved during the damp mopping process.
2. Remove warning signs when floor has dried.
3. Before leaving the work area, do a final inspection to see that the work was completed as required.
4. Return all equipment to the storage area.
5. Clean and store equipment.
 - a. Empty mop unit.
 - b. Clean all equipment items before placing in storage locations.
 - c. Hang wet mops to facilitate drying.

Equipment Care

“If you treat your equipment nicely, it will love you in return”

Handout

Mop Strokes



Start stroke parallel to baseboard, about 2 feet away.

Make second stroke close to baseboard.

Continue mopping making a “U-Turn” at end of each stroke to form a figure 8.

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Abbreviations

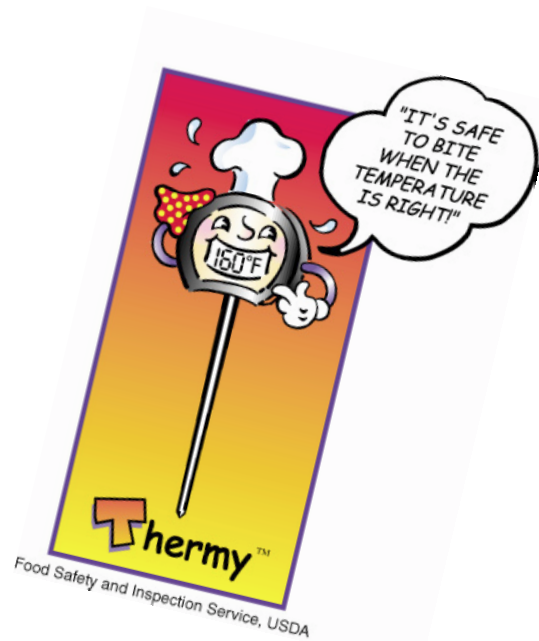
C	Celsius
CMS	Centers for Medicare & Medicaid Services
EPA	Environmental Protection Agency
F	Fahrenheit
FIFO	First in First Out
HACCP	Hazard Analysis Critical Control Point
PPE	Personal Protective Equipment
ppm	parts per million
psi	pounds per square inch
SOM	State Operations Manual
T/Tbsp	Tablespoon

Dietetics in Health Care Communities

a dietetic practice group of the
American Dietetic Association



Food Safety



HACCP

Hazard Analysis Critical Control Point

Learning Objectives:

Upon completion of this inservice, the participant will be able to:

1. Describe the development of the HACCP system;
2. List the 7 principles of HACCP;
3. Describe the steps in implementing a HACCP system;

Understand the basic steps for a HACCP system.

NOTE: HACCP is a complex subject that would be difficult to cover in one inservice session. This section is designed so that it can easily be broken up into several different inservice sessions.

Overview

The Pillsbury Company and the U.S. Army Natick Laboratories developed HACCP (Hazard Analysis Critical Control Points) as a food safety program for the National Aeronautics and Space Administration (NASA) in the 1960's. NASA needed to develop a system to assure that food used in space was free of pathogens and biological toxins. The concept of HACCP was first presented to the public at the 1971 National Conference on Food Protection. HACCP has been deemed one of the best of NASA's spin-offs.

HACCP is an organized and methodical system designed to keep food safe from harvest to consumption, based upon technical and scientific principles that help to insure food safety. HACCP principles can be applied to production, meat slaughter and processing, shipping and distribution, food service and in home preparation.

The most important aspect of HACCP is that it is a preventative system rather than an inspection system of controlling food safety hazards. Prevention of hazards cannot be accomplished by end product inspection; controlling the production process with HACCP offers the best approach. The application of HACCP is systematic because structured hazard analysis and implementation are provided.

The HACCP system has two major components. The "HA" represents the logic in the hazard analysis, identifying the where and how of hazards. The "CCP" represents the critical control points that provide the control of the process and the proof of control. The end objective of HACCP is to make the product as safe as possible and to be able to prove that the product was processed as safely as possible.

The assurance of safety comes from the process of identifying the hazards, establishing controls for those hazards, monitoring the controls and verifying that the system works. Foodborne illness can be devastating to astronauts in outer space but symptoms of foodborne illness can also be deadly for the very young, the elderly and for those persons who are less able to fight off disease.

Seven Principles of HACCP

1. Analyze hazards.
2. Identify critical control points.
3. Establish preventive measures with critical limits for each control point.
4. Establish procedures to monitor the critical control points.
5. Establish corrective actions to be taken when monitoring shows that a critical limit has not been met.
6. Establish procedures to verify that the system is working properly.
7. Establish effective record keeping to document the HACCP system.

Developing a HACCP Plan

The seven HACCP principles are the most important steps in writing a HACCP plan. The first two steps provide the foundation for the HACCP plan and are essential because application of the other HACCP principles depend on the results of the hazard analysis. The remaining five steps are the application steps of the plan.

Step 1: Bring Together the HACCP Resources/Assemble the HACCP Team

Assemble the HACCP resources and team. This includes written materials and documents that relate to food safety as well as assembling a team of individuals. The team should include people who know how the process (operations) works.

Step 2: Describe the Product and its Method of Distribution

Describe completely each food product the facility makes. This can include a brief description of how the process occurs and/or how the product is produced or prepared and helps to focus on potential hazards that may occur in the product. To describe the product, answer the questions in the form below. (Form 1)

One way to control paperwork is to control all products in the same process category using a single HACCP Plan. If the product(s) differ only in characteristics but not safety, the same process category may be covered by the same HACCP plan.

Step 3: Develop a Complete List of Ingredients and Raw Materials

Develop a written list of ingredients and raw materials for each process/product. The ingredients and raw materials will help to focus on potential hazards in the product produced. It may be helpful to divide the ingredients as indicated in the form below. (Form 2)

Step 4: Develop a Process Flow Diagram

Construct a process flow diagram that identifies all the steps used to prepare the product, from receiving through final use that are directly under the control of the facility. After the flow diagram is constructed it should be verified by walking through the process to make sure that the steps listed on the diagram describe what really occurs in producing the product. See Process Flow Diagram.

Step 5: Meet the Regulatory Requirements for Sanitation

Good sanitation is the most basic way to ensure that a safe product is produced and serves as an excellent foundation for building a HACCP plan. It also demonstrates that management has the commitment and resources to successfully implement the HACCP plan.

Application of the Principles of HACCP

Principle 1 - Conduct a Hazard Analysis: List the steps in the process and identify where significant hazards are likely to occur, focusing on hazards that can be prevented, eliminated or controlled by the HACCP plan.

- A. A hazard is a biological, chemical or physical agent that is expected to cause illness or injury when proper procedures are not followed. A biological hazard makes food unsafe to eat and is frequently associated with raw products, usually have meat, poultry products as the main component; and may be introduced by people.
 1. *Biological Hazards* include:
 - a. Bacteria or Germs
 - b. Poisons in fish and plants
 - c. Viruses
 - d. Parasites
 - e. Fungi

2. *Chemical Hazards* are usually naturally occurring or are added during the process. These include:
 - a. Pesticides
 - b. Food Additives and Preservatives
 - c. Cleaning Supplies
 - d. Toxic Metals
 - e. Lubricants on equipment
 - f. Paints
 - g. Petroleum Products

3. *Physical Hazards* are normally unexpected and include:
 - a. Dirt
 - b. Hair
 - c. Broken glass
 - d. Nails
 - e. Staples
 - f. Metal fragments
 - g. Operator overload
 - (1) Physical distress
 - (2) Safety capability
 - (3) Training/knowledge

B. The process of conducting a hazard analysis involves two stages

1. Brain Storming Session – HACCP Team members
 - a. Review ingredients used in a product
 - b. Review the activities conducted at each step in the food preparation process and the equipment used
 - c. Review the final product, its method of storage and distribution
 - d. Review the intended use and consumers of the product

2. Development of a list of hazards, which may be introduced, increased or controlled at each step of production. The following is a list of questions that can be asked at this step.
 - a. Does the food contain ingredients that may present biological, chemical or physical hazards?
 - (1) Example—Chicken that contains Salmonella
 - (2) Example—Fruit or vegetable with pesticide residue
 - (3) Example—Fresh vegetable with dirt
 - b. Does the food permit survival or multiplication of pathogens and/or toxin formation in the food during processing?
 - c. Does food processing include a controllable processing step that will destroy pathogens?
 - d. Does the layout of the facility provide an adequate separation of raw foods and ready to eat foods? If not, what hazards should be considered as possible contaminants of the ready to eat products?
 - e. Will the equipment provide the time and temperature control that is necessary for safe food?
 - f. Is the equipment properly sized for the volume of food that will be processed?

Principle 2 - Identify the Critical Control Points: A critical control point (CCP) is a point, step or procedure that can be applied so that a food safety hazard can be prevented, eliminated or reduced to acceptable levels. A critical control point may control more than one food safety hazard or in some cases more than one CCP is needed to control a single hazard. The number of CCP's needed depends on the processing steps and the control needed to assure food safety.

A. Determine Critical Control Points (CCP's)

1. Points in a food's production (from raw to consumption) at which the potential hazard can be prevented, controlled, reduced to acceptable levels or eliminated.
 - a. Cooking
 - b. Cooling
 - c. Holding
 - d. Storage
 - e. Packaging
 - f. Metal Detection

B. Establish Critical Limit

1. The maximum and/or minimum value to which a biological, chemical or physical factor must be controlled
2. Critical limits distinguish between safe and unsafe operating conditions at a Critical Control Point
 - a. Temperature
 - b. Time
 - c. Physical dimensions
 - d. Humidity
 - e. pH
 - f. Water Activity
3. Critical limits must be scientifically based
 - a. Regulatory standards and guidelines
 - b. Literature surveys
 - c. Experimental results
 - d. Experts

Principle 3 - Establish Critical Limits: A critical limit (CL) is the maximum and/or minimum value to which a biological, chemical, or physical parameter must be controlled at a CCP to prevent, eliminate or reduce to an acceptable level the occurrence of a food safety hazard. The critical limit is usually a measure such as time, temperature, water activity (Aw), pH, weight or some other measure that is based on scientific literature and/or regulatory standards.

A. Establish Critical Limit

1. The maximum and/or minimum value to which a biological, chemical or physical factor must be controlled
2. Critical limits distinguish between safe and unsafe operating conditions at a Critical Control Point
 - a. Temperature
 - b. Time
 - c. Physical dimensions
 - d. Humidity
 - e. pH
 - f. Water Activity
3. Critical limits must be scientifically based
 - a. Regulatory standards and guidelines
 - b. Literature surveys
 - c. Experimental results
 - d. Experts

Principle 4- Monitor CCP: Describe monitoring procedures for the measurement of the critical limit at each critical control point. Describe how the measurement will be taken, when the measurement is to be taken, who is responsible for the measurement and how frequently the measurement is taken during production.

A. Establish Monitoring Procedures

1. Planned system of observations or measurements that assess if a Critical Control Point is under control
2. Produces an accurate record for future use in verification
3. The monitoring program
 - a. Identifies if control procedures are being followed
 - b. Indicates when there has been a departure from critical limits
 - c. Allows for action to be taken if there has been loss of control
 - d. Provides written documentation of procedures, persons completing the monitoring and time and date
4. Monitoring personnel
 - a. Understand process
 - b. Adequately trained
 - c. Provide accurate, timely reports

Principle 5 - Establish Corrective Action: Corrective actions are the procedures that are followed when a deviation in a critical limit occurs. The HACCP team will identify the steps that will be taken to prevent potentially hazardous food from entering the food chain and the steps that are needed to correct the process. This usually includes identification of the problems and the steps taken to assure that the problem will not occur again.

A. Establish Corrective Actions

1. Procedures to follow when a food has not been prepared under the critical limits
2. Corrective actions will prevent foods that are hazardous from reaching the consumer
3. Corrective action should include:
 - a. Determine and correct the cause of non-compliance
 - b. Determine the disposition of the hazardous product
 - (1) Reprocessing food
 - (2) Disposing of food
 - c. Record the corrective action that has been taken
 - (1) Corrective actions are developed in advance for each CCP
 - (2) Responsible employee should be designated

Principle 6 - Verification: Those activities, other than monitoring, that determine the validity of the HACCP plan and that the system is operating according to the plan. The HACCP team may identify activities such as auditing of CCP's, record review, prior shipment review, instrument calibration and product testing as part of the verification activities.

A. Establish Verification Procedures

1. Determines if the system is operating according to the HACCP plan by:
 - a. Reviewing the plan on a scheduled time frame to determine if the system is complete and accurate
 - b. Reviewing of CCP monitoring records
 - c. Reviewing of records for deviations and corrective actions
 - d. Validation of critical limits to determine if they are adequate for control of the hazard
 - e. Sampling and testing to verify documented CCP monitoring records
2. Should be conducted on a routine and unannounced basis

3. Examples of reports include:
 - a. Records associated with CCP monitoring (*Time and Temperature Records*)
 - b. Direct recording of monitoring data of the CCP while in operation
 - c. Certification that monitoring equipment is properly calibrated and in working order (*Thermometers, Ovens and Refrigeration Units*)
 - d. Documentation of training and knowledge of individuals responsible for monitoring CCP's (*Inservice Records*)

Principle 7 – Recordkeeping: A key component is recording information that can be used to prove that the food was produced safely. Records need to include information about the HACCP plan, the HACCP Team, product description, flow diagrams, hazard analysis, CCP's identified, critical limits, monitoring system, corrective actions, recordkeeping procedures and verification procedures.

- A. Establish Record-Keeping Procedures. The following may be included:
 1. A summary of the Hazard Analysis
 2. The HACCP Plan
 - a. Listing of the HACCP team and the assigned responsibilities
 - b. Description of the food, its distribution, intended use and consumer
 - c. Flow Diagram completed on hazardous foods
 - d. HACCP Plan Summary Tables
 - (1) Steps in the process that are CCP's
 - (2) The hazards of concern
 - (3) Critical limits
 - (4) Monitoring
 - (a) Position responsible
 - (b) Procedure to follow
 - (c) Frequency
 - (5) Corrective Action
 - (6) Verification Procedures
 - (7) Record-Keeping Procedures
 - e. Support Documentation of validation records
 - f. Records that are generated
 - (1) Supplier certification records documenting compliance of an ingredient with a critical limit
 - (2) Processor audit records verifying supplier compliance
 - (3) Storage records
 - (4) Monitoring records
 - (5) Verification records
 - (6) Corrective Action records
 - (7) Employee training records
 - (8) Documentation of the adequacy of the HACCP plan from a knowledgeable HACCP expert

Prerequisite Programs

The HACCP program should be built on a solid foundation. That foundation is the conditions and practices, basic operating conditions to deliver safe food. These may include:

- A. Supplier control
 1. Supplier has food safety program in place
- B. Specifications
 1. Written and available specifications for ALL foods
 - a. Product
 - b. Packaging
 - c. Ingredients

- C. Production equipment
 - 1. Constructed/installed properly
 - 2. Sanitary design
 - 3. Preventative maintenance program
 - 4. Calibration schedules
- D. Cleaning/Sanitation
 - 1. Master sanitation schedule in place
 - 2. Procedure for cleaning written and followed
- E. Personal Hygiene
 - 1. Requirements established and followed
- F. Training
 - 1. Documented training
 - a. Personal hygiene
 - b. Sanitation
 - c. Safety
 - d. HACCP role
- G. Chemical Control
 - 1. Segregation of chemicals
- H. Receiving and Storage
 - 1. Appropriate temperature(s)
- I. Effective Pest Control system

Form 1

Product Category Description

Product:

The following areas need to be defined when developing the product category description:

1. Common name/description:

2. Process description:

3. How is it to be used?

4. Type of package?

5. Length of shelf life; at what temperature?

6. Where will it be served/sold?

7. Labeling instructions:

8. Is special distribution control needed?

Form 2

Product and Ingredients

Product:

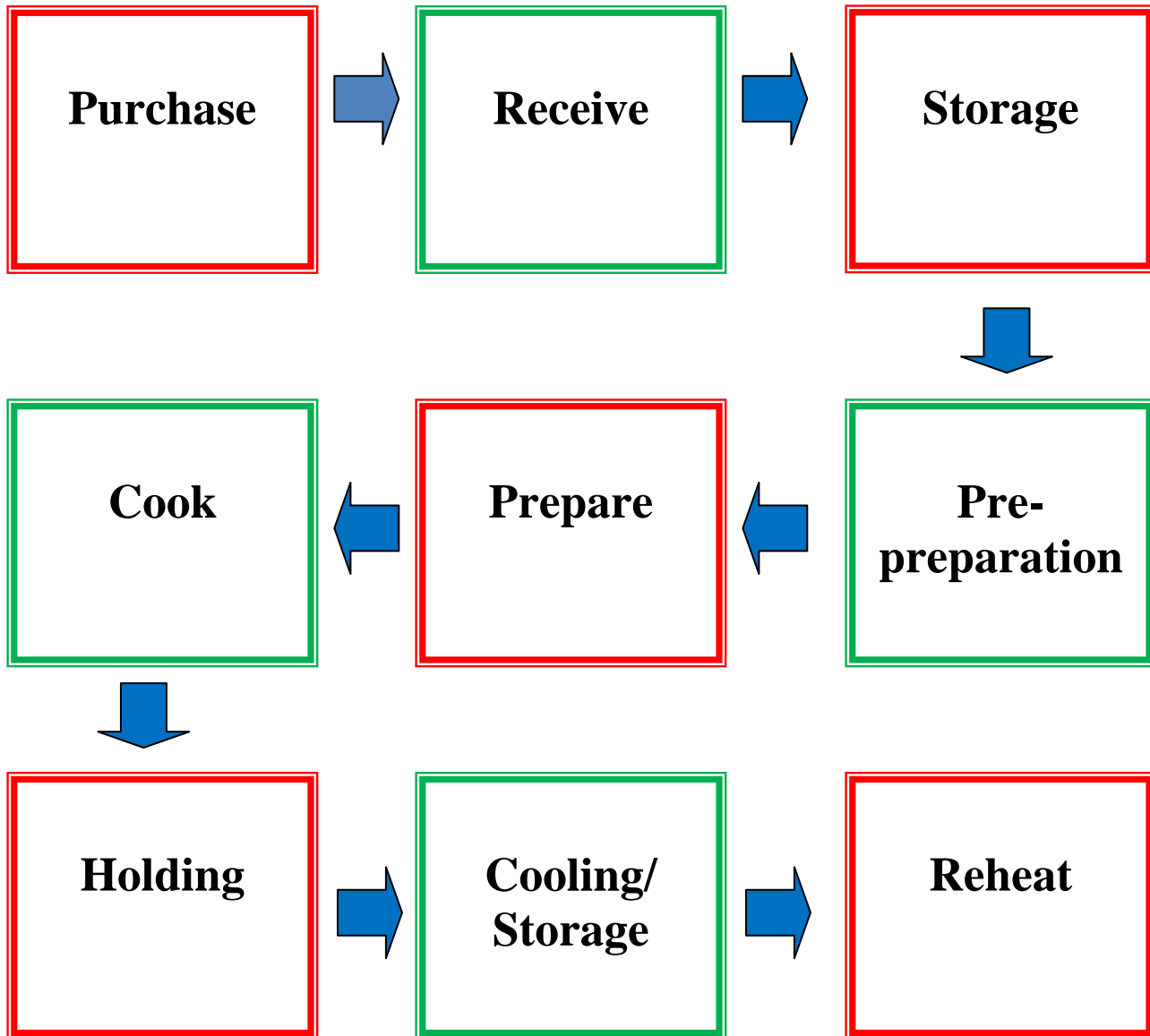
Meat ingredients:

Non-meat ingredients:

Restricted ingredients:

Packaging materials:

Process Flow Diagram



Basic Test #1

A hazard is a biological, chemical or physical agent that is expected to cause illness or injury when proper procedures are not followed. Give examples of each of the following:

1. Biological Hazards

2. Chemical Hazards

3. Physical Hazards

4. What are the 2 stages involved in conducting a hazard analysis?

5. A CCP is:
 - a. A point at which loss of control may result in an unacceptable risk to consumers
 - b. A point at which loss of control does not lead to an unacceptable risk to consumers
 - c. Failure to meet a required critical limit
 - d. Presence of a hazard or health risk

6. An advantage of a HACCP system is that it:
 - a. Focuses on policies and procedures
 - b. Does not require staff training
 - c. Creates paperwork to keep employees out of trouble
 - d. Focuses on managing hazards to control risks

Basic Test #1 - Answers

A hazard is a biological, chemical or physical agent that is expected to cause illness or injury when proper procedures are not followed. Give examples of each of the following:

1. Biological Hazards

- a. **Bacteria or Germs**
- b. **Poisons in fish and plants**
- c. **Viruses**
- d. **Parasites**
- e. **Fungi**

2. Chemical Hazards

- a. **Pesticides**
- b. **Food Additives and Preservatives**
- c. **Cleaning Supplies**
- d. **Toxic Metals**
- e. **Lubricants on equipment**
- f. **Paints**
- g. **Petroleum Products**

3. Physical Hazards

- a. **Dirt**
- b. **Hair**
- c. **Broken glass**
- d. **Nails**
- e. **Staples**
- f. **Metal fragments**

4. What are the 2 stages involved in conducting a hazard analysis?

- Brainstorming session**
- Developing a list of hazards**

6. A CCP is:

- a. **A point at which loss of control may result in an unacceptable risk to consumers**
- b. A point at which loss of control does not lead to an unacceptable risk to consumers
- c. Failure to meet a required critical limit
- d. Presence of a hazard or health risk

7. An advantage of a HACCP system is that it:

- a. Focuses on policies and procedures
- b. Does not require staff training
- c. Creates paperwork to keep employees out of trouble
- d. **Focuses on managing hazards to control risks**

Activity A

Process Flow Diagram

1. Choose a common/favorite recipe.
2. Assemble a list of all the ingredients necessary.
3. Following HACCP principles, “walk” through the process flow diagram noting potential hazards, CCP’s, etc.

Downloadable Blank HACCP Forms & Flow Chart

1. Hazard Analysis Table

PROCESS STEP					
Processing Step	Potential Hazards (C) Chemical (P) Physical (B) Biological	Is this potential food safety hazard significant?	Justification of Decision	Preventive Measures	Is this step a CCP?

NAME OF FOOD ESTABLISHMENT: _____

BRIEF PRODUCT DESCRIPTION: _____

ADDRESS: _____

SIGNATURE: _____

DATE: _____

2. ROP HACCP Plan Summary

CCP									
Critical Control Point (CCP)	Hazard Description	Critical Limits for each Control Measure	Monitoring				Corrective Action	Verification Activities	Record-keeping Procedures
			What	How	Frequency	Who			

NAME OF FOOD ESTABLISHMENT: _____

BRIEF PRODUCT DESCRIPTION: _____

ADDRESS: _____

SIGNATURE: _____

DATE: _____

3. Refrigeration / Freezer Log

Refrigeration / Freezer Log						
Location/ Unit Description	Date	Time	Temperature	Corrective Action	Food Worker Initials	Manager Initials / Date

Instructions: A designated foodservice employee will record the location or description of holding unit, date, time, air temperature, corrective action, and initials on this Log. The supervisor of the food operation will verify that foodservice workers have taken the required temperatures by visually monitoring food workers during the shift and reviewing, initialing, and dating this log daily. This log should be maintained for a minimum of 90 days after the food has been consumed.

4. Thermometer Calibration Log

Thermometer Calibration Log							
Date	Time	Test Thermometer ID#	Reference Thermometer Reading	Test Thermometer Reading	Adjustments Required (Yes / No)	Corrective Action	Initials

Verification (Records Review) by and Date: _____

Instructions: Foodservice workers will record the calibration temperature and corrective action taken each time thermometer is calibrated. The supervisor of the food operation will verify that foodservice employees are using and calibrating thermometers properly by making visual observations of employee activities during all hours of operation. The supervisor of the operation will review and initial the log daily. This log should be maintained for a minimum of 90 days after the food has been consumed. Thermometers intended for measuring hot temperature items, such as cooked product, will be calibrated in hot water, while those used for taking lower temperatures will be calibrated in ice water. All thermometers will be calibrated within + or - 2 degrees F.

5. Corrective Action Log

Corrective Action Log	
Product:	Lot ID:
Date / Time:	Designated Food Worker:
Deviation:	
Cause of Deviation:	
Cause of Deviation Eliminated By:	
CCP Under Control After Corrective Actions Taken:	
Preventative Measures:	
Product Disposition:	

Verification (Records Review) by and Date: _____

6. Cooking & Reheating Temperature Log

Cooking and Reheating Temperature Log							
Date and Time		Food Item	Internal Temperature / Time	Internal Temperature / Time	Corrective Action Taken	Initials	Verified By / Date

Instructions: Record product name, time, the two temperatures/times, and any corrective action taken on this form. The supervisor of the food operation will verify that food workers have taken the required cooking temperatures by visually monitoring food workers and preparation procedures during the shift and reviewing, initialing, and dating this log daily. This log should be maintained for a minimum of 90 days after the food has been consumed.

7. Holding Times & Temperatures

Holding Times and Temperatures								
Date	Food Item	1 st Measurement (e.g. enter holding)			2 nd Measurement (e.g. exit holding)			Corrective Action
		Time	Temp	Initials	Time	Temp	Initials	

Supervisory Employee's Initials and Date: _____

Instructions: Take and record the temperature of the food when placed in holding units and when removed from holding units. If pans are moved directly from ovens to holding units, simply record the end cooking temperature on this form.

8. Receiving Log

Receiving Log (Transporting)							
Date	Time	Vendor or Supplier	Product Name	Temperature (°F)	Corrective Action Taken	Initials/Date	Manager Initials/Date

Instructions: Use this Log for deliveries or receiving foods from suppliers. Record any temperatures and corrective action taken on the Receiving Log. The supervisor of the food operation will verify that foodservice workers are receiving products using the proper procedure by visually monitoring foodservice workers during the shift and reviewing the log daily. The Receiving log should be maintained for a minimum of 90 days after the food has been consumed.

9. Cooling Temperature Log

Cooling Temperature Log										
Date	Food Item	Time / Temp	Time / Temp	Time / Temp	Time / Temp	Time / Temp	Time / Temp	Corrective Actions Taken	Initials	Verified By / Date

Instructions: Record temperatures every hour during the cooling cycle. Record corrective actions, if applicable. If no foods are cooled on any working day, indicate "No Foods Cooled" in the Food Item column. The supervisor of the food operation will verify that the designated food worker is cooling food properly by visually monitoring the food worker during the shift and reviewing, initialing, and dating the log daily. The Cooling Log should be kept for a minimum of 1 year.

10. Damaged or Discarded Product Log

Damaged or Discarded Product Log							
Date	Time	Vendor or Supplier	Product Name	Temperature	Corrective Action Taken	Initials/Date	Manager Initials/Date

Instructions: Designated food worker will record product name, quantity, action taken, reason, initials, and date each time a food or food product is damaged and/or will be discarded. The supervisor the food operation will verify that food workers are discarding damaged food properly by visually monitoring foodservice workers during the shift and reviewing, initialing, and dating this log daily. The Damaged or Discarded Product Log should be maintained for a minimum of 90 days after the food has been consumed.

11. Food Contact Surface Cleaning & Sanitizing Log

Food Contact Surfaces Cleaning and Sanitizing Log									
Date and Time		Wash Temperature	Rinse Temperature	Final Rinse (Sanitization) Temperature	Heat Sensitive Tape (place here)	Sanitizer Concentration (in ppm)	Corrective Action	Food Worker Initials	Verified By / Date

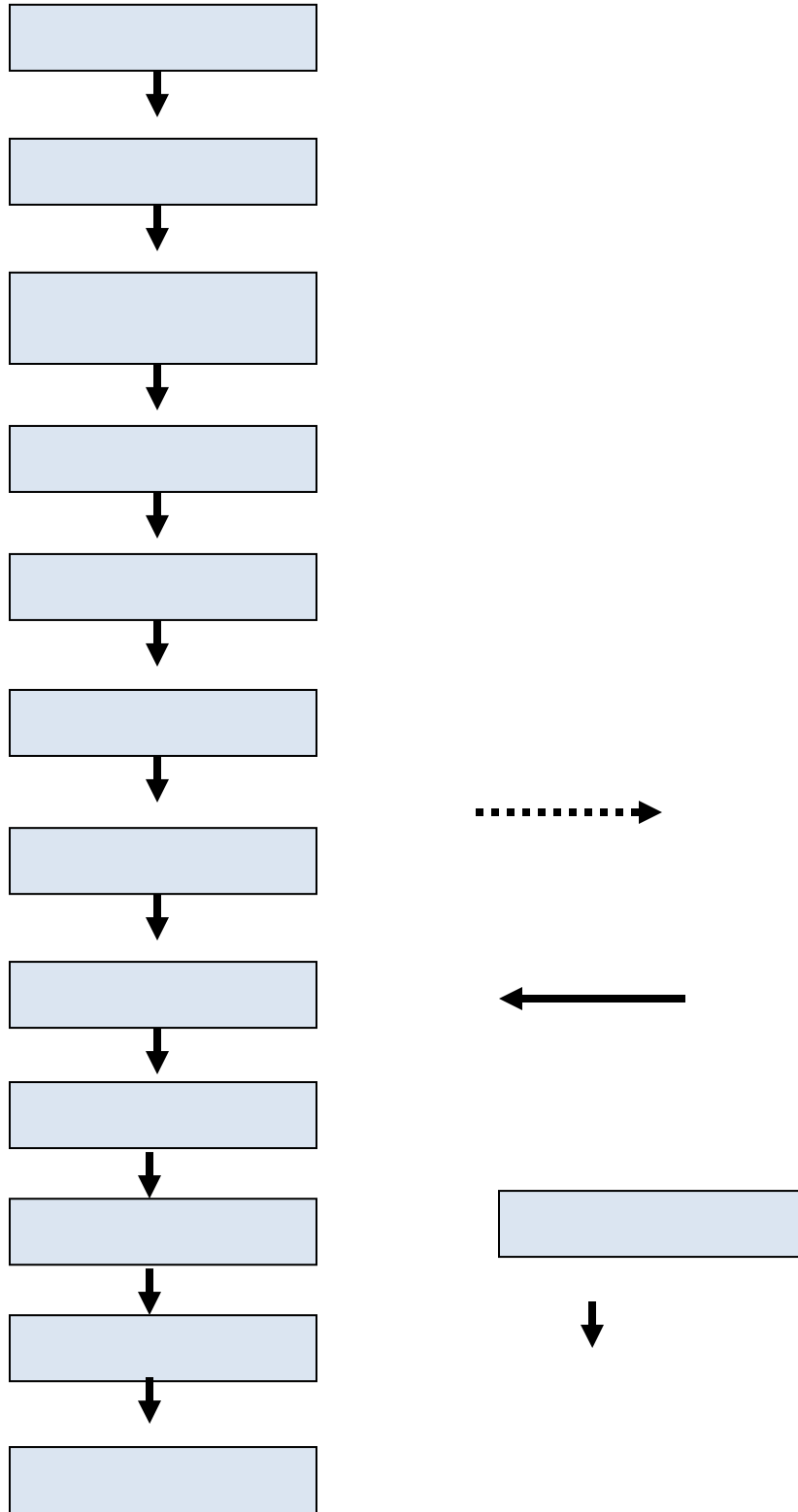
Instructions: Record time, temperatures/sanitizer concentration, as appropriate and any corrective action taken on this form. The supervisor of the food operation will verify that food workers have taken the required information by visually monitoring foodservice workers and preparation procedures during the shift and by reviewing, initialing, and dating this log daily. This log should be maintained for a minimum of 90 days after the food has been consumed.

12. Food Preparation Log

Food Preparation Log									
Date	Start Time	Product Name	Temp #1	Temp #2	Amount Prepared	Corrective Actions	End Time	Food Worker Initials	Verified By / Date

Instructions: Designated foodservice worker will record the date, product name, start and end time of preparation, the two temperature measurements taken, any corrective action taken, and the amount of food prepared. The supervisor of the food operation will verify that foodservice worker is taking the required temperatures and following the proper food preparation procedures by visually monitoring foodservice worker during the shift and reviewing, initialing, and dating the log daily. This log should be maintained for a minimum of 90 days after the food has been consumed.

Flow Chart



Activity B

Conducting a Hazard Analysis

Have participants pretend that they are HACCP team members. Take the recipe used in the process flow diagram and go through each of the following 4 steps.

1. Review ingredients used in the recipe.
2. Review the activities conducted at each step in the food preparation process and the equipment used.
3. Review the final product, its method of storage and distribution.
4. Review the intended use and consumers of the product.

Have the participants answer these questions about the recipe used above.

1. Does the food contain ingredients that may present biological, chemical or physical hazards?
 - a. Example—Chicken that contains Salmonella
 - b. Example—Fruit or vegetable with pesticide residue
 - c. Example—Fresh vegetable with dirt
2. Does the food permit survival or multiplication of pathogens and/or toxin formation in the food during processing (*Moist high protein foods*)?
3. Does food processing include a controllable processing step that will destroy pathogens (*Time and Temperature Control*)?
4. Does the layout of the facility provide an adequate separation of raw foods and ready to eat foods? If not, what hazards should be considered as possible contaminants of the ready to eat products (*Raw Foods and Ready-to-eat foods stored in the same area*)?
5. Will the equipment provide the time and temperature control that is necessary for safe food (*Will the refrigerator cool a product in the safe time frame*)?
6. Is the equipment properly sized for the volume of food that will be processed (*Do you have space to hold hazardous foods at the proper temperature*)?

Activity C

Take the recipe you have been using and allow the participants to determine the Critical Control Points

Have the participants set the critical limits for the critical control points identified in the prior step.

Give the participants an example of non-compliance and let them decide on the corrective action.

Activity D:

What is HACCP?

Playing the Game:

1. Instructor assigns a scorekeeper.
2. Divide the participants into groups of 2
3. Instructor numbers the groups starting with 1
4. Instructor has an index card numbered from 1 through the number of groups in the class
5. Instructor places the index cards upside down.
6. Instructor draws a card from the pile. The number drawn is the number of the group given the first opportunity to answer the question.
7. Instructor asks questions verbally.
8. If the first group does not correctly answer the question, the instructor draws from another index card and the number on the index card indicates the next group that is allowed to answer the question. This continues until the question is answered correctly.
9. Instructor then repeats the process for each question below.
10. After each group has been allowed to answer a question, the cards are placed face down again until all the questions are answered.
11. One point is given for each correctly answered question.
12. At the end of the activity, group points are announced. A sheet with the correct answers may be given to the participants if desired.

Questions:

1. Which one of the following is an advantage to the HACCP System
 - a. To ensure that safe food is served to consumers
 - b. To ensure that the astronauts are served foods that they enjoy
 - c. To prevent a food service organization from legal action
 - d. To give employees job security
2. What do the letters HACCP stand for?
3. Name at least 4 of the 7 steps in the development of a HACCP Program
4. Which of the following is not a critical control point
 - a. Storage
 - b. Reheating
 - c. Cooking
 - d. Cooling
5. You are the first cook to arrive in the morning. When you open the oven you find that the roast that was cooked yesterday was left in the cold oven overnight. What is the corrective action you should take?

Answers to Activity D Questions

2. Which one of the following is an advantage to the HACCP System
 - e. To ensure that safe food is served to consumers**
 - f. To ensure that the astronauts are served foods that they enjoy

- g. To prevent a food service organization from legal action
- h. To give employees job security

2. What do the letters HACCP stand for?

Hazard Analysis Critical Control Point

3. Name at least 4 of the 7 steps in the development of a HACCP Program

- 1. Analyze hazards.
- 2. Identify critical control points.
- 3. Establish preventive measures with critical limits for each control point.
- 4. Establish procedures to monitor the critical control points.
- 5. Establish corrective actions to be taken when monitoring shows that a critical limit has not been met.
- 6. Establish procedures to verify that the system is working properly.
- 7. Establish effective record keeping to document the HACCP system.

5. Which of the following is not a critical control point

- a. **Storage**
- b. Reheating
- c. Cooking
- d. Cooling

5. You are the first cook to arrive in the morning. When you open the oven you find that the roast that was cooked yesterday was left in the cold oven overnight. What is the corrective action you should take?

Throw it away

Sample HACCP Monitoring Chart

Recipe _____

Date _____

Critical Control Point	Time	Temperature	Standard	Corrective Action	Recorded By

Handout

FROZEN GROUND BEEF/PORK

OPERATIONAL STEP	CCP	STANDARD	MONITORING	CORRECTIVE ACTION	Employee
PURCHASING		Purchase only meat that has been inspected by USDA	Observe Federal Stamp or vendor to provide proof of government inspected meat		Manger
RECEIVING		Accept only if delivered at 0° F	Measure Temperature	Reject meats delivered at above 0 ° F or with unacceptable color, sour smell or broken cartons, dirty meat wrappers or torn packaging	Manager
STORAGE		Store at 0 degrees F	Measure Temperature		Storeroom Clerk
THAWING		Thaw under refrigeration at or below 41° F or under running potable cold water for no more than 2 hrs	Measure Temperature		Cook
COOKING	CCP	Cook meat to internal temperature of 155° F for 15 seconds.	Measure Temperature	Continue heating until temperature reaches recommended internal temperature or higher	Cook
HOLDING	CCP	Hold for service at 135 ° F or higher	Measure Temperature	Reheat one time to 165° F for at least 15 seconds within 2 hrs if product has been held less than 2 hrs. If temperature is below 135° F for longer than 2 hrs discard	Dietary Aide
COOLING	CCP	Divide into smaller portions and cool to 70° F in 2 hrs and to 41° F in 4 hrs	Measure Temperature	Reheat to 165° F for at least 15 seconds within 2 hrs if not cooled to 70° F within 2 hrs and 41° F within 4 hrs. If not cooled within above noted time the second time discard	Cook
REHEATING	CCP	Reheat to 165° F for at least 15 seconds within 2 hrs	Measure Temperature	Continue heating to 165° F or higher. If temperature is not reached for at least 15 seconds within 2 hrs discard	Cook

Proper Storage of Leftovers

Perishable and Non-Perishable

Learning Objectives:

Upon completion of this inservice, the participant will be able to:

1. List proper methods for storing leftovers;
2. State the importance of labeling and dating foods that are stored.

Discussion

Leftovers can have several meaning such as unused ingredients after opening a container, production leftovers and food remaining after meal service. Foods held on a steam table often lose quality and nutrients and are not appropriate to reuse. Items on a buffet line with exposure to residents and staff may not be safe to store and reuse.

A. Storage of perishable leftovers.

1. Cover, label with name, date stored and the date it must be used or discard by . Refrigerate leftovers immediately using HACCP cooling methods. Store in shallow airtight containers. Plastic containers (such as Rubbermaid™) with tight fitting lids are recommended.
2. Leftovers can be stored under refrigeration up to seven days. Check state and local regulations. Some items that are not considered perishable, such as gallons of mayonnaise, contain a “*use by*” date and do not require dating when opened; however, best practice is to have a policy outlining discard time frames for such foods. This is frequently stated as 30 days. Manufacturers have various meanings for “*use by*” dates most often indicating quality not food safety.
3. Leftovers can be frozen for an extended period of time (see handout).

B. Storage of non-perishable food items removed from original containers.

1. Be sure to reseal, label and date all products. Items should be sealed in an airtight manner: in containers with tight fitting lids or in Ziploc bags.
2. Use products within “*use by date*” stated on original package.

C. Recommended frozen storage procedures:

1. Whenever possible, wrap individual portions rather than several together.
2. Wrap in clear plastic wrap and then in aluminum foil or freezer paper for double protection against freezer burn.
3. Note if products (meat) are cooked or raw.
4. When layered items are to be frozen, separate each layer with wax paper to insure easy separation upon thawing.
5. Label frozen leftovers with the date and contents.
6. Maintain an inventory list of frozen leftovers and use in a timely fashion.

Activities.

Have participants check refrigerators, freezers and storage areas for leftovers/non-perishables and discuss observations.

Post Test: Proper Storage of Leftovers - Perishable and Non-Perishable - Part A

1. What is the correct storage procedure for leftovers in the:
Refrigerator: _____
Freezer: _____
2. What is the length of time leftovers can be stored under refrigeration? _____

3. True False Non-perishables should be stored in sealed containers with date, and contents identified.
4. True False Keep an inventory of frozen leftovers
5. True False The “*use by date*” on non-perishables is not important.

Post Test Key: Proper Storage of Leftovers - Perishable and Non-Perishable - Part A

1. What is the correct storage procedure for leftovers in the:

Refrigerator: Cover, label, date, store in shallow containers

Freezer: Cover, label, date

2. What is the length of time leftovers can be stored under refrigeration?

24 Hours to 7 days

3. **True** False Non-perishables should be stored in sealed containers with date, and contents identified.

4. **True** False Keep an inventory of frozen leftovers

5. True **False** The “*use by date*” on non-perishables is not important.

Suggested Storage of Perishable and Non-Perishable Foods

<i>Food</i>	<i>Refrigerator storage (32°F-40°F [0°C-4°C])</i>	<i>Freezer storage (0°F [-18°C] or below)</i>	<i>Dry storage (50°F-70°F [10°C-21°C])</i>
Roasts, steaks, chops	3-5 days	Beef and lamb: 3-6 months Pork: 4-6 months Veal: 3-4 months Sausage, raw: 1-2 months Unopened sliced bacon: 2 months Hot dogs unopened: 1-2 months	Never
Ground meat, stew meat Ground turkey, veal, lamb	1-2 days	3-4 months	Never
Ham, baked whole	7 days	1-2 months	Never
Hams, canned	9 months	Not recommended	Never
Chicken and turkey Fresh, whole	1-2 days	Chicken: 6-12 months Turkey: 6-9 months Giblets: 3-4 months	Never
Lean Fish (cod, flounder, Haddock, sole, etc.) Fatty Fish (Bluefish, mackerel, salmon, etc.)	30°F-32°F (-1°C-0°C) 1-2 days	6 months	Never
Shell Fish (shrimp, crayfish, squid, shucked clams, mussels and oysters)	1-2 days	3-6 months	Never
Live clams, mussels, crab, lobster and oysters	2-3 days	2-3 months	Never
Shell eggs fresh	3-5 weeks (Use by date stamped on carton)	Not recommended	Never
Frozen eggs	1-2 days after thawing	9 months	Never
Dried eggs	6 months	Not recommended	Never
Fresh fruits and vegetables	5-7 days	Not recommended	Never
Frozen fruits and vegetables	---	Variable, depends on kind	Never
Canned fruits and vegetables	---	Not recommended	12 months
Dried fruits and vegetables	Preferred	Not recommended	2 weeks
Canned fruit and vegetable juice	---	---	Satisfactory
Butter	1-3 months	6-9 months	Never
Cheese, Hard	6 months, unopened 3-4 weeks opened	6 months	Never
Cream Cheese	2 weeks	Doesn't freeze well	Never
Half & Half	3-4 days(Date on Carton)	4 months	Never
Milk	7 days (date on carton)	3 months	Never
Sour Cream	7-21 days (date on container)	Do not Freeze	Never

<i>Food</i>	<i>Refrigerator storage (32°F-40°F [0°C-4°C])</i>	<i>Freezer storage (0°F [-18°C] or below)</i>	<i>Dry storage (50°F-70°F [10°C-21°C])</i>
Yogurt	7-14 days (date on carton)	1-2 months	Never
Regular cornmeal	Required over 60 days	Not recommended	2 months
Whole wheat flour	Required over 60 days	Not recommended	2 months
Degermed cornmeal	Preferred	Not recommended	Satisfactory
All-purpose and bread flour	Preferred	Not recommended	Satisfactory
Rice	Preferred	Not recommended	Satisfactory

Revised and adapted from previous publications by Ruby P. Puckett and Food Safety Education, FDA, USDA Food Safety and Inspection Services as printed in Safe Handling of Foods, HACCP, OSHA and other Safety Precautions in Foodservice Departments, Division of Continuing Education, University of Florida, Gainesville FL 2002.

General Storage Temperatures

Dry Storage 50° F - 70° F (10° C – 21 ° C)

Refrigerated Storage 41° F (0° C) or below

Deep Chilled Storage 26° F to -32° F (-3° C to 0° F)

Freezer Storage 0° F (-23.5° C) or below The 2009 Food Code does not specify the requirement to store frozen foods at 0° or below – only that it must be frozen solid. Facility policy should be followed).

Producing Proper Food Quantities And Proper Handling of Leftovers

Learning Objectives:

Upon completion of this inservice, the participant will be able to:

1. State how to produce appropriate amounts of food to reduce amount of leftovers;
2. Demonstrate how to handle leftovers to maintain safety of the product;
3. List appropriate uses of leftover foods.

How to Produce Appropriate Amounts of Foods (to Reduce Leftovers)

- A. An excessive quantity of food left at the end of a meal is usually due to over production.
- B. Avoid excessive leftovers by producing only what you need for the meal.
 1. Follow standardized recipes for appropriate number of portions.
 2. Follow production sheets.
 3. Use correct portion sizes (according to recipe and menu).

How to Handle Leftovers to Maintain Safety

- A. Safe handling of leftovers starts with proper purchasing, receiving, storage and preparation of foods.
 1. Purchasing
 - a. Purchase from reputable vendors with proper facilities for storing and delivering food at appropriate temperatures and free of contamination.
 2. Receiving
 - a. Refrigerator foods should be received at an internal temperature of 41° F or below.
 - b. Frozen foods should be received at 0° F or below.
 - c. Non-perishables should be in unopened, undamaged cartons or cases.
 - d. Canned goods should not be dented, damaged or bulging.
 3. Storage
 - a. Refrigerator foods must be maintained at a temperature of 41° F or below.
Freezer foods must be maintained at 0° F or below (at a temperature to maintain a frozen state. The 2009 Food Code does not specify the requirement to store frozen foods at 0° or below – only that it must be frozen solid. Facility policy should be followed).
 4. Preparation.
 - a. Thaw frozen foods safely. The best practice is to thaw under refrigeration or to cook from the frozen state, if this is appropriate for the specific food. Thawing under running water – a method that is frequently observed – is not best practice, especially in warm climates where tap water is above 70° F.
 - b. Wash hands frequently as needed for safe food handling.
 - c. Use only clean sanitized utensils and surfaces.
 - d. Maintain safe temperatures throughout preparation.
- B. Holding foods - hot foods.
 1. Hot foods should be checked to be sure internal temperature is above 135° F prior to placing them in holding equipment such as steam tables. Check individual state regulations, as some states have not adopted the 2009 Federal Food Code and continue to use 140° F as the minimum hot food holding temperature.
 2. Be sure to preheat holding equipment prior to placing hot food items for holding.
 3. Prepare foods in small amounts and in shallow pans for holding.

4. Hot foods must be held at a temperature of 135° F or above, per the 2009 Food Code, or at the temperature specified by state regulation, if more stringent.
5. Check hot food temperatures every 1-2 hours to be sure internal temperatures are maintained and record temperatures.
6. Remove food that is not holding appropriate temperature.
7. Keep foods covered when not in use in order to maintain temperature.
8. Never mix new food in with old food.
9. Use clean and sanitized equipment.

C. Holding foods - cold foods.

1. Cold foods must be maintained at an internal temperature of 41° F or below.
2. If using ice to keep foods cold, be sure food is in a clean container and not directly on the ice.
3. Be sure ice is covering food enough to keep it cold.
4. When using ice, be sure water can drain away from the food.
5. Utilize clean and sanitized equipment.
6. Measure food temperatures every 1-2 hours and record - pull foods that do not maintain temperature.

D. Cooling leftovers.

1. Reduce size of food (cut roasts into smaller pieces, place thick, viscous fluids in shallow pans (2" depth; thin fluids 3" depth).
2. Cool in small batches in an ice bath (prepared by placing a shallow pan of food inside a larger pan filled with ice), OR in a quick chill unit.
3. Avoid use of storage refrigerators or freezers for use in cooling large amounts of hot food, as this will cause the temperature of the unit to rise making it unsafe for other foods stored in the unit.
4. Allow air to circulate around the cooling food.
5. Food must be cooled to 70° F within 2 hours and to 41° F within an additional 4 hours.
6. Label food with the date it was prepared and the date that it is to be used by.
7. Discard if not used within 7 days. (Check state regulations.)

E. Reheating leftovers.

1. Leftovers must be reheated to an internal temperature of 165° F for at least 15 seconds within 2 hours to be used safely.
2. If reheating in a microwave, food must be reheated to an internal temperature of 165° F and the food is rotated or stirred, covered and allowed to stand for 2 minutes so heat can spread throughout the food.
3. Use direct heat to reheat foods. This would be in ovens, steamers, stovetops or microwaves - never in steam tables or other holding equipment.
4. Food should be reheated in small batches and reheated only once - if not used it should be discarded.

Appropriate Uses for Leftovers

- A. The following are appropriate uses for leftovers which have been handled according to the instructions noted above:
1. Bread - Breadcrumbs, croutons, stuffing, bread pudding.
 2. Rice - rice custard, soup, casseroles.
 3. Noodles - casseroles, soups.
 4. Cakes and cookies - HS snacks, selective dessert cart.
 5. Hard cooked eggs - potato salad, egg salad, tuna salad, deviled eggs.

6. Cooked meat or poultry - slice for meat sandwiches, grind or cube for meat salad, cube for stew or soup, use in barbecue sandwiches, freeze in small portions for meat alternates.
7. Vegetables - in soups, stews, casseroles.
8. Fruits - selective dessert cart, muffins, gelatin salads, fruit alternate, cobblers, fruit salad.

Post Test: Appropriate Handling and Use of Leftovers

Name _____ Date _____

1. Name two things you can do to reduce leftovers.

2. True False In order to have safe leftovers, you must handle food appropriately from purchasing to receiving, storage and preparation.

3. Hot foods should be held at a minimum temperature of _____ degrees Fahrenheit.

4. Cold foods should be held at a maximum temperature of _____ degrees Fahrenheit.

5. Name two things you should do to maintain the safety of hot foods on tray line.

6. Name two things you should do to maintain the safety of cold foods on a tray line.

7. Leftovers must be reheated to a temperature of _____ degrees Fahrenheit within _____ hours and then to _____ degrees Fahrenheit within an additional _____ hours to remain safe.

8. Name two ways to cool foods quickly.

9. Hot foods must be cooled to a temperature of _____ degrees Fahrenheit within _____ hours to remain safe.

10. True False It is all right to reheat foods in the steam table.

11. True False If leftovers are not used after reheating they must be cooled to 41° F or less within 4 hours.

KEY Post Test: Appropriate Handling and Use of Leftovers

Name _____ Date _____

1. Name two things you can do to reduce leftovers.
follow standardized recipes
follow production sheets
use correct portions
2. **True** False In order to have safe leftovers, you must handle food appropriately from purchasing to receiving, storage and preparation.
3. Hot foods should be held at a minimum temperature of 135 degrees Fahrenheit.
4. Cold foods should be held at a maximum temperature of 41 degrees Fahrenheit.
5. Name two things you should do to maintain the safety of hot foods on tray line.
check temperatures
preheat equipment
keep covered
6. Name two things you should do to maintain the safety of cold foods on a tray line.
use ice
check temperatures
7. Hot foods must be cooled to a temperature of 70 degrees Fahrenheit within 2 hours and then to 41 degrees Fahrenheit within an additional 4 hours to remain safe.
8. Name two ways to cool foods quickly.
blast chiller
ice bath
9. Leftovers must be reheated to a temperature of 165 degrees Fahrenheit within 2 hours to remain safe.
10. True **False** It is all right to reheat foods in the steam table.
11. True **False** If leftovers are not used after reheating they must be cooled to 41° F or less within 4 hours.

Appropriate Handling and Use of Leftovers

1) How to produce appropriate amounts of foods.

- Follow standardized recipes
- Follow production sheets
- Use correct portion sizes (per menus and recipes)
- Forecast needs/demands

2) How to handle leftovers to maintain safety.

- Cooling leftovers
 - Reduce the size of the food to cool
 - Cut roasts into smaller pieces
 - Cool in shallow pans no more than 2 inches deep
 - Cool in small batches in an ice bath
 - Avoid using storage refrigerators to cool large amounts of foods
 - Allow air to circulate around cooling foods
 - Utilize cooling paddles, etc.
 - Cool foods using the 2-step method
 - ✓ from 135° F to 70° F within 2 hours
 - ✓ to 41° F within the next 4 hours
 - Label and date all leftovers with storage date and date to be used or discarded
 - Discard if not used within 7 days
 - ✓ Leftover meat and poultry should be discarded after seven days if stored under refrigeration at 41° F or lower.

Reheating leftovers

- Reheat to 165°F for at least 15 seconds and within 2 hours
- In a microwave, reheat to 165°F and allow to stand 2 minutes
- Never reheat foods in steam tables or holding equipment
- Reheat in small batches
- Reheat only once - discard if not used

3) Appropriate uses for leftovers

- Bread - bread crumbs, croutons, stuffing, bread pudding.
- Rice - rice custard, soup, casseroles.
- Noodles - casseroles, soups.
- Cakes and cookies - HS snacks, selective dessert cart.
- Hard cooked eggs - potato salad, egg salad, tuna salad, deviled eggs.
- Cooked meat or poultry - slice for sandwiches, grind or cube for salad, cube for stew or soup, use in barbecue sandwiches, freeze in small portions for meat alternates.
- Vegetables - soups, stews, casseroles.
- Fruits - dessert cart, muffins, gelatin salads, cobblers, fruit salad.

Food Labeling and Dating

Learning Objectives:

Upon completion of this inservice, the participant will be able to

1. State the importance of labeling and dating food removed from the original container;
2. Demonstrate how to label foods.

Discussion.

- A. Many foods appear to be the same. Labeling eliminates possibility of confusion/error.
- B. Proper food labeling - All leftover foods or foods removed from their original containers require proper labeling when stored. Proper food labeling requires the following:

NAME, IDENTIFICATION, DATE OF PREPARATION AND DATE FOODS ARE TO BE USED OR DISCARDED.

1. Name identification
 - a. Foods can look the same in an unlabeled container. Example: apple juice and lemon juice.
 - b. Chemicals and foods can look the same in an unlabeled container. Example: flour and white powder (rat poison); flour and white powder (detergents).
 - c. The proper name of the food product must be placed on all food containers being stored.
2. Dates recorded
 - a. At the time food is being removed from its original container and placed in another container, DATE IT.
 - b. At the time leftover foods are removed from either hot or cold holding and placed in a container, DATE WITH PREPARATION DATE AND THE DATE THAT IT IS TO BE USED OR DISCARDED
 - c. Sight or smell does not tell how long a food product has been in storage.
 - d. Bacteria grow in food products even though we can't see it until it is over grown - MOLD.
 - e. Once refrigerated items are properly stored with name and dates, they need to be used or disposed of within seven days. (Check state regulations.)
 - f. At the time food is moved from freezer to refrigerator for thawing, date it.

Activities

- A. Labeling game
1. Assemble 12 empty baby food jars with lids.
 2. Soak labels off and dry jars, number jars 1-12.
 3. Select 12 food items from the food preparation area. Example: farina, cream of white, cream of rice, flour, sugar, powdered sugar, salt, lemon juice, garlic salt, powdered milk, vinegar, apple juice, tapioca, onion salt, garlic powder, raspberry gelatin and strawberry gelatin, etc., and put them in the jars. Number the jars.
 4. Record the numbers of jars on a key for reference. As the food items are added, match the number with the food that went in the jar.
 5. Hand out form.
 - a. Guess food products by sight alone.
 - b. Guess food products by sight and smell.
 - c. List proper labeling information.

Post Test: Food Labeling and Dating

Name _____ Date _____

PROPER LABELING INSERVICE FORM			
Jar #	Sight	Sight and Smell	Proper Labeling
#1			
#2			
#3			
#4			
#5			
#6			
#7			
#8			
#9			
#10			
#11			
#12			

SAFE FOOD HANDLING PRACTICES: FOOD TEMPERATURES

Learning Objectives:

Upon completion of this inservice, the participant will be able to:

1. Demonstrate an understanding of the importance of handling food at the proper temperatures;
2. State how to store hazardous foods;

Define the most common factors in foodborne illness

General Knowledge

Up to 40% of communicable diseases are associated with poor food handling.

Bacteria are present everywhere - in the air, in food and on our hands, mouth, skin.

Bacteria in food can multiply and cause food borne illness that can result in illness or death for the geriatric patient.

DANGER ZONE

41° F – 135° F (5° C - 57° C)

Bacteria need warm temperatures and moisture to multiply in food. Bacteria thrive in potentially hazardous foods that are often warm, moist, protein-rich and chemically neutral or low in acid. The conditions are referred to as FATTOM.

Food

Acidity
Time
Temperature
Oxygen
Moisture

FATTOM: Conditions Needed for Bacteria to Grow

Bacteria grow best when they have:

F = Food

Moist protein-rich foods, such as meat, milk, eggs and fish, are potentially hazardous and are likely to cause foodborne illness because they transport pathogenic bacteria and can support growth of these bacteria. Melon, leafy greens and tomatoes are potentially hazardous and need to be washed and held under 41°

A = Acidity

Bacteria grow best in an environment that is neutral or slightly acidic. Microorganisms thrive in a pH range between 6.6 and 7.5.

T = Time

No more than four hours in the temperature danger zone**

**Note: When cooling, it is also allowable to bring food from 135° F to 70° F within two (2) hours and from 70° to 41° F within an additional four (4) hours.

When low acid food (food with a neutral or alkaline pH) is placed in the **DANGER ZONE** (41° to 135° F or 5° to 57° C) longer than **two hours**, pathogens multiply rapidly. Restricting the time that foods stay in the **DANGER ZONE** to **two hours or less** prevents growth of large numbers of pathogens.

T = Temperature

During a two-hour period in the **DANGER ZONE, 41° and 135° F (5° to 57° C)**, only minimal growth and reproduction of pathogens can occur. One important rule of food safety is to **stay out of the DANGER ZONE**, where potentially hazardous foods support the growth of pathogenic microorganisms.

O = Oxygen

Some microorganisms are **aerobic**, that is need **oxygen** (air) to grow. When foods such as meat, spaghetti sauce or vegetables are canned, oxygen is excluded from the environment. Therefore, growth of aerobic organisms is controlled and the food is preserved. Such foods are shelf stable and do not require refrigeration.

Some microorganisms (such as botulism) grow only in **anaerobic** conditions (the absence of oxygen). Improperly preserved home canned foods are usually the source of botulism.

M = Moisture

Moisture content is the amount of water in food and is expressed as a percentage. Water activity (a_w) is the amount of water available for deterioration reactions and is measured on a scale of 0 to 1.0. Microorganisms need an abundant supply of water to grow. Perishability of a food is related not only to moisture content, but also to water activity.

Water Activity levels (a_w) of ≥ 0.85 promote s the growth of microorganisms such as bacteria, yeast, and mold. Meat, produce and soft cheeses have a_w in this range. Bacteria do not grow as easily in foods such as jams and jellies, dry noodles, flours, candies and crackers, where a_w is below 0.85. Foods preserved with salt or sugar, such as jerky or jams and jellies have a lower a_w because salt and sugar deprive microorganisms of water and inhibit their reproduction. These products are shelf-stable (i.e., do not need refrigeration).

Facts of Bacteria Reproduction:

- Bacteria double in number every 20 minutes.
- The growth rate slows at 32° F, but the bacteria are not killed.
- Most common hazardous foods are meats, poultry, gravies, eggs, milk, custards, dressing, fish and shellfish, cream sauces and mayonnaise-based foods such as salads. Also melon, leafy greens, tomatoes and bean sprouts.

Most Common Factors in Foodborne Illness

- Failure to thoroughly heat or cook food.
- Infected employees who practice poor personal hygiene at home and at the workplace.
- Food prepared in advance and not cooled and stored properly .
- Raw contaminated ingredients incorporated into foods that receive no further cooking.
- Foods allowed remaining within the **Danger Zone**.

- Failure to reheat and hold cooked foods at temperatures and for the length of time needed to kill bacteria.
- Cross-contamination of cooked foods with raw foods, by employees who mishandle foods or through improperly cleaned equipment.

Safe Food Preparation for Cold Items:

- Chill ingredients before mixing.
- Use properly cleaned and sanitized utensils.
- Practice good personal hygiene.
- Prepare pasta, meat, egg and fish salad less than 24 hours before service.
- Chill finished products to 41°F or below prior to service.
- Wash fresh produce before use.
- Make only small batches and refrigerate each batch before service.

Proper Food Handling – Cold Foods

- Keep cold foods cold at 41°F or below.
- Prepare cold foods such as salads prior to meal service to allow for proper chilling.
- Cold salads may be prepared the day before they are served.
- After dishing desserts or salads or after making meat or salad sandwiches, put in the refrigerator immediately.
- Hold cold foods on ice or in a refrigerated unit during tray service to keep cold.
- Foods may be placed in the freezer for a short time to lower the temperature quickly.

Proper Food Handling – Hot Foods

- Keep hot foods hot at 135°F or higher.
- Place foods on the steam table no more than 20 minutes before serving. Heat foods according to Food Code/ State Code regulations before placing on steam table.
- Reheat mechanically altered food to 165°F for 15 seconds before placing on steam table.
- Place all pans inside the wells of the steam table. Smaller pans such as 1/3 pans or 1/6 pans may need to be used for small quantities of food.
- Batch cook foods to assure proper temperatures.

2009 Food Code Time and Temperature Control - Thawing

3-501.13 Thawing.

Except as specified in ¶ (D) of this section, POTENTIALLY HAZARDOUS FOOD (TIME/TEMPERATURE CONTROL FOR SAFETY FOOD) shall be thawed:

(A) Under refrigeration that maintains the FOOD temperature at 5°C (41°F) or less; or

(B) Completely submerged under running water:

(1) At a water temperature of 21°C (70°F) or below,

(2) With sufficient water velocity to agitate and float off loose particles in an overflow, and

(3) For a period of time that does not allow thawed portions of READY-TO-EAT FOOD to rise above 5°C (41°F), or

(4) For a period of time that does not allow thawed portions of a raw animal FOOD requiring cooking as specified under ¶ 3-401.11(A) or (B) to be above 5°C (41°F), for more than 4 hours including:

(a) The time the FOOD is exposed to the running water and the time needed for preparation for cooking, or

(b) The time it takes under refrigeration to lower the FOOD temperature to 5°C (41°F);

(C) As part of a cooking process if the FOOD that is frozen is:

(1) Cooked as specified under ¶ 3-401.11(A) or (B) or § 3-401.12, or

(2) Thawed in a microwave oven and immediately transferred to conventional cooking EQUIPMENT, with no interruption in the process; or

(D) Using any procedure if a portion of frozen READY-TO-EAT FOOD is thawed and prepared for immediate service in response to an individual CONSUMER'S order.

2009 Food Code Time and Temperature Control - Cooling

3-501.14 Cooling.

(A) Cooked POTENTIALLY HAZARDOUS FOOD (TIME/TEMPERATURE CONTROL FOR SAFETY FOOD) shall be cooled:

- (1) Within 2 hours from 57°C (135°F) to 21°C (70°F);
- (2) Within a total of 6 hours from 57°C (135°F) to 5°C (41°F) or less.

(B) POTENTIALLY HAZARDOUS FOOD (TIME/TEMPERATURE CONTROL FOR SAFETY FOOD) shall be cooled within 4 hours to 5°C (41°F) or less if prepared from ingredients at ambient temperature, such as reconstituted FOODS and canned tuna.

(C) Except as specified under ¶ (D) of this section, a POTENTIALLY HAZARDOUS FOOD (TIME/TEMPERATURE CONTROL FOR SAFETY FOOD) received in compliance with LAWS allowing a temperature above 5°C (41°F) during shipment from the supplier as specified in ¶ 3-202.11(B), shall be cooled within 4 hours to 5°C (41°F) or less.

(D) Raw EGGS shall be received as specified under ¶ 3-202.11(C) and immediately placed in refrigerated EQUIPMENT that maintains an ambient air temperature of 7°C (45°F) or less.

3-501.15 Cooling Methods.

(A) Cooling shall be accomplished in accordance with the time and temperature criteria specified under § 3-501.14 by using one or more of the following methods based on the type of FOOD being cooled:

- (1) Placing the FOOD in shallow pans;
- (2) Separating the FOOD into smaller or thinner portions;
- (3) Using rapid cooling EQUIPMENT;
- (4) Stirring the FOOD in a container placed in an ice water bath;
- (5) Using containers that facilitate heat transfer;
- (6) Adding ice as an ingredient; or
- (7) Other effective methods.

(B) When placed in cooling or cold holding EQUIPMENT, FOOD containers in which FOOD is being cooled shall be:

- (1) Arranged in the EQUIPMENT to provide maximum heat transfer through the container walls; and
- (2) Loosely covered, or uncovered if protected from overhead contamination as specified under Subparagraph 3-305.11(A)(2), during the cooling period to facilitate heat transfer from the surface of the FOOD.

Miscellaneous

- Store hazardous foods (food containing meat, milk, eggs, or mayonnaise) in the refrigerator at all times except during preparation or service.
- DO NOT LEAVE FOOD ON THE STOVE OR STEAM TABLE AFTER MEALS.
- Never allow hazardous foods to stay at room temperature or place on a warm range or griddle.
- Discard mechanically altered foods after service.
- Heat leftovers to an internal temperature of at least 165° F for 15 seconds before placing on the serving line.

Handout

CRITICAL TEMPERATURES FOR FOOD HANDLING AND STORAGE

212°F	100°C	Water boils			
165°F	76°C	Minimum for cooking poultry, stuffed meats and reheating of potentially hazardous foods			
155°F	70°C	Minimum for cooking pork, ground meats, ham, game, hot meat sandwiches			
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> Danger Zone for Food Safety </div>			135°F	57°C	Cooking storage or display of potentially hazardous foods at or above this temperature
			65° - 86°F	18° - 29°C	Range of room temperatures
			41°F	5°C	Storage or display of potentially hazardous foods at or below this temperature
32°F	0°C	Water freezes			
0°F	-18°C	Storage of frozen foods			

POST TEST 1: Safe Food Handling Practices: Food Temperatures

Name _____ Date _____

1. Hot food must be kept at _____ degrees F or above.
2. Cold food must be kept at _____ degrees F or below.
3. Previously prepared food must be reheated to _____ degrees F or higher.
4. True False Disease-causing microorganisms require a warm, moist environment to grow and multiply. For this reason, refrigerated foods can be considered safe.
5. True False Foods should be cooled at room temperature before they are refrigerated.
6. True False The dangerous temperature zone is between 150° F and 140° F.

POST TEST 1 KEY: Safe Food Handling Practices: Food Temperatures

Name _____ Date _____

1. Hot food must be kept at 135 degrees F or above.
2. Cold food must be kept at 41 degrees F or below.
3. Previously prepared food must be reheated to a minimum of 165°F for 15 seconds.
4. True False Disease-causing microorganisms require a warm, moist environment to prosper. For this reason, refrigerated foods can be considered safe.
True
5. True False Foods should be cooled at room temperature before they are refrigerated.
False
6. True False The dangerous temperature zone is between 150° F and 140° F.
False

POST TEST 2: Safe Food Handling Practices: Food Temperatures

Name _____ Date _____

1. What does the acronym FATTOM stand for?

F
A
T
T
O
M

2. What percentage of communicable diseases may be caused by poor food handling?

3. What are 3 of the most common mistakes leading to foodborne illness?

4. What is the **DANGER ZONE**?

5. True False Hot foods should be kept at 120° F or higher

6. True False Foods should be placed on the steam table no more than 20 minutes before serving.

7. True False Batch cook foods to assure proper temperatures

8. True False Thaw frozen meats on the countertop.

POST TEST 2 Key: Safe Food Handling Practices: Food Temperatures

Name _____ Date _____

1. What does the acronym FATTOM stand for?

Food

Acidity
Time
Temperature
Oxygen
Moisture

2. What percentage of communicable diseases may be caused by poor food handling?

40%

3. What are 3 of the most common mistakes leading to foodborne illness?

Failure to thoroughly heat or cook food

Infected employees who practice poor personal hygiene at home and at the workplace

Food prepared in advance without proper cooling and storage

Raw contaminated ingredients incorporated into foods that receive no further cooking

Foods allowed remaining within the Danger Zone

Failure to reheat and hold cooked foods at temperatures and for the length of time needed to kill bacteria.

Cross-contamination of cooked foods with raw foods, by employees who mishandle foods or through improperly cleaned equipment.

4. What is the **DANGER ZONE**?

DANGER ZONE, 41° and 135°F (5° to 57°C)

5. True **False** Hot foods should be kept at 120° F or higher

6. **True** False Foods should be placed on the steam table no more than 20 minutes before serving.

7. **True** False Batch cook foods to assure proper temperatures

8. True **False** Thaw frozen meats on the countertop.

QUICK CHILL FOODS

First 2 hours / 135° - 70° F and
within a total of 6 hours
from 135° F to 41° F or less

Use Shallow Pans

Temperature Danger Zone
41° F to 135° F

Refrigerator: 41° - 35° F
Freezer: 0° - minus 10° F
Check Equipment and Record Every Shift

Handout

Minimum Cooking Food Temperatures & Holding Times

FOOD	MINIMUM TEMPERATURE	MINIMUM HOLDING TIME AT THE SPECIFIED TEMPERATURE
Pasteurized eggs (note: only pasteurized eggs are to be used if under cooked or combined with susceptible populations) Commercially Raised Game Animals Fish, Pork & Meat Not otherwise specified in this chart or in ¶ 3-401.11(B)	63° C (145° F)	15 seconds
Exotic Species of Game Animals Comminuted Fish & Meats Injected Meats	70° C (158° F) 68° C (155° F) 66° C (150° F) 63° C (145° F)	<1 second 15 seconds 1 minute 3 minutes
Poultry Stuffed Fish; Stuffed Meat; Stuffed Pasta; Stuffed Poultry; Stuffing Containing Fish, Meat or Poultry; Wild Game Animals	74° C (165° F)	15 seconds
Food Cooked in a Microwave Oven	74° C (165° F)	Stir and allow to stand covered for 2 minutes after cooking To be rotated or stirred throughout or midway during cooking to compensate for uneven distribution of heat.
Fruits and vegetables	60° C (140° F)	

Department of Health and Human Services, Food and Drug Administration. 2009 Food Code

Handout

Summary Chart for Minimum Food Temperatures and Holding Times Required by Chapter 3 for Reheating Foods for Hot Holding

Food	Minimum Temperature	Minimum Holding Time at the Specified Temperature	Maximum Time to Reach Minimum Temperature
¶ 3-403.11(A) and (D) Food that is cooked, cooled, and reheated	74°C (165°F)	15 seconds	2 hours
¶ 3-403.11(B) and (D) Food that is reheated in a microwave oven	74°C (165°F)	and hold for 2 minutes after reheating	2 hours
¶ 3-403.11(C) and (D) Food that is taken from a commercially processed, hermetically sealed container or intact package	57°C (135°F)	No time specified	2 hours
¶ 3-403.11(E) Unsliced portions of meat roasts cooked as specified under ¶ 3-401.11(B)	Same oven parameters and minimum time and temperature conditions as specified under ¶ 3-401.11(B)		Not applicable
	OR		
	Minimum and maximum time and temperature conditions listed in this chart for ¶ 3-403.11(A), and (D).		

Department of Health and Human Services, Food and Drug Administration. 2009 *Food Code*. Springfield, VA: National Technical Information Service, US Department of Commerce; 2009

Cooking Temperatures

Objective: To educate dietary employees on the minimum internal cooking temperature standards.

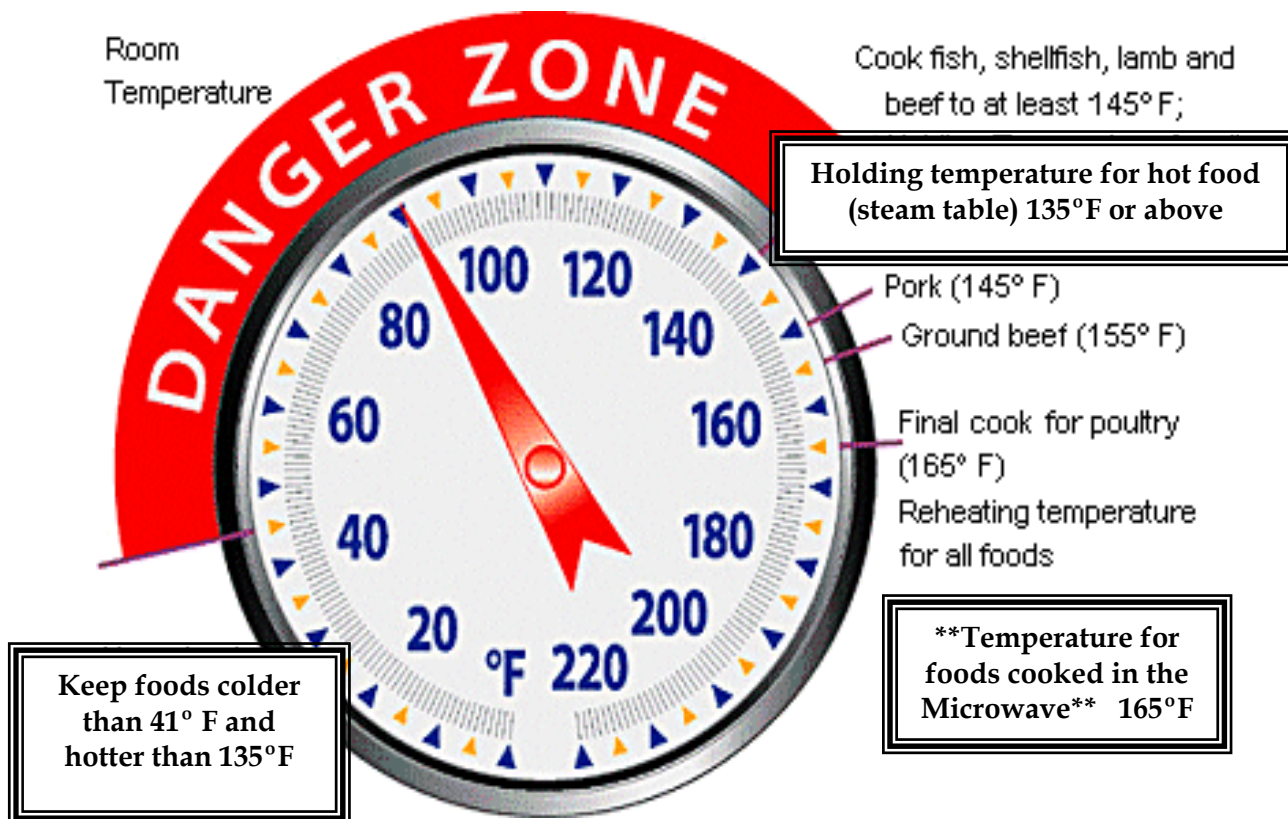
- I. Reasons for the standard cooking temperatures
 - a. Potential for food borne illness if not properly cooked.
 - b. Microorganisms decreased to safe amount through cooking process.

- II. Temperature Danger Zone
 - a. The temperature range between 41 ° F (5 ° C) and 135 ° F (60 ° C) where foodborne bacteria grow quickly and make food unsafe
 - b. This is the reason food must be held either above 135 ° F (60 ° C) or below 41 ° F (5 ° C).

- III. Minimum Internal Temperatures
 - a. Color, smell, look, or texture of a food is not enough to determine if it is cooked through or not.
 - b. **135°F** (60°C) for all foods that will be held hot prior to service. 145°F (63°C) for 15 seconds for fish; seafood; veal; lamb; mutton; pork; pork roasts and cured pork (e.g. ham); raw shell eggs for immediate service; and any fish and meat not specifically mentioned below.
 - c. **155°F** (68°C) for 15 seconds for ground beef, injected meats; ground fish or ground meat (e.g. pork, beef); raw eggs not prepared for immediate service.
 - d. **165°F** (74°C) for 15 seconds for poultry; stuffed fish; stuffed meat; stuffed pasta; stuffed poultry; stuffing containing fish, meat, or poultry. Also, any dishes containing previously cooked foods (reheating)
 - e. **165°F** (74°C) for foods cooked in a microwave. The food should be rotated or stirred at least midway through cooking process, covered to retain moisture, and allowed to stand covered for two minutes following cooking to allow for post cooking heat to rise.

Minimum Internal Cooking Temperatures Chart

- **135°F (60°C)** for all foods that will be held hot prior to service. 145°F (63°C) for 15 seconds for fish; seafood; veal; lamb; mutton; pork; pork roasts and cured pork (e.g. ham); raw shell eggs for immediate service; and any fish and meat not specifically mentioned below.
- **155°F (68°C)** for 15 seconds for ground beef, injected meats; ground fish or ground meat (e.g. pork, beef); raw eggs not prepared for immediate service.
- **165°F (74°C)** for 15 seconds for poultry; stuffed fish; stuffed meat; stuffed pasta; stuffed poultry; stuffing containing fish, meat, or poultry. Also, any dishes containing previously cooked foods (reheating)
- **165°F (74°C)** for foods cooked in a microwave. The food should be rotated or stirred at least midway through cooking process, covered to retain moisture, and allowed to stand covered for two minutes following cooking to allow for post cooking heat to rise.



Accurate Thermometer Use

Learning Objectives:

Upon completion of this inservice, the participant will be able to:

1. Understand the use of different types of thermometers;
2. Calibrate a thermometer.

Why Use a Thermometer?

Using a reliable thermometer is the **ONLY** way to be certain that foods are properly cooked (to the right temperature) to prevent foodborne illness.



Always check the manufacturer's instructions for use and calibration of thermometers. Not all thermometers can be calibrated and usage instructions vary with each type of thermometer.

Using the Food Thermometer

The reading will only be correct if the thermometer is placed in the proper location in the food.

In general, the food thermometer should be placed in the thickest part of the food, away from bone, fat or gristle.

Check Manufacturer's Instructions

Read the manufacturer's instructions before using the thermometer.

- Instructions should tell how far the thermometer must be inserted to give an accurate reading.
- If instructions are not available, check the stem of the food thermometer for an indentation, or "dimple" that shows one end of the location of the sensing device.
- Dial thermometers must penetrate approximately 2 to 3 inches.
- Most digital thermometers will read the temperature in a small area of the tip.

Where to Place the Food Thermometer

Meat

- Beef, pork, or lamb roasts
 - ✓ Placed midway in the roast, avoiding the bone.
- Hamburgers, steaks, or chops
 - ✓ Thermistor or thermocouple in the thickest part, away from bone, fat or gristle.
 - ✓ Dial bimetal thermometer, read "Thin Foods" below.
- When the food being cooked is irregularly shaped, (i.e., beef roast, etc.) check the temperature in several places.

Poultry

- Whole poultry
 - ✓ Insert into the thickest part of the thigh (avoiding the bone).
 - ✓ If stuffed, the center of the stuffing should be checked after the thigh reads 180° F. Stuffing must reach 165° F.
- Poultry parts
 - ✓ Insert food thermometer into the thickest area, avoiding the bone.
 - ✓ May be inserted sideways if necessary.
 - ✓ When irregularly shaped, the temperature should be checked in several places.

Thin Foods (i.e., **hamburger patty, pork chop, chicken breast**)

- Thermistor or thermocouple food thermometer should be used, if possible.
- If using an "instant-read" dial bimetallic-coil food thermometer, the probe must be inserted in the side of the food so that entire sensing area (usually 2-3 inches) is positioned through the center of the food.
 - ✓ May be helpful to remove the food from the heat source and insert the food thermometer sideways after placing the item on a clean spatula or plate.

Combination Dishes

- Casseroles and other combination dishes
 - ✓ Place the food thermometer into the thickest portion of the food or the center of the dish.
 - ✓ Egg dishes and dishes containing ground meat and poultry should be checked in several places.

Accurate Use of a Bimetallic Stemmed Thermometer:

- Calibrate thermometers by:
 - ⇒ Ice point method - Submerge the sensor in a 50/50 ice and water slush. Wait until the indicator stops moving then set at 32°F (See handout).
 - ⇒ Boiling point method - Submerge the sensor into boiling water. Wait until the indicator stops moving then set at 212°F
 - This method is **much less reliable** than the ice point method. To be totally accurate, distilled water must be used and the atmospheric pressure must be 29.92 inches of mercury. A variance of as much as 5°F is possible. (Food Code standards allow a variance of only $\pm 2^\circ$ F).
- Clean and sanitize the thermometer before use and between testing foods. Sanitizing can be accomplished by
 - ⇒ Using alcohol swabs to carefully clean the thermometer
 - ⇒ Using the three (3) sink method to wash, rinse and sanitize
 - Most thermometers should not be immersed in water – wash carefully by hand.
- Do not let thermometer touch sides or bottom of container
Insert thermometer so that the sensor is in the center of the food and wait at least 15 seconds for reading

Types of Food Thermometers

The bimetallic-stemmed thermometer has long been recommended. However, as technology increases, other options are becoming available. These include the following:

DIGITAL FOOD THERMOMETERS

Thermocouple:

- Measures temperature at the junction of two fine wires located in the tip of the probe.
- Measures temperature quickly, within 2 – 5 seconds
 - ✓ Temperature can be quickly checked in a number of locations.
 - ✓ Especially useful for cooking large foods, (roasts or turkeys), when checking in more than one place is advised.
 - ✓ Accurately reads the temperature of thin foods (hamburger patties, pork chops, and chicken breasts).
- Does NOT remain in the food while cooking.

- Used near the end of the estimated cooking time to check for final cooking temperatures.
- To prevent overcooking, check the temperature before the food is expected to finish cooking.
- Can be calibrated for accuracy.

Thermistors:

- Uses a resistor (a ceramic semiconductor bonded in the tip with temperature-sensitive epoxy) to measure temperature.
- Measures temperature in about 10 seconds.
- Can measure temperature in thin foods, as well as thick foods.
- Because the center of a food is usually cooler than the outer surface, place the tip in the center of the thickest part of the food.
- Does NOT remain in the food while cooking.
- Used near the end of the estimated cooking time to check for final cooking temperatures.
- To prevent overcooking, check the temperature before the food is expected to finish cooking.
- Not all can be calibrated. Check the manufacturer's instructions.

Oven Cord Thermometers:

- Allows the temperature of food in the oven to be checked without opening the oven door.
- Probe is inserted into the food, and the long, metal cord extends from the oven to the base unit that can be placed on the counter or attached to the stovetop or oven door by a magnet.
- Programmed for the desired temperature and beeps when it is reached.
- Can also be used to check foods cooking on the stove.
- Cannot be calibrated.

Thermometer Fork Combination:

- Combines a cooking fork with temperature-sensing device embedded in one of the tines with a food thermometer.
- Temperature is indicated within 2 – 10 seconds on a digital display or by indicator lights on the handle.
- Accurately measures the internal temperature of even thin foods.
- Used near the end of the estimated cooking time to check for final cooking temperatures.
- To prevent overcooking, check the temperature before the food is expected to finish cooking.
- NOT designed to remain in a food while in the oven or on the grill.
- Cannot be calibrated.

DIAL FOOD THERMOMETERS

Bimetallic-coil Thermometers:

- Contain a coil in the probe made of two different metals with different rates of expansion.
- Senses temperature from its tip and up the stem for 2 to 2 1/2 inches.
- Dial display.
- Available as "oven-safe" and "instant-read."

"Oven-safe" Bimetallic-coil Thermometers:

- Designed to remain in the food while it is cooking in the oven
 - ✓ Generally used for large items such as a roast or turkey.
- Constantly shows the temperature of the food while cooking.
- If not left in the food, can take as long as 1 to 2 minutes to register the correct temperature.
- Accurately measures the temperature of relatively thick foods (such as beef roasts) or deep foods (foods in a stockpot).
- Not appropriate to measure the temperature of any food less than 3 inches thick.
- Temperature should be taken in a second, and even third area, to verify the temperature of the food.
 - ✓ Each time the thermometer is inserted into the food, let the thermometer equilibrate (come to temperature) at least 1 minute before reading.
- Some models can be calibrated. Check the manufacturer's instructions.

"Instant Read" Bimetallic-coil Thermometers:

- Measures the temperature of a food in about 15 to 20 seconds.
- Does NOT remain in the food while it is cooking in the oven.
- Used near the end of the estimated cooking time to check for final cooking temperatures.
- To prevent overcooking, check the temperature before the food is expected to finish cooking.
- Probe must be inserted the full length of the sensing area (usually 2 to 3 inches).
- If measuring a thin food, (hamburger patty or boneless chicken breast), the probe should be inserted through the side of the food so that the entire sensing area is positioned through the center of the food.
- Some models can be calibrated. Check the manufacturer's instructions.

APPLIANCE THERMOMETERS

Refrigerator/ Freezer Thermometers:

- Important to verify the temperature of refrigerators and freezers.
 - ✓ Refrigerators should maintain a temperature no higher than 41° F.
 - ✓ Freezers should maintain 0° F.
- Bimetallic-coil thermometers are specially designed to provide accuracy at cold temperatures.

Oven Thermometers:

- Bimetallic-coil thermometers can measure temperatures from 100 to 600° F.

2009 Food Code Regarding Temperature Measuring Devices (Thermometers)

4-201.12 Food Temperature Measuring Devices.*

FOOD TEMPERATURE MEASURING DEVICES may not have sensors or stems constructed of glass, *except that thermometers with glass sensors or stems that are encased in a shatterproof coating such as candy thermometers may be used.*

4-203.11 Temperature Measuring Devices, Food.

(A) FOOD TEMPERATURE MEASURING DEVICES that are scaled only in Celsius or dually scaled in Celsius and Fahrenheit shall be accurate to $\pm 1^{\circ}\text{C}$ in the intended range of use.

(B) FOOD TEMPERATURE MEASURING DEVICES that are scaled only in Fahrenheit shall be accurate to $\pm 2^{\circ}\text{F}$ in the intended range of use.

4-203.12 Temperature Measuring Devices, Ambient Air and Water.

(A) Ambient air and water TEMPERATURE MEASURING DEVICES that are scaled in Celsius or dually scaled in Celsius and Fahrenheit shall be designed to be easily readable and accurate to $\pm 1.5^{\circ}\text{C}$ in the intended range of use.

(B) Ambient air and water TEMPERATURE MEASURING DEVICES that are scaled only in Fahrenheit shall be accurate to $\pm 3^{\circ}\text{F}$ in the intended range of use.

4-302.12 Food Temperature Measuring Devices.

(A) FOOD TEMPERATURE MEASURING DEVICES shall be provided and readily accessible for use in ensuring attainment and maintenance of FOOD temperatures as specified under Chapter 3.

(B) A TEMPERATURE MEASURING DEVICES with a suitable small-diameter probe that is designed to measure the temperature of thin masses shall be provided and readily accessible to accurately measure the temperature in thin FOODS such as MEAT patties and FISH filets.

4-502.11 Good Repair and Calibration.

(A) UTENSILS shall be maintained in a state of repair or condition that complies with the requirements specified under Parts 4-1 and 4-2 or shall be discarded.

(B) FOOD TEMPERATURE MEASURING DEVICES shall be calibrated in accordance with manufacturer's specifications as necessary to ensure their accuracy.

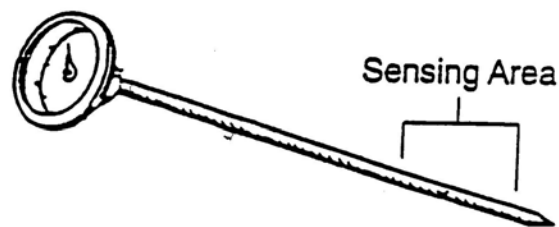
(C) Ambient air temperature, water pressure, and water TEMPERATURE MEASURING DEVICES shall be maintained in good repair and be accurate within the intended range of use.

Department of Health and Human Services, Food and Drug Administration. 2009 *Food Code*. Available at <http://www.fda.gov/Food/FoodSafety/RetailFoodProtection/FoodCode/FoodCode2009/>

Handout/Activity

How to Use a Thermometer

1. Use a Clean and Sanitized Thermometer.
WASH, RINSE, and AIR DRY *before* and *after* each use.
2. Insert Thermometer Stem through Holding Clip of Thermometer Case.
3. Take the temperature -
In the center or thickest part of food.
Between packages of food.
Between the fold of flexible packaged food.
Do not poke a hole in packaging.
4. Allow time for thermometer needle to stop moving
Wait 15 seconds.
Record temperature.
5. Hand wash, rinse, and air dry (do not submerge in water)-
Thermometer and Thermometer Case *before* and *after* each use.



Handout

Calibrating a Bi-metallic Stemmed Thermometer

WHEN:

- ✓ At least once a month.
- ✓ After a thermometer is dropped or has had rough handling.
- ✓ After extreme temperature changes.

HOW:

1. Fill a medium-sized glass with 50/50 ice to water.
Place thermometer in glass of ice water.
2. Wait 3 minutes. Stir water occasionally.
3. After 3 minutes, thermometer should read 32° F.

CORRECTIVE ACTION:

If thermometer does not read 32° F:

1. Leave it in the ice water.
2. Using pliers or an adjustable wrench, turn adjustable nut on back of thermometer until needle reads 32° F.
3. Wait 3 minutes. Stir occasionally.
4. After 3 minutes, thermometer should read 32° F. If not, repeat corrective action.



Post Test: Thermometers

Name _____ Date _____

1. Name 3 different types of food thermometers.
2. Why should a thermometer be used?
3. The 2009 Food Code requires that a Fahrenheit thermometer be accurate to within how many degrees?
4. What does it mean to calibrate a thermometer?
5. What is the general rule for placement of a thermometer in food items?

Post Test: Thermometers

Name _____ Date _____

1. Name 3 different types of food thermometers.

Thermocouple

Thermistors

Oven Cord Thermometers

Thermometer Fork Combination

Bimetallic-coil Thermometers

"Oven-safe" Bimetallic-coil Thermometers

"Instant Read" Bimetallic-coil Thermometers

2. Why should a thermometer be used?

The ONLY way to be certain that foods are properly cooked (to the right temperature) to prevent foodborne illness.

3. The 2009 Food Code requires that a Fahrenheit thermometer be accurate to within how many degrees?

± 2° F

4. What does it mean to calibrate a thermometer?

Set it to record accurate temperatures

5. What is the general rule for placement of a thermometer in food items?

In general, the food thermometer should be placed in the thickest part of the food, away from bone, fat or gristle.

SAMPLE FREEZER AND REFRIGERATOR TEMPERATURE LOG

Record temperatures of freezers and refrigerators at least twice a day (approximately 6:00 AM and 7:00 PM). Any unit not at the proper temperature must be reported to the supervisor at once. _____
 Month/Year

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	NOTES					
	AM																																				
#1 Freezer	PM																																				
#2 Freezer	AM																																				
	PM																																				
#3 Freezer	AM																																				
	PM																																				
#1 Refrig.	AM																																				
	PM																																				
#2 Refrig.	AM																																				
	PM																																				
#3 Refrig.	AM																																				
	PM																																				
#4 Refrig.	AM																																				
	PM																																				
#5 Refrig.	AM																																				
	PM																																				
#6 Refrig.	AM																																				
	PM																																				
Milk Cooler	AM																																				
	PM																																				
Initials																																					

Food Temperature Log

Date Started: _____

Area: _____

Record temperatures prior to start of service and again half way through service. Hot foods must be above 135°F and cold foods below 41°F

	Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
B R E A K F A S T	Juice							
	Fruit/Cold Item							
	Entrée							
	Hot Cereal							
	Ground Entrée							
	Pureed Entrée							
	Milk							
	Initials							
L U N C H	Soup							
	Entrée							
	Ground Entree							
	Pureed Entree							
	Starch							
	Ground Item							
	Pureed Item							
	Vegetable							
	Pureed Item							
	Salad							
	Pureed Salad							
	Dessert							
	Pureed Dessert							
Milk								
Beverages								
	Initials							
D I N E R	Soup							
	Entrée							
	Ground Entree							
	Pureed Entree							
	Starch							
	Ground Item							
	Pureed Item							
	Vegetable							
	Pureed Item							
	Salad							
	Pureed Salad							
	Dessert							
	Pureed Dessert							
Milk								
Beverages								
	Initials							

Circle and report temperatures not meeting 135°F for hot and 41°F for cold to supervisor. Reheat hot foods to 165°F for 15 seconds. Chill cold foods in freezer, ice bath or refrigerator following HACCP Guidelines

Foodborne Illness

Learning Objectives:

Upon completion of this inservice, the participant will be able to:

1. State the 3 types of hazards
2. Describe the top 5 bacteria

Overview Of Foodborne Illness

- A. Foodborne infection results from ingesting food with bacteria that are in a vegetative or growing state. These active bacteria enter the body and continue growing foodborne illness. (salmonellosis, shigellosis, and listeriosis).
- B. Foodborne intoxication results from ingesting a food that contains toxins, possibly produced by the growth of bacteria. (mushrooms; staphylococcus, botulism)
- C. Clostridium perfringens, bacillus cereus, and e. coli have characteristics of both infections and intoxications.

Biological Hazards

Bacteria
Viruses
Parasites
Fungi

Chemical Hazards

Pesticides
Preservatives
Toxic metals
Cleansers

Physical Hazards

Glass fragments
Metal Shavings
Staples
Dirt

Handout

Foodborne Illness

Biological Hazards

Bacteria

Bacteria are the source for most foodborne illnesses. Bacteria that cause foodborne illness are called pathogens.

- A. Humans, animals, insects, soil, food and water can all carry bacteria.

Viruses

Viruses are the smallest and simplest form of life known. Viruses are transmitted from people to food. Viruses do not grow or multiply in food. People infected with a virus are called carriers.

Parasites

Parasites are small or microscopic organisms that live within another organism

Fungi

Molds and yeasts are both types of fungi. Molds grow well on most types of food and appear as brightly colored, fuzzy growth. Certain molds produce a toxin that can result in a foodborne illness. Toxins produced by molds are called mycotoxins. Mycotoxins are commonly found in dry and/or acidic foods. Yeasts are not a significant cause of foodborne illness, but can contaminate food and cause it to spoil. An indication of yeast spoilage is a fermenting, alcohol smell and discoloration.

Biological Toxins

Biological toxins are a natural part of a plant or animal. Seafood, plants and mushrooms are the primary biological toxins responsible for illness in the US.

Critical Sources Of Foodborne Illness

- 1.** Failure to properly cool foods
- 2.** Failure to thoroughly heat/cook food
- 3.** Poor personal hygiene
- 4.** Foods prepared in advance without proper cooling and storage
- 5.** Raw, contaminated ingredients added to foods receiving no further cooking
- 6.** Foods allowed to remain at improper temperatures
- 7.** Failure to reheat food properly
- 8.** Cross-contamination

Handout

Conditions Needed for Bacteria Growth

- Food** High-protein foods are likely to be received already contaminated or may be easily contaminated later.
- Acidity** Acidity is measured on a scale from 0 (very acid) to 14.0 (very alkaline [basic]). A solution with a pH (acid-alkaline measurement) of 7.0 is neutral. Most potentially hazardous foods have a pH level between 4.6 and 7.0. However, high acid foods, such as citrus fruit, rarely allow the growth of harmful bacteria. Adding vinegar or lemon juice to food items will help slow bacterial growth---but it does not ensure control and should not be used as the only defense against bacterial growth.
- Time** Potentially hazardous foods should not remain in the temperature danger zone (danger zone) for more than four hours during the foodhandling process.
- Temperature** The temperature danger zone for potentially hazardous foods is 41° to 135° F. However, since bacteria can survive at (and some bacteria can grow at) lower temperatures, refrigerating food is not total protection against bacterial growth. Discard food if it is past its expiration date.
- Oxygen** Some bacteria require oxygen to grow, while others require no oxygen. However, most of the bacteria that cause foodborne illness can grow either with or without oxygen.
- Moisture** The amount of available water in food is called the water activity (a_w). A food with an a_w level of 0.85 or lower is not considered potentially hazardous. Most potentially hazardous foods have water activity values of 0.97 - 0.99, which is ideal for bacterial growth. Water activity can be reduced to safer levels by freezing, dehydrating (removing the water), adding sugar or salt, or cooking. Dry foods, such as beans and rice, become potentially hazardous when water is added.

POST TEST: Foodborne Illness

Name _____ Date _____

1. Viruses differ from bacteria because viruses need:
 - a. High temperatures to grow
 - b. A living host to survive
 - c. Low temperatures to grow
 - d. Potentially hazardous foods in which to grow

2. What are the four types of hazards that can lead to foodborne illness?

3. Which one of the following foods must be refrigerated *immediately* upon delivery?
 - a. Bottled salad dressing
 - b. Precooked turkey
 - c. Dried bacon bits
 - d. Powdered eggs

4. List 3 sources of foodborne illness.

5. Which one of the following is *most hazardous* to food handlers:
 - a. Aerosol pesticide to kill insects
 - b. 220 ppm quat sanitizer in a three-compartment sink
 - c. Microwave oven to cook pork
 - d. Sharp knife to chop carrots

6. There are six conditions that are needed for bacterial growth – name three.

POST TEST KEY: Foodborne Illness

Name _____ Date _____

1. Viruses differ from bacteria because it usually takes fewer viruses to cause illness and because viruses need:
 - a. High temperatures to grow
 - b. **A living host to survive**
 - c. Low temperatures to grow
 - d. Potentially hazardous foods in which to grow

2. What are the four types of hazards that can lead to foodborne illness?
Chemical
Biological
Physical
Food Security

3. Which one of the following foods must be refrigerated *immediately* upon delivery?
 - a. Bottled salad dressing
 - b. **Precooked turkey**
 - c. Dried bacon bits
 - d. Powdered eggs

4. List 3 sources of foodborne illness.
 - a. **Failure to properly cool foods**
 - b. **Failure to thoroughly heat/cook food**
 - c. **Poor personal hygiene**
 - d. **Foods prepared in advance without proper cooling and storage**
 - e. **Raw, contaminated ingredients added to foods receiving no further cooking**
 - f. **Foods allowed to remain at improper temperatures**
 - g. **Failure to reheat food properly**
 - h. **Cross-contamination**

5. Which one of the following is *most hazardous* to food handlers:
 - a. **Aerosol pesticide to kill insects**
 - b. 220 ppm quat sanitizer in a three-compartment sink
 - c. Microwave oven to cook pork
 - d. Sharp knife to chop carrots

6. There are six conditions that are needed for bacterial growth – name three.
Food
Acidity
Time
Temperature
Oxygen
Moisture

Receiving and Storage

Learning Objectives:

Upon completion of this inservice, the participant will be able to:

1. Identify guidelines needed to maintain compliance with state and federal regulations.
2. Identify steps to ensure safe food quality.

RECEIVING

General Guidelines

- Do not schedule deliveries during mealtimes.
- Do not allow vendors to stock items (i.e., bread, milk, ice cream, dairy products or chemicals).
- Check in all orders carefully. Assure that credit is received for missing or damaged products.
- Check for signs of improper handling (e.g., broken boxes, leaky packaging, dented cans)
- Check for proper temperature using properly calibrated thermometers (i.e., milk should be < 41° F upon delivery)
- Monitor that all products received have been labeled and dated by vendor or establish guidelines to label and date on arrival.

Accepting Deliveries

1. Direct the delivery person to the food storage area.
2. Show delivery person where the items are to be unloaded.

DRY STORAGE AREAS

General Information

1. Storage rooms should have only one access door. If the storage room has more than one door, only one door will be used. All other doors must be locked and their use prohibited. Secure locks must be installed on all other doors and windows.
2. Food Service Director shall control the keys to storage rooms.
3. All storage areas should be well lit with humidity controls to prevent condensation of moisture and growth of molds.
4. Storerooms should have good ventilation and the temperature should be 50° F to 70° F.
5. Ceilings should be free from water and heating pipes to protect the food from leaking pipes, heat or contamination.
6. The storeroom should be rodent-proof.
7. Seal any porous surfaces with paint or other substances to prevent accidental food leakage from being absorbed.
8. Coat metal shelves to prevent oxidation.
9. No smoking, eating or consuming of beverages is allowed in storage rooms.

Food Storage

1. Store food a minimum of 6 inches above the floor and 18 inches down from the ceiling sprinkler heads on clean racks or other clean surfaces protected from splash, overhead pipes or other contamination.
2. Allow adequate space on all sides to permit ventilation.
3. Arrange food in food groups to make it easier to store, locate and inventory.

4. Store food items on shelves, with heavier and bulkier items stored on lower shelves.
5. Canned and dry foods without expiration dates should be dated and used within six (6) months of delivery.
6. Use containers with tight-fitting covers for storing cereal, grain products, dried vegetables and broken lots of bulk food.
7. All containers should be accurately and legibly labeled.
8. Scoops must be provided for sugar, flour, dried vegetables and spices.
9. Do not store scoops in food containers; keep in a protected area near the containers.
10. Wash and sanitize scoops on a weekly basis, or as needed.

Chemicals

1. Chemicals must be clearly labeled, kept in original containers when possible and kept in a locked area away from food.
2. Store poisonous and toxic material outside the food storage and preparation area or in cabinets used for no other purpose.
3. Do not store bactericides and cleaning compounds in the same cabinet or area of room with insecticides and other poisonous materials.

Care of Storeroom

1. Arrange all foods according to type.
2. Place new stock behind previously delivered items of the same food so that older stock will be issued first. Use the FIFO (first in/first out) method to rotate foods.
3. Remove all trash from the storeroom daily or more often as needed.
4. Keep floors, walls, shelves and equipment clean.
5. Floors must be swept clean at all times and mopped at least weekly.
6. Keep shelves clean. Shelves and their contents should be dusted weekly.
7. Keep dry storage areas in a condition that protects stored foods from pest infestation. Contact a licensed pest control company immediately if signs of pests are evident.
8. Spray regularly to keep free from pest infestation.
9. Remove leaking cans and spoiled foods promptly to prevent contamination of other foods.
10. Use foods with expiration dates prior to the date on the package.
11. Store cleaning products separately from food.

REFRIGERATED STORAGE

General Information

1. Refrigerate or freeze perishable food such as meat, poultry, fish, dairy products, fruits, vegetables and frozen products immediately to ensure nutritive value and quality.
2. Date refrigerated and frozen foods upon delivery. Note: For perishable foods without expiration dates, obtain printed material from supplier and make available for all staff. This information should then be included as the "Use by Date" on labeling.
3. Keep all refrigerator/freezer units clean and in good working condition at all times.

Refrigerator

1. Refrigeration temperatures should be thermostatically controlled to maintain food temperatures at or below 41° F.
2. Every refrigerator must be equipped with an internal thermometer.
3. Thermometers should be checked during each shift.
4. Each nursing unit with a refrigerator/freezer unit will be monitored for appropriate temperatures.

5. Refrigerated foods should be stored promptly upon delivery and careful rotation procedures should be followed.
6. All foods should be covered, labeled and dated.
7. All foods should be stored to allow air circulation.
8. Cooked foods must be stored above raw foods to prevent contamination.

Freezers

1. Freezer temperatures should be thermostatically controlled to maintain food temperatures so that foods remain frozen.
2. Every freezer must be equipped with an internal thermometer.
3. Thermometers should be checked at least twice each day.
4. All frozen food items should be stored promptly upon delivery and careful rotation procedures should be followed To ensure that FIFO is used.
5. Foods should be covered, labeled and dated.
6. Meat, fish and poultry should be stored on lower shelves while fruits, vegetables, juices and breads should be stored on upper shelves.
7. Defrost frozen meat, poultry and fish in refrigerator for 24 to 48 hours, and use immediately after thawing.
8. When removing frozen items from the freezer, if they are not to be used immediately, the product must be redated. Before being moved to refrigeration, apply a new label. That label should include a “Removed from the Freezer Date” and a “Use by Date” to ensure proper handling and reduce confusion.

Post Test: DRY Food Storage

Name _____ Date: _____

Please record "T" for TRUE and "F" for FALSE on the line provided next to each question.

- _____ 1. All storage should be secured, locked and have identified staff that are allowed access.
- _____ 2. The optimal temperatures for dry storerooms is 70 to 90° F.
- _____ 3. No one should smoke in food storage rooms, but it is all right to eat and consume beverages.
- _____ 4. Food should be stored 6 inches above the floor and 18 inches down from the sprinkler heads on clean racks or surfaces.
- _____ 5. It is not important to date food in a storeroom if you are going to use it within a week.
- _____ 6. Canned and dry foods (shelf stable) that do not have an expiration date on their box or label should be used within six months of delivery.
- _____ 7. Scoops for flour, sugar and other dry products can be kept inside the container or bag.
- _____ 8. Chemicals need to be labeled, kept in original containers when possible and kept in a locked area away from food.
- _____ 9. Leaking cans should be removed from the food storage area immediately.
- _____ 10. Understanding proper storage of foods and chemicals is everyone's responsibility.

Post Test: **COLD Food Storage**

Name: _____ Date: _____

Please record "T" for TRUE and "F" for FALSE on the line provided for each question.

- _____ 1. Refrigeration temperatures must be maintained below 45 degrees.
- _____ 2. Proper labeling of foods only needs to be done one time, when it arrives at the facility.
- _____ 3. Freezers must maintain food temperatures at or below 0 degrees F.
- _____ 4. Refrigerators and freezers do not need an internal thermometer if there is a dial on the outside of the unit that tells the temperature inside.
- _____ 5. FIFO is not important in refrigerators or freezers due to the temperature control.
- _____ 6. Cooked foods must be stored below raw food.
- _____ 7. No one must monitor the refrigerator/freezer unit temperatures in the resident areas or nursing stations.
- _____ 8. Frozen meat, poultry, and fish can be defrosted on the counter and then used immediately.
- _____ 9. Proper storage of food includes complete covering, labeling and dating of the product.
- _____ 10. When removing a frozen item from the freezer, if it is not to be used immediately, the product must be relabeled before being placed in the refrigerator.

TEST ANSWERS

Dry Food Storage

1. T
2. F
3. F
4. T
5. F
6. T
7. F
8. T
9. T
10. T

Cold Food Storage

- F
- F
- T
- F
- F
- F
- F
- F
- T
- T

Receiving/Storage Checklist

Name _____

Date _____

Check the appropriate response (yes/no) for each question.

If "No", identify who is responsible for taking corrective action in the Staff Member section.

	YES	NO	Staff Member
Receiving Area			
1. Is area free from debris?			
2. Are incoming shipments inspected for infestations, spoilage and foreign material? Food Supplies? Non-Food Supplies?			
3. Are refrigerated and frozen products checked for proper temperatures and promptly moved to refrigerated or freezer areas?			
4. Are meats weighed for accuracy of weights?			
5. Are all items checked off the receiving slip?			
6. Are empty shipping and packing materials disposed of promptly?			
Dry Storage			
1. Is food neatly stored 6" off the floor on shelves or racks?			
2. Are shelves clean, free of dust and debris?			
3. Are floors swept and clean?			
4. Is proper stock rotation (FIFO) practiced?			
5. After foods are opened, are they placed in a clean container, properly sealed and labeled?			
6. Is area free from dampness/humidity with a temperature between 50° F and 70° F?			
7. Is area free from rodent and insect activity?			
8. Are chemical cleaners and pesticides stored away from food supplies in a separate area?			
9. Are food items (cans, boxes) that have been removed from original, dated boxes, appropriately redated and labeled?			
Refrigerator Storage			
1. Are refrigerators equipped with thermometers that are calibrated regularly?			
2. Are refrigerator temperatures $\leq 41^{\circ}$ F?			
3. Are coils, grill work and areas around the compressors cleaned regularly?			
4. Are all foods covered, labeled and dated?			
5. Is there adequate air circulation around the food items?			
6. Are cooked foods stored above raw foods to prevent contamination?			
7. Are temperatures monitored regularly?			
Freezer Storage			
1. Are freezers equipped with thermometers that are accurately calibrated?			
2. Are freezer temperatures $\leq 0^{\circ}$ F?			
3. Are temperatures monitored regularly?			
4. Are all foods dated, wrapped and covered?			
5. Is there adequate air circulation?			
General Guidelines			
1. Is there adequate storage for all items?			
2. Are inventories maintained?			
3. Are leaking cans/spoiled foods removed immediately?			
3. Are products used before expiration dates?			
4. Are products past the expiration date disposed of promptly?			
5. Is there a list available to identify shelf life of dry, refrigerated/frozen foods in storage?			

MSDS

Learning Objectives:

Upon completion of this inservice, the participant will be able to:

1. Identify hazardous products in the work place;
2. Follow label directions of hazardous products and protect himself/herself from injury;
3. Locate and use the material safety data sheets (MSDS) in the dietary department.

Chemical products have become a part of everyday life. They are used daily at home and on the job often without knowing how to use them correctly.

Hazard Product File

- A. Each product used in the dietary department has a “Material Safety Data Sheet” (MSDS). The MSDS includes this information about the product:
 1. Name and purpose
 2. Fire and explosion information
 3. Potential health and physical hazards
 4. Precaution to use while handling the product
 5. Method to properly store, clean-up, or dispose of the product
 6. First aid and emergency action to take if an accident occurs.
- B. Employees are given the location of the manual and directed to use it whenever necessary.

The Labeling System

- A. Shipping labels include:
 1. The name of the hazardous chemical
 2. Appropriate hazard warnings
 3. Name and address of the product supplier
 4. Words **DANGER**, **WARNING**, and **CAUTION** help alert one to a potential hazard.
- B. Package labels include:
 1. How to use the product properly (i.e., dilution, temperature, ventilation, etc.)
 2. Precautions to use when working with the product
 3. First aid and emergency action to take if an accident occurs
- C. Employer’s labeling system.
 1. Containers that hold hazardous products must have proper labels that include chemical name, manufacturer’s name and address and appropriate hazard warnings.
 2. If hazardous products are transferred from pail drums, etc., into small bottles, each new container must be labeled.
 3. If the label is damaged, it must be replaced with a new label.
 4. Information for the label can be obtained from the “MSDS” file.

Hazardous Chemicals

A chemical is classified as hazardous if it can cause a health or physical hazard.

- A. Health hazards - A chemical causes measurable changes in the body (www.osha.gov) and is a health hazard if it:

1. Irritates the skin or eyes but does not cause permanent damage
2. Causes an allergic reaction to develop from long term repeated use
3. Destroys or changes surface it touches
4. Causes cancer
5. Is poisonous when inhaled, swallowed or touched
6. Damages internal organs

Examples of products that are health hazards are oven cleaners, warewash sanitizers and floor cleaners.

- B. Physical hazards - A product that can cause fires, explosions or chemical reactions including:
1. Gasoline (can catch fire);
 2. Aerosol cans (will explode when heated);
 3. Bleach (can give off a poisonous gas when mixed with some other chemicals).

Chemical Concepts

- A. Corrosives - May cause severe chemical burns and cause permanent damage on contact. (Prevent by using protective equipment or gloves per label directions).
- B. Flammable and Combustible - Can catch fire easily; burn quickly -aerosols.
- C. Reactive - Cause chemical change when mixed with other substances (i.e.,bleach). Products should be mixed with water only.
- D. Oxidizers - Can react violently with combustible materials causing splattering, explosion or fires. Products should be handled and stored properly per MSDS directions.

Potential Exposure to Hazardous Chemicals

- A. Inhalation
1. Breathing in dust particles, fumes, mist or vapors from a hazardous product can irritate or burn the nose, throat, lungs and air passages.
- B. Skin or Eye Contact
1. When hazardous chemicals or their solutions are splashed or spilled onto skin or into eyes, they can cause irritation, rash, dry or cracked skin, burning eyes and in some cases may cause severe or permanent injury.
- C. Swallowing
1. Chemicals can enter the body if contaminated food is eaten.
 2. Chemicals can enter the body when smoking while handling a chemical product.
 3. Chemicals can enter the body when accidentally drunk in a solution.
 4. Hazardous chemicals that have been swallowed can severely irritate or injure internally, cause nausea and in some cases may cause death.

Body Reactions to Chemical Exposure

- A. The body can usually heal itself from small, infrequent exposure to hazardous chemicals.
- B. Continual or severe exposure to some chemicals can cause permanent damage if not properly treated.
- C. Exposure to harmful chemicals can cause:
 - 1. Acute effects - which may develop rapidly from brief exposure (i.e., severe burns)
 - 2. Chronic effects - which may develop slowly (i.e., emphysema from prolonged inhalation).
- D. The body's reaction to exposure depends on:
 - 1. Kind of chemical
 - 2. Amount to which the individual has been exposed
 - 3. Length of time of exposure
- E. The MSDS will explain safe exposure limits of a product.

Activities

A. Have an employee read to the group MSDS information for several chemical products.

B. Discuss suggestions for making the work place safe.

C. Have individuals relate what is needed when using specific food service products.

Examples:

- | | |
|---------------------------|-----------------------------|
| a. presoaks | g. pot and pan sanitizers |
| b. machine detergents | h. multi-purpose cleaners |
| c. rinse additive | i. germicidal cleaners |
| d. machine sanitizer | j. oven cleaners/degreasers |
| e. delimers | k. heavy grease soak tanks |
| f. pot and pan detergents | |

Include:

- name of the product used
- how dispensed
- what is needed when using the product (refer to MSDS for the product)
- safety tips
- first aid and emergency action

D. Review Chemical Safety Chart inserting names of chemicals in the department that fall within product categories. Post in chemical storage area.

E. Give the employees a few minutes to “play” the Chemical Labeling game. Discuss the results.

POST TEST: Hazardous Chemicals

Name _____ Date _____

1. MSDS stands for

2. What information is included on a MSDS?

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

- 3. True False Oven cleaners usually contain hazardous chemicals.
- 4. True False Cleanup information is not included in MSDS.
- 5. True False A chemical is a health hazard if it irritates the skin or eyes.
- 6. True False It is all right to mix bleach with other chemicals to get better results.
- 7. True False The body can usually heal itself from small, infrequent exposure to hazardous chemicals.
- 8. True False The MSDS will explain safe exposure limits of a product.
- 9. True False A package label will not usually include first aid instruction.
- 10. True False There is really nothing a worker can do to increase safety when working with a hazardous chemical product.

POST TEST KEY: Hazardous Chemicals

Name _____ Date _____

8. MSDS stands for
Material Safety Data Sheet

2. What information is included on a MSDS?

a. Name & Purpose

b. Fire and explosion information

c. Potential health and physical hazards

d. Precautions to use when handling the product

e. Method to store properly, clean up or dispose of the product

f. First aid & emergency action to take if an accident occurs.

10. **True** False Oven cleaners usually contain hazardous chemicals.

11. True **False** Cleanup information is not included in MSDS.

12. **True** False A chemical is a health hazard if it irritates the skin or eyes.

13. True **False** It is all right to mix bleach with other chemicals to get better results.

14. **True** False The body can usually heal itself from small, infrequent exposure to hazardous chemicals.

15. **True** False The MSDS will explain safe exposure limits of a product.

16. True **False** A package label will not usually include first aid instruction.

17. True **False** There is really nothing a worker can do to increase safety when working with a hazardous chemical product.

Chemical Safety Chart

PRODUCT	GUIDELINE
<p style="text-align: center;">Aerosols, lighting fluids & Sterno</p> <p>List Examples:</p>	<ul style="list-style-type: none"> ▪ These cans could start a fire! ▪ Do not place near stoves and burners. ▪ Do not expose to direct sunlight or heat. ▪ Do not incinerate or puncture. ▪ Do not spray near fire or open flame.
<p>Corrosives:</p> <p>List Examples:</p>	<ul style="list-style-type: none"> ▪ Read Label Carefully! ▪ Mix only with water. ▪ Wear protective gloves to avoid direct skin contact ▪ Avoid skin contact and breathing in vapors. ▪ Wear eye goggles to protect eyes.
<p>Detergent, Soakers & Sanitizers</p> <p>List Examples:</p>	<ul style="list-style-type: none"> ▪ Mix only with water! ▪ Mix in correct concentration! ▪ Check sanitizers with test strip to verify effective concentration
<p>Bleach</p>	<ul style="list-style-type: none"> ▪ Follow instructions carefully! ▪ DANGER! Reacts very strongly with other chemicals such as vinegar, chlorine and ammonia based chemicals!
<p>All chemicals and cleaning products</p> <p>The MSDS (Material Safety Data Sheet) for the chemicals used in your dietary department are located:</p> <hr style="width: 30%; margin-left: 0;"/>	<ul style="list-style-type: none"> ▪ Protect yourself! ▪ Use chemicals per labeled instructions. ▪ Wear gloves, apron and protective gear. ▪ Work in well-ventilated area. ▪ Don't store chemicals near food. ▪ Be sure to use a <i>labeled</i> spray bottle so that you know what chemical you are using ▪ Notify your supervisor of any chemical handling problems, accidents or concerns. ▪ Know where the MSDS sheets are located.

Activity

Chemical Labeling

Make up bags of white powdery chemicals and food substances: (1/4 cup each)

Label each bag with a number 1-14

1. flour
2. sugar
3. salt
4. Ajax
5. cornstarch
6. baking powder
7. baking soda

Give the participants 10-15 minutes to “feel” the items without opening up the bags.

Have them fill out the attached sheet.

Review their answers with the correct answers.

Give award for the most correct (i.e., pen/pencil, etc).

Discuss the importance of proper labeling and how easy it would be to make a mistake.

Chemical Labeling

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

Pest Control

Learning Objectives:

Upon completion of this inservice, the participant will be able to:

1. Identify common kitchen pests;
2. State methods of pest control;
3. Identify areas in the kitchen that may promote pest infestation.

What Bugs You?

A. Flies

1. Domestic flies (at right) feed on and breed in garbage and animal waste. They can transmit diseases and food-borne illness as they travel from garbage to food, utensils and food contact surfaces. Diseases the pests transmit include dysentery, infantile diarrhea, streptococcus and staphylococcus infections.
2. Drain flies can be found in the muck, slime or gelatinous film often accumulating on the sides of drains and overflow pipes or in unclean garbage disposals. They are very small and can be inhaled, causing respiratory problems. These flies originate in filthy conditions, thus can spread diseases. Fruit flies are small flies that breed in overripe fruit. They can also breed in stale soft drinks or in standing water in mop buckets.



Domestic Fly



Drain Fly

B. Cockroaches

There are many different species of cockroaches. They are found in dark warm areas, cracks, crevices, in and under stoves, refrigerators and dishwashers and in boxes or crates. These pests carry and transmit disease, including salmonella, dysentery and diarrhea. Their offensive odor clings to dishes they run over. Cockroaches hide during the day, thus evidence of infestation may not occur until population is large.



Cockroach

C. Rodents (mice, rats)

Rodents spread diseases through contact with food and food contact surfaces. They carry fleas on their bodies that also transmit disease. These pests have poor bladder control and leave urine and feces everywhere they travel in the facility. The urine and feces of rodents can infect food. Evidence of rodent infestation includes droppings and gnawed boxes, pipes, wood or concrete.



Mouse

D. Other pests

Other pests may include flour moth, larvae, beetles which can be found in dry storage areas, especially in open bags of flour, meal, cake mix, etc. Ants are attracted to sweets and transport filth and waste. They often enter facilities in search of water.

Three Basic Approaches That Apply to All Pests

- A. Pest-proof the building.
- B. Deprive pests of food, water and shelter by following good cleaning procedures.
- C. Work with a licensed and registered Pest Control Operator (PCO) for extermination.

First Line of Defense

- A. **Inspect:** Inspect all shipments for signs of pests such as roach egg casings or boxes gnawed by mice or rats. Inspect employee break room and lockers for dirty uniforms or improperly stored food/beverages. Also inspect the kitchen and surrounding area for potential problems utilizing the attached survey.
- B. **Repair:** Repair any leaks that create moisture. Seal holes in walls, ceiling, screens, doors, vents or around pipes. Repair gaps around door frames and at thresholds. Replace or repair any damaged or loose screens.
- C. **Store:** Store opened foods in tightly sealed containers. Use FIFO to disturb insect breeding cycles. Store food and supplies at least 6 inches off floor. Low humidity in the storeroom can keep cockroach eggs from hatching. Store trash in sealed plastic bags. Remove overripe fruits from storage areas, dispose in sealed garbage bags.
- D. **Clean and Sanitize:** Clean spills and crumbs quickly. Clean trashcans and dumpsters regularly. Clean drains and garbage disposals with boiling water (NEVER pour pesticides in drains or disposals). Keep kitchen and employee break room and lockers cleaned and sanitized utilizing daily cleaning tasks or weekly/monthly cleaning schedules.

Integrated Pest Management (IPM)

IPM is a program designed to prevent pests from infesting the facility and to get rid of any pests present. The IPM program is specific to your facility, based on pests in your geographical area and the age, layout and problems of the building. Pesticides should be a supplement to good housekeeping, including cleaning, sanitizing and proper storage of food and supplies. Pesticides are regulated and should be used according to these laws and directions on labels. Always consult with PCO that is servicing the facility before using pesticides to avoid mixing chemicals or disrupting IPM.

Pest Facts

- If roaches are seen during the day, the population is large.
- Roaches can become resistant to insecticides.
- Roaches can live 2-4 weeks without water and 1-3 months without food.
- Rodents contaminate much more than they eat.
- Rodents can squeeze through gaps the width of a pencil.

POST TEST: Pest Control

Name _____

Date _____

1. Cockroaches can be found in what places?

2. How do good cleaning practices eliminate pests?

3. Where do flies breed?

4. True False With good housekeeping, you will have no pests.

5. True False Roaches can become resistant to insecticides.

6. True False Integrated Pest Management (IPM) is the responsibility of the Pest Control Operator (PCO).

POST TEST: Pest Control

Name _____ Date _____

1. Cockroaches can be found in what places?
Dark, warm areas, cracks, crevices, in and under stoves, refrigerators, dishwashers and in boxes and crates.
2. How do good cleaning practices eliminate pests?
Deprives them of food
3. Where do flies breed?
Garbage and Animal Waste
4. True **False** With good housekeeping, you will have no pests.
5. **True** False Roaches can become resistant to insecticides.
6. True **False** Integrated Pest Management (IPM) is the responsibility of the Pest Control Operator (PCO).

Facility Survey

If the answer to any question is YES, develop plan of correction for the identified problem.

Building

1. Do windows and doors have gaps around them? Are baseboards loose?
2. Do windows/doors with screens have tears or holes?
3. Will a pencil fit under the door?
4. Do walls/ceilings have holes or cracks? Are areas around pipes sealed?
5. Does the roof or pipes leak? Any standing water or dripping condensation?
6. Are drains wet, sludgy or open?

Equipment

1. Is there a build-up of food or other material on equipment?
2. Is there a lot of dead space around equipment where food or debris can collect?

Housekeeping

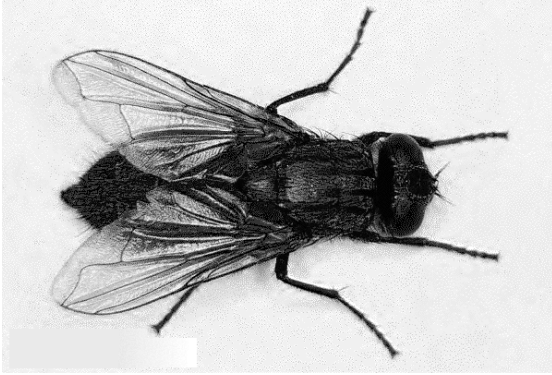
1. Are spills left to be cleaned up later?
2. Are dishes, pots, pans stored wet?
3. Is water left in or around dish machine at night?
4. Are dirty dishes/trays left in kitchen overnight?
5. Are there empty boxes in storeroom?
6. Is the door propped open for deliveries?

Garbage

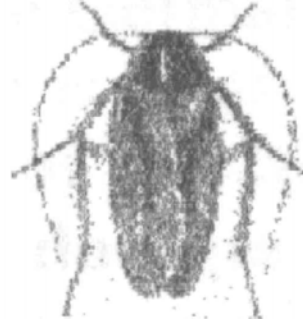
1. Does garbage stay inside the facility for extended periods of time (ie overnight)?
2. Are dumpster doors left open?
3. Is the dumpster dirty? Who is responsible for cleaning?
4. Is there food debris around outside of dumpster?
5. Are open bags of garbage taken to the dumpster?

Cooperative Learning Activity

Copy this page and cut into 2 or 4 cards. Divide staff into groups and have them tour the facility and fill in information. Have groups present information and discuss.



1. I am a _____.
2. I can spread diseases such as _____.
3. I feed on _____.
4. Is there a place in the kitchen I could be hiding? _____
5. How can you prevent me from moving in? _____



1. I am a _____.
2. I can spread diseases such as _____.
3. I live in _____.
4. Is there a place in the kitchen I could be hiding? _____
5. How can you prevent me from moving in? _____



1. I am a _____.
2. I can spread diseases such as _____.
3. I enter through _____.
4. Is there a place in the kitchen I could be hiding? _____
5. How can you prevent me from moving in? _____



1. I am a _____.
2. I can spread diseases such as _____.
3. I breed in _____.
4. Is there a place in the kitchen I could be hiding? _____
5. How can you prevent me from moving in? _____

Serving Food Safely

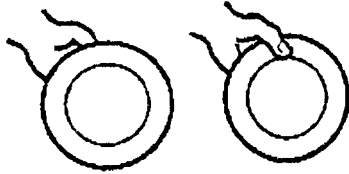
Learning Objective:

Upon completion of this inservice, the participant will be able to identify the correct ways of handling dishes, utensils and foods during all aspects of serving food and the residents

Serving food safely and politely is as important as preparing the food properly. Dishes and eating utensils should not be contaminated by workers while serving. The following handouts will help to demonstrate the proper techniques of serving food.

Handout

SERVING FOOD SAFELY



Hold the
Plate underneath

Do not
touch eating surface



Hold cups by
handles



Do not put
fingers inside



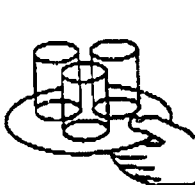
Do not stack
Cups



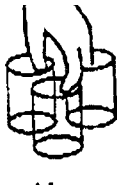
Carry one in
each hand



Or use a tray



Use a tray



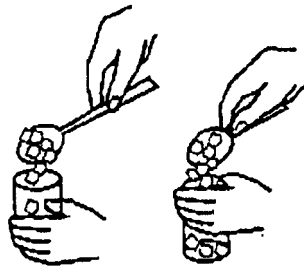
Do not put fingers
in glasses



Hold glass
near base

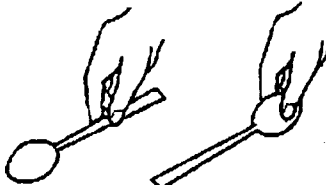


Do not hold
at rim



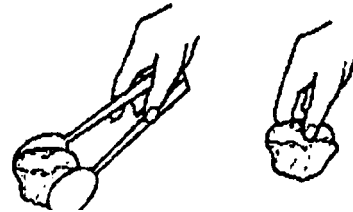
Keep hand by Base

Do not put hand at rim



Hold spoons by Handles

Do not hold by bowl



Serve with tongs

Do not use fingers



Do not test temperature With fingers



You can feel heat rising with your hand



Open condiments with scissors, not teeth



Keep food items separate



Do not mix everything together



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Dietetics in Health Care Communities

a dietetic practice group of the
**eat
right.**™ American Dietetic
Association

Dietary Staff: Essential Training



Introduction to Adult Learning

Providing education and training is an integral part of the registered dietitian's (RD) responsibility in long-term care facilities. For most, this is a challenging task which can be a juggling act with numerous factors to consider.

- Skill levels of staff
- Resident needs
- Vital information, significance of topic, priority of information
- Cultural/ethnic background of staff
- Age range of staff
- Department/ facility goals
- Competencies
- Limited time
- And MORE

Because this is such an essential undertaking, the following has been included as background information.

Adult Education in Practice

Adult education is quite different from childhood education. It is important for the teacher (leader) of adult learners to apply the following principles to all educational efforts.

The following are basic guidelines to remember when planning inservice training:

- Goals/objectives that are realistic and important help adults commit to learning. "Real world" application is important.
- Adults resist learning activities that attack their competence. Participants (learners) need to have some control over who, what, when, where, why and how.
- Training needs to directly relate to day-to-day activities.
- The learning activity must have direct, concrete experiences in real work.
- Inservice training must provide support from peers without the fear of judgment during the learning process.
- Adults need feedback; build in activities that allow for practice and immediate feedback.
- Small-group activities are invaluable, providing a chance to share the learning experience.
- Adults have a wide range of previous experience, knowledge, self-directions, interests and abilities. These diversities need to be accommodated. This allows for interesting discussion among adult learners.
- Follow up support is needed to transfer learning into daily practice.

Know Your Staff!

This goes beyond being acquainted on a first-name or staff position basis. Every member of your staff brings a world of experience and uniqueness to the job daily.

Food service is one of the entry points to the world of gainful employment for anyone looking for a job. There are part-time positions that attract students, housewives, older workers, or the person who does not desire full-time work or is re-entering the job market. It is unlikely that a defined level of education is required in order to be hired at the entry level. The RD providing inservice training needs to be aware that staff members will have varied educational levels and abilities. It also means that the leader of instruction must present the information in more than one way; lecture alone is likely to be ineffective.

The inservice leader will need to observe the learners as they perform their daily work tasks. Particular attention should be paid to such things as:

- Reading directions or asking co-workers for directions
- Writing notes to communicate or passing information verbally
- Pay attention also to the style of language used among staff members as they communicate with each other. Do they use formal or familiar terms of address (Mrs. Jones, Sally, “honey” for co-workers as well as for supervisors)?
- Observe the noise level in the kitchen: Do the workers visit easily with each other?
- Do they have familiarity labels for certain pieces of equipment (the large enclosed tray cart may be named “Sherman”)?
- Do they talk about family matters?
- Do they continue their conversation when you come into the area?
- These signs will tell the leader of the education session how formal or familiar to be in the inservice session. One must balance respect for the learners with familiarity allowed or granted by the learners in order to establish a comfortable setting for learning.

The leader needs to know the length of service of each staff member. The long-term staff person should be able to perform tasks more efficiently than the newly-hired person, be more knowledgeable about job requirements, and know the organizational structure in more detail. The long-term employee should be willing to assist or teach those with less experience and be able to guide other staff members in their duties. The long-term employee may be assigned supervisory duties in the absence of the Certified Dietary Manager (CDM), thus becoming part of the instructional team, endorsing what is taught in the inservice sessions while assisting others.

Know Your Needs for Inservice Topics!

There is never a lack of needs to be addressed in training! The identification of needed topics should begin with pre-contract evaluation of the facility. As problems are observed in the dietary department’s functions (internally or in interaction with other departments) note these problems. The administrator should be asked what the major problems are in the dietary department; dietary staff and the CDM should be asked this same question. Staff members in other departments may also comment about problems they have experienced.

The most recent survey report is a critically important source of information for inservice needs. Every deficiency or comment should be noted and addressed as soon as possible. The RD needs to review all these sources of information and coordinate them to establish a list of topics. This list can then be prioritized with the administrator and the staff of the facility. The adult learner will be more attentive and will learn more when her/his needs are given top priority.

Inservice is not simply an exercise for problem solving or avoiding deficiencies, although this is a very valuable means of achieving compliance with regulations. Training is also a means of staff development, improving knowledge level, efficiency of operation, and self-confidence of the individual staff members as well as for the whole department. As the staff members become more knowledgeable they are more valuable as employees. They are able to assume higher levels of responsibility and are empowered to make better decisions. This in turn frees the RD to operate at a higher professional level.

Know Your Material!

The RD who leads inservice training must be well-versed in the basic principles of each topic to be presented. If the leader does not understand the basis of the information to be presented, he/she will be unable to evaluate adequately any non-traditional solution to a problem that the staff might present. There are many “right” ways to do a task. The procedure chosen must comply with the requirements supported by the basic principles.

The material chosen for presentation must be matched to the learner's needs and build on the learner's current level of knowledge and understanding. The information should bring the learner's mastery of the subject matter to the next level of understanding (or to the learner's desired level of mastery of the subject). The adult learner brings a background of life experience and practical knowledge to the educational session. The leader of inservice must acknowledge and accept this as a fact and prepare to advance the learner in terms of her/his needs and desires. The leader must also be prepared to field comments from participants based on their experience!

The material must be amenable to the most effective style of learning for the staff. It is important to correlate presentation of materials with the domain of learning that predominates in the specific inservice topic:

- *Cognitive domain* deals with intellectual understanding of an area of knowledge. An example is descriptions of meals to comply with the various areas of Medical Nutrition Therapy.
- *Affective domain* deals with attitudes and feelings. An example is instruction in basic telephone courtesy or acceptable terms of address among staff, especially supervisory personnel.
- *Psychomotor domain* deals with physical coordination, dexterity, or agility. An example is racking dishes for dishwashing or safe use of knives.

In order to effectively instruct staff in an area of concern (for example, sanitation of tableware) the leader will begin with the basics presented in a logical order for *continuity*.

The second session on the same topic will build on the basics in a planned *sequence* of information presented. The final session will discuss all the information as a whole in order to achieve *integration* of the material presented.

Inservice Program Planning Process:

In organizing and planning each inservice session it will be most helpful to use a consistent system. This helps to assure that the material will satisfy the needs and expectations of the learners of the session. This can be done by using the following steps:

Step 1. Needs Assessment.

Discuss needs with CDM, administrator, observe needs within dept, review past survey deficiencies, seek input from dietary staff members – these are the basis for determining needs. There are also standard topics such as safe food handling, sanitation, safety, etc., that need to be reviewed periodically.

Step 2. Objectives Statements.

In terms of desired changes or the end point or expectations in behavior of dietary staff members, list all the objectives for the selected presentation(s). Rank these objectives in order of importance. Review the written objectives to be sure they accurately express what the learners want to accomplish. (See Introductory Verbs for General and Specific Objectives Stated in Terms of Behavioral Outcomes).

Step 3. Topic Outline.

List the items of information to be presented in the inservice session, and organize them for presentation. As with any information source, select and adapt the material for the needs and learning style of the learners. The presentation also needs to comply with current Standards of Practice.

Step 4. Select Resources/Materials.

Choose and/or develop resources/materials to be used in presenting the inservice session. Keep in mind the most accepted style of learning for the staff, as well as the most effective way to impart the needed knowledge.

Step 5. Technique Selection.

Determine how to present the inservice topic. Techniques used to present the topic should be varied and should use more than one of the senses to increase learning.

- A demonstration coupled with visual presentation (video tape, movie, posters or pictures, etc.) followed by hands-on training is an effective teaching procedure.
- A lecture alone is unlikely to result in understanding of the process to be used.
- The variety of techniques available is unlimited and includes lecture, demonstration, film, role playing, hands-on practice or any combination of these.
- Regardless of the technique of presentation that is used, group discussion is very valuable since it allows the learner to participate. The learners' questions allow opportunity to clarify and assimilate the information given.
- Discussion time with a presentation is an excellent way to develop improved procedures that will be used by the learners.

REMEMBER: *Presentation does not equal learning! No question is stupid!*

Step 6. Evaluation.

Prepare a plan of evaluation to be used with the inservice session to determine its effectiveness.

The evaluation process can be accomplished in more than one way. For example, use a post test at the end of the session to provide immediate feedback about understanding of the major points presented. Be sure to adjust the language of the test to the abilities of the learners, and present the post test in a non-threatening way. The same test questions can be the basis of discussion. The learners should be able to apply the lesson(s) to their work setting. This is the most valuable type of evaluation; it often leads to identification of other needs for future inservices.

In summary, inservice training properly conducted is a valuable use of the RD's time and expertise. As the staff becomes more capable, they also become more valuable to the department, to the organization, and to the RD. This allows the staff to assume more responsibility. This is a WIN-WIN situation, when service to the patient/resident/client improves and deficiencies are less likely.

Introductory Verbs for General and Specific Objectives Stated in Terms of Behavioral Outcomes

The following is a list of verbs that could be used to introduce objectives in each of the six categories of the cognitive domain. The verbs under each category represent only a limited sample and can be expanded through the use of a thesaurus. It is also noted that some of these introductory verbs can be used in more than one category.

1. Knowledge:

recognize recall list

2. Comprehension

predict	summarize	interpret	extrapolate
project (future trends, etc.)	prognosticate	explain	anticipate
abstract	define	describe	reconstruct
translate	outline		

3. Application

use	relate	express oneself	associate
locate	utilize	apply	employ
participate	put into operation	express	

4. Analysis

distinguish	note	identify	classify
locate	discern	analyze	discriminate
differentiate	inspect	discover	perceive likeness and difference

5. Synthesis

develop	design	predict	devise
generalize	forecast	theorize	prepare
hypothesize	propose	plan	arrange
organize	form	integrate	structure
create	produce		

6. Evaluation

evaluate ... in terms of	determine the comparability	assess
make judgments	rate	appraise
	critique	

7. General

read	work	write	express oneself
role play			

Department Orientation

Learning Objectives:

Upon completion of this inservice, the participant will be able to:

1. Demonstrate a basic understanding of the department.
2. Find his/her way around the department.
3. Have the necessary information to begin work responsibilities.

Introduction

New employees in the dietary/nutrition services department need to be oriented to the physical layout of the department and the facility in general, need basic information regarding the working of the department and need general information about facility procedures.

Using checklists will ensure that the new employee has been given the necessary information.

Time should be given to answer questions and concerns from the new employee(s).



NUTRITION SERVICES ORIENTATION CHECKLIST

Employee Name: _____

Employee Job Title:

Tour of Department (see attached)	Date:
Introduction to Staff, Supervisors, Introduction to Mentor	Date:
Policy & Procedure Manual	Date:
Nutrition Services Organization	Date:
Purpose and Organization of the Department Job Description	Date:
Dress code and personal conduct	Date:
Time Card, Clocking In and Out Schedule, Work Hours, Pay Schedule	Date:
Requests For Time Off, Holidays	Date:
Breaks, Meal Service for Employees	Date:
Absence, How to report an absence, Tardiness, Probation, Attendance Standards	Date:
Telephone Operation, Personal Calls	Date:
In-service Requirements	Date:
Sanitation and Safety Procedures, Reporting Injuries, MSDS Manual	Date:
Universal Precautions	Date:
Proper Lifting Techniques	Date:
Emergency Procedures, Codes Red, White and Green	Date:

The above standards have been reviewed with me. I understand all policies and have had all my questions answered.

Employee's Signature

Date:

Supervisor/Coordinator's Signature

Date:

TOUR AND GENERAL ORIENTATION OF NUTRITION SERVICES DEPARTMENT

STOREROOM

- Everything stored 6 inches off of floor
- All items in tightly sealed packages
- Date, check dates and rotate
- Remove empty boxes & breakdown
- Return items where found
- Items must be stored 18 inches below ceiling
- No items block fire extinguishing equipment or exits

WALK-IN REFRIGERATOR & FREEZER

- Everything stored 4 inches off of floor
- All items in tightly sealed packages
- Date, check dates and rotate
- Remove empty boxes & breakdown
- Return items where found
- Clean up spills immediately
- Procedures for temperature checking and recording
- Report inappropriate temperatures

PREPARATION & TRAY ASSEMBLY AREA

- Nothing under sink
- Can opener operating and cleaning
- Storage of containers
- Temperature monitors
- Tray set-up
- Time
- Resident menus
- Accuracy
- Loading, operation and cleaning of meal delivery system
- Retherm and other mechanics of meal delivery system

HAND SINK

- Proper hand washing technique

PAPER TOWEL, SOAP & GLOVE DISPENSER

- Procedure for 3 compartment sink
- Disposal cover
- Checking sanitizing solution
- Air drying before stacking

COOK'S AREA

- Do not operate any equipment unless training on operation, maintenance and cleaning has been documented.

CHEMICAL STORAGE

- Review each chemical & use
- Operation of chemical dispensers
- MSDS
- Personal Protective Equipment (PPE)

DISH ROOM

- Dish machine operation
- Operation of chemical dispensers
- Recording of dish machine temperatures

DINING ROOM

- Location of supplies
- Temperature checks
- Serving line
- Heating procedures
- Microwave use
- Resident menu selection procedures

COMPUTERIZED MENU SYSTEM

- Menus
- Resident rosters
- Spreadsheets
- Production tallies
- Standardized recipes
- Tray tickets
- Admission procedures
- Modified diets
- Diet Office Location and Functions

RESIDENT UNITS

- Tour resident dining locations
- Resident unit meal delivery system
- Soiled tray pickup procedure
- Nourishment delivery procedure

CLINICAL NUTRITIONIST AND DIETETIC TECHNICIANS

- Review roles
- Introductions
- Contact information

NUTRITION SERVICES ORGANIZATION

- Review organizational chart
- HACCP Procedures

OTHER ITEMS REVIEWED

The above tour and discussion was completed with me. I understand the above operations and procedures and have had all my questions answered.

Employee Name (Print)

Date

Employee's Signature

Date

Signature of Coordinator/Supervisor Conducting the Tour

Date

DEPARTMENT ORIENTATION CHECKLIST

NAME

Job Title

Answer with YES or N.A. (not applicable)

- _____ 1. Received a copy of my work schedule
- _____ 2. Received an explanation of my work schedule, where posted, how to request a schedule change.
- _____ 3. Received instruction regarding time clock use and location.
- _____ 4. Informed of department dress code.
- _____ 5. Received tour of the department.
- _____ 6. Assigned a preceptor and explanation of preceptor's schedule.
- _____ 7. Informed of department call-in procedure.
- _____ 8. Received tour of the facility.
- _____ 9. Received materials, equipment, tools for job and assigned work area.
- _____ 10. Received satisfactory explanation(s) to question(s).
- _____ 11. Reviewed the following safety information:
- location of nearest fire exit (s)
 - location of nearest eye wash station
 - location of nearest Material Safety Data Sheet
 - location of nearest fire extinguisher
 - location of nearest fire PULL station
 - reviewed department fire/evacuation procedures
 - location of personal protective gear
 - reviewed chemicals used in the workplace

Employee Signature

Date

Department Representative

Date

Resident Rights

Learning Objectives: Upon completion of this inservice, the participant will be able to:

1. Identify and or recognize resident rights related to meal service
2. Interview residents regarding their food issues.

Preparation

1. Set a time several days before the meeting for each employee to visit and interview a certain number of residents. It has been suggested 1-3 residents per employee.
2. Provide the Meal Service questionnaire with the interview protocol defined.
3. Review the protocol for visiting residents.
 - a. Do not interview a resident in a group setting.
 - b. Please knock before entering a resident's room.
 - c. Ask permission to enter a resident's room.
 - d. Introduce yourself and where you work.
 - e. Explain to the resident the purpose of your visit.
4. Each employee will bring the completed questionnaire(s) to the inservice session.

Introduction of Resident Rights in Relationship to Nutrition Service and Meals

The rights of long term care residents are protected under law. Dietary staff must know and be aware of basic resident rights and how they impact the food service department.

The following are a list of some dietary considerations based on resident rights.

1. The resident has the right to be served attractive, tasty food at the proper temperature in a pleasing, clean, homelike environment.
2. The resident has the right to participate, as much as possible, in holiday/ethnic meals and traditions. The facility is their home and holidays are a special time to celebrate. If therapeutic diets are ordered, a physician's order is required in the medical record stating the resident is allowed to participate in the holiday meal, free from restrictions.
3. The resident has the right to designated, planned meal times and snack times.
4. The resident has the right to have access to a menu prior to the meal and have food served as listed on the menu. They also have the right to request food alternatives and substitutions within reasonable limits.
5. The resident has the right for their individualized nutritional needs to be identified, met and a plan of care established.
6. The resident has the right to have food served on/in regular dishes and have a full compliment of eating utensils.
7. The resident has the right to special equipment, adaptive equipment, assistive devices if needed to aide them in self feeding and maintain or promote independence.

8. The resident has the right to be treated with respect and dignity in all aspects of their care.
9. The resident has the right to be addressed in a pleasant way when being visited by the staff.
10. The resident has the right to choose their preferred dining location and table mates.
11. The resident has the right to refuse a prescribed diet as long as they or their responsible party(s) are informed of the consequences of refusing medical treatment.

There are more issues that could be listed. See if the staff can list more.

Discussion

1. After discussing resident rights in relationship to meal service (see above), ask each employee to state what they learned about the resident(s) they interviewed. Discuss if they feel the resident's rights have been honored. Discuss what was surprising to them during the interview process. Was this the first time anyone had interviewed a resident?
What did they learn?
2. Ask the staff attending the session if they can give examples of ethnic food choices and religious food preferences typical of the area.
3. Discuss how the residents have a voice in making food choices. (Answer: Resident council meeting, Food Committee meetings, individual interviews, etc.)
4. Explain how each employee works for every resident. The resident is the customer, they have rights and the employees are responsible to meet the needs of the customer.
5. Ask those in attendance if there are any improvements that need to be made from what they learned doing this exercise.

PROTECTING RESIDENTS

ABUSE, NEGLECT & MISAPPROPRIATION OF PROPERTY

All residents in nursing facilities have certain rights, which are called “Resident’s Rights.” One of these very important rights is the right...

“to be free from abuse and unnecessary restraint”

ABUSE means the **willful** infliction of injury, unreasonable confinement, intimidation, or punishment resulting in physical harm, pain or mental anguish.

NEGLECT means failure to provide goods and services necessary to avoid physical harm, mental anguish, or mental illness. **A finding of neglect cannot be substantiated if caused by factors beyond your control.**

VERBAL ABUSE refers to any use of oral, written or gestured language that **willfully** includes disparaging and derogatory terms to residents or their families, or **within hearing distance**. *Verbal abuse includes threats of harm or frightening a resident.*

SEXUAL ABUSE includes, but is not limited to, sexual harassment, sexual coercion, or sexual assault.

MISAPPROPRIATION (THEFT) OF FUNDS means the **deliberate** misplacement, exploitation, or wrongful, temporary or permanent use of a resident’s belongings or money without the resident’s consent. Missing items are to be reported to your supervisor immediately. In many cases, items can be found quickly.

Staff Responsibility

Every employee who believes he or she has witnessed behavior of this nature must report it at once. Staff shall report any incident of suspected or known abuse or neglect immediately to your supervisor or _____ . This includes staff to resident abuse, neglect or misappropriation, as well as resident to resident and third party to resident (family members, friends, etc.)

Handout for Resident Rights Session - Issues of Respect

- Knock before entering the room and ask permission to enter. Where privacy must be violated, help the resident understand the reasons.
- Introduce yourself.
- Call the resident by formal name, unless give permission to use first name.
- Explain why you are there, the purpose of your visit.
- If the resident has visitors, ask the resident if they would like you to come back later. Explain to the resident and visitor that the resident has the right to private conversations and must give permission to have others in the room. If they ask you to come back later, provide an approximate time to return.
- Include the person in decision making, provide information and help the person to explore options.
- Look for ways to foster independence, e.g., meal choices, activities, self-care.
- Allow time and support the person's ability to cope with changes and losses.
- Give choices and options.
- Ask rather than tell.
- Before leaving the room ask, "Is there anything else I can do for you?"

“ The elderly person does not come asking to find a new lifestyle, or even a greatly altered one, but asks that we recognize and honor his or her way of life while assisting in making alterations required by lack of the person's own resources.”

M. O. Wolanin

Meal Service Questionnaire

Resident: _____ Room Number: _____

1. Do you receive enough to eat? Yes _____ No _____
2. Is the appearance of your food attractive and pleasing? Yes _____ No _____
3. Are the employees who serve your meals friendly? Yes _____ No _____
4. Do you like the menu choices? Yes _____ No _____
5. Were you asked what you like to eat at meals and snack times? Yes _____ No _____
6. Is your hot food served hot? Yes _____ No _____
7. Is your cold food served cold? Yes _____ No _____
8. Do you like eating in the dining room (or your room)? Yes _____ No _____
9. Does your food taste good? Yes _____ No _____

Any other comments:

Resident Rights Post Test

1. Residents need to accept that they will be fed in an institutional atmosphere
 - a. True
 - b. False

2. Residents love to be surprised by what is being served; therefore, the menus are never posted.
 - a. True
 - b. False

3. Residents may request an alternative selection.
 - a. True
 - b. False

4. Residents should be allowed to choose table mates.
 - a. True
 - b. False

5. The staff does not need to talk to the residents during meal times.
 - a. True
 - b. False

Resident Rights Post Test - Answer Key

1. Residents need to accept that they will be fed in an institutional atmosphere
 - a. True
 - b. False**

2. Residents love to be surprised by what is being served; therefore, the menus are never posted.
 - a. True
 - b. False**

3. Residents may request an alternative selection.
 - a. True**
 - b. False

4. Residents should be allowed to choose table mates.
 - a. True**
 - b. False

5. The staff does not need to talk to the residents during meal times.
 - a. True
 - b. False**

Resident Rights from State Operations Manual

§483.10 Resident Rights

The resident has a right to a dignified existence, self-determination, and communication with and access to persons and services inside and outside the facility. A facility must protect and promote the rights of each resident, including each of the following rights

Interpretive Guidelines §483.10

All residents in long term care facilities have rights guaranteed to them under Federal and State law. Requirements concerning resident rights are specified in §§483.10, [483.12](#), [483.13](#), and [483.15](#). Section 483.10 is intended to lay the foundation for the remaining resident's rights requirements which cover more specific areas. These rights include the resident's right to:

- Exercise his or her rights ([§483.10\(a\)](#));
- Be informed about what rights and responsibilities he or she has ([§483.10\(b\)](#));
- If he or she wishes, have the facility manage his personal funds ([§483.10\(c\)](#));
- Choose a physician and treatment and participate in decisions and care planning ([§483.10\(d\)](#));
- Privacy and confidentiality ([§483.10\(e\)](#));
- Voice grievances and have the facility respond to those grievances ([§483.10\(f\)](#));
- Examine survey results ([§483.10\(g\)](#));
- Work or not work ([§483.10\(h\)](#));
- Privacy in sending and receiving mail ([§483.10\(i\)](#));
- Visit and be visited by others from outside the facility ([§483.10\(j\)](#));
- Use a telephone in privacy ([§483.10\(k\)](#));
- Retain and use personal possessions ([§483.10\(l\)](#)) to the maximum extent that space and safety permit;
- Share a room with a spouse, if that is mutually agreeable ([§483.10\(m\)](#));
- Self-administer medication, if the interdisciplinary care planning team determines it is safe ([§483.10\(n\)](#)); and
- Refuse a transfer from a distinct part, within the institution ([§483.10\(o\)](#)).

A facility must promote the exercise of rights for each resident, including any who face barriers (such as communication problems, hearing problems and cognition limits) in the exercise of these rights. A resident, even though determined to be incompetent, should be able to assert these rights based on his or her degree of capability.

F151

§483.10(a) Exercise of Rights

§483.10(a)(1) The resident has the right to exercise his or her rights as a resident of the facility and as a citizen or resident of the United States.

§483.10(a)(2) The resident has the right to be free of interference, coercion, discrimination, and reprisal from the facility in exercising his or her rights.

Interpretive Guidelines §483.10(a)(1)

Exercising rights means that residents have autonomy and choice, to the maximum extent possible, about how they wish to live their everyday lives and receive care, subject to the facility's rules, as long as those rules do not violate a regulatory requirement.

Intent §483.10(a)(2) This regulation is intended to protect each resident in the exercise of his or her rights.

Interpretive Guidelines §483.10(a)(2) The facility must not hamper, compel, treat differentially, or retaliate against a resident for exercising his/her rights. Facility behaviors designed to support and encourage resident participation in meeting care planning goals as documented in the resident assessment and care plan are not interference or coercion.

Examples of facility practices that may limit autonomy or choice in exercising rights include reducing the group activity time of a resident trying to organize a residents' group; requiring residents to seek prior approval to distribute information about the facility; discouraging a resident from hanging a religious ornament above his or her bed; singling out residents for prejudicial treatment such as isolating residents in activities; or purposefully assigning inexperienced aides to a resident with heavy care needs because the resident and/or his/her representative, exercised his/her rights.

Procedures §483.10(a)(2)

Pay close attention to resident or staff remarks and staff behavior that may represent deliberate actions to promote or to limit a resident's autonomy or choice, particularly in ways that affect independent functioning. Because reprisals may indicate abuse, if the team determines that a facility has violated this requirement through reprisals taken against residents, then further determine if the facility has an effective system to prevent the neglect and abuse of residents. ([§483.13\(c\)](#), [F224-F225](#).)

F152

§483.10(a)(3) -- In the case of a resident adjudged incompetent under the laws of a State by a court of competent jurisdiction, the rights of the resident are exercised by the person appointed under State law to act on the resident's behalf.

§483.10(a)(4) -- In the case of a resident who has not been adjudged incompetent by the State court, any legal-surrogate designated in accordance with State law may exercise the resident's rights to the extent provided by State law.

Interpretive Guidelines §483.10(a)(3) and (4)

When reference is made to "resident" in the Guidelines, it also refers to any person who may, under State law, act on the resident's behalf when the resident is unable to act for himself or herself. That person is referred to as the resident's surrogate or representative. If the resident has been formally declared incompetent by a court, the surrogate or representative is whoever was appointed by the court - a guardian, conservator, or committee. The facility should verify that a surrogate or representative has the necessary authority. For example, a court-appointed conservator might have the power to make financial decisions, but not health care decisions.

Work Place Violence

Learning Objectives: Upon completion of this inservice, the participant will be able to:

1. Identify situations that cause work place violence.
2. Identify security measures to help prevent work place violence.

Preparation Prior to Class

Write the following statements on the chart or blackboard:

1. Most workplace violence involves robbery or interaction with unstable people.
2. Some workplace violence occurs when people "snap" under extreme personal or job-related pressure.
 - a. Work situations that may push the emotionally unstable to violence include:
 - b. Personal situations that may lead to violence at work include:
3. Cooperate with security measures designed to prevent violence

Procedures

1. Ask participants to answer above questions in an open forum.
2. Write answers on chart or board.
3. Add any items left out you feel need to be discussed.
4. Open class for questions.

Handout on Workplace Violence

1. Most Workplace Violence Involves Robbery or Work With Unstable People

Acts of violence and threats include, but are not limited to:

- verbal (such as threats, harassment, abuse and intimidation),
- non-verbal (such as gestures and intimidation),
- physical (such as hitting, pushing, shoving, kicking, touching, and assault) and
- others (such as arson, sabotage, vandalism, stalking and possession of a weapon).

All threats and acts of violence will be taken seriously. Such acts of violence may be committed by strangers, patrons, co-workers or by persons in a relationship with an employee.

2. Some Workplace Violence Occurs When People “Snap” Under Extreme Personal or Job-Related Pressure

Work situations that may push the emotionally unstable to violence include:

- Losing a job or fear of losing job.
- Receiving a warning or reprimand.
- Not receiving an expected raise or promotion.
- Believing others are acting unfairly or showing hostility.
- Holding a grudge against a supervisor or co-worker.

Personal situations that may lead to violence at work include:

- Emotional or mental illness that causes people to blame work for their problems.
- Substance abuse, especially with drugs that cause violent behavior.
- Jealousy, revenge, and similar reactions to rejection by a spouse or partner.
- Inability to cope with overwhelming personal, financial, and/or health problems.

3. Cooperate With Security Measures Designed to Prevent Violence:

- Keep all security doors closed and locked.
- Wear nametag at all times.
- Don't lend your nametag to others.
- Don't bring weapons, drugs, or alcohol to work.
- Require visitors (even relatives or ex-employees) to sign in.
- Report any burned out or inadequate lighting.
- Keep security and police phone numbers close at hand.
- Report any threats or frightening behavior.
- Keep purses and valuables locked up and out of sight.

Slips, Trips and Falls

Learning Objectives: Upon completion of this inservice, the participant will be able to:

1. Identify causes of slips, trips and falls in the work place.
2. Identify hazards in the workplace and remedies that can be implemented

Slips

A slip occurs when there is too little friction or traction between footwear and the walking surface. Common causes include the following:

- Wet walking surfaces
- Oil or other slippery material on the floor
- Ice, snow, or mud
- Materials such as scraps of paper, cloth, etc. on the floor
- Unanchored rugs or mats
- Highly polished floors
- Smooth floor coatings
- Footwear with soles that are not appropriate for the walking surfaces



Trips

A trip occurs when the foot contacts an object or drops to a lower level unexpectedly and the person is off balance. Common causes include the following:

- Cords and hoses on the floor
- Uneven or damaged walking surfaces (floors, parking lots or sidewalks)
- Frayed, wrinkled, or torn carpet
- Debris, material, tools, etc. left in aisles and other walking areas
- Poor lighting
- Walker's view forward is obstructed by materials being carried or carts being pushed
- Changes in walking surface levels
- Obstacles on the floor such as capped off pipes, electrical boxes, etc



Falls

A fall occurs when a person tumbles to the floor as a result of a slip or trip.



Hazards	Remedies
<p style="text-align: center;">Wet surfaces</p> <ul style="list-style-type: none"> • Slippery floors • Walking too fast or not paying attention to the walking surface 	<p style="text-align: center;">Clean up, fix & report problems</p> <ul style="list-style-type: none"> • Clean up spills right away, report them immediately; clearly mark the area • Slow down, shorten the stride and walk with toes pointed outward to increase base of support
<p style="text-align: center;">Uneven surfaces</p> <ul style="list-style-type: none"> • Any change in surface area, such as grass to concrete or wooden floor to carpet • Worn carpeting, loose floor boards, or weak stairs and rails 	<p style="text-align: center;">Mark or fix surfaces</p> <ul style="list-style-type: none"> • Add color contact and signs to mark the changes in surface areas • Repair or report loose surface problems
<p style="text-align: center;">Poor lighting</p> <ul style="list-style-type: none"> • Dark or dimly lit areas 	<p style="text-align: center;">Be careful</p> <ul style="list-style-type: none"> • Change or report burned-out light bulbs to the appropriate person • Pay particular attention to areas that are often poorly lit, such as stairways, docks and parking lots
<p style="text-align: center;">Bad weather</p> <ul style="list-style-type: none"> • Rain, ice, snow, or mud on a parking lot, sidewalk, or loading dock • Wet areas inside doors, docks, and passageways 	<p style="text-align: center;">Wear the right shoes</p> <ul style="list-style-type: none"> • Wear slip-resistant shoes appropriate for the weather or walking surface. (neoprene soles) • Report problem areas such as icy sidewalks, snow-blocked entrances and debris on walkways
<p style="text-align: center;">Wrong tools for the job</p> <ul style="list-style-type: none"> • Not using the proper tools or safety equipment. (Instead of using a ladder using a chair or ladder that is too short.) • Not using proper lifting or safety equipment 	<p style="text-align: center;">Use proper tools for the job</p> <ul style="list-style-type: none"> • Take the time to find and use the correct size ladder and equipment • Never stand on a ladder's top rung • Do not use a chair for a ladder • Follow the safety procedures; if unsure ask the supervisor
<p style="text-align: center;">Poor housekeeping</p> <ul style="list-style-type: none"> • Dangerous clutter, such as boxes, electrical cords, rope, cases, file drawers and tools on the floor • Carts, bins and equipment left in hallways, blocking doorways or rooms 	<p style="text-align: center;">Clear clutter</p> <ul style="list-style-type: none"> • Be sure the floor is kept free of anything that a person might trip over • If housekeeping is a problem, suggest to the supervisor that employees be assigned to "clutter control" on a rotating basis

Hazards	Remedies
<p style="text-align: center;">Big loads</p> <ul style="list-style-type: none"> • Carrying a load that is too big, too heavy, or too bulky to be carried safely • Carrying a load that feels off balance, or prevents/inhibits clear vision directly in front • Pushing a cart from behind so that it blocks the view 	<p style="text-align: center;">Carry smaller loads</p> <ul style="list-style-type: none"> • Use a cart or hand truck or ask for help when the load is large • Keep at least one hand open for balance especially on the stairs • Use an elevator when possible • Pull carts when they are too tall to see over
<p style="text-align: center;">Not enough time</p> <ul style="list-style-type: none"> • Worrying about being late or not having enough time • Being in a hurry. 	<p style="text-align: center;">Slow down</p> <ul style="list-style-type: none"> • Slow down, take smaller steps • Make wide turns on slippery surfaces • Manage time wisely, be on time, start earlier
<p style="text-align: center;">Not storing items correctly</p> <ul style="list-style-type: none"> • Knives left on the counter top • Knives stored in drawer with other utensils • Blades left without a guard on 	<p style="text-align: center;">Properly store items</p> <ul style="list-style-type: none"> • Put knives in drawers alone or on racks • Store with guards on
<p style="text-align: center;">Work area too high or low</p> <ul style="list-style-type: none"> • Reaching over the head • Bending below the knees 	<p style="text-align: center;">Work area at proper level</p> <ul style="list-style-type: none"> • Use step ladder or lower the work area • Raise the work area

Slips, Trips and Falls Post Test

Name: _____

Date: _____

Safety awareness:

List 5 conditions that can cause slips, trips or falls.

1. _____

2. _____

3. _____

4. _____

5. _____

2. True or False - A slip happens when there is too little traction between the footwear and the surface one is walking on.
3. True or False - A trip occurs when you are off balance.
4. True or False - A chair can be used to change a light bulb as long as someone is standing next to you as a support.
5. True or False - When carrying a small load down a flight of stairs, keep one hand on the stair railing for balance.
6. True or False - You only have to report a fall to the Supervisor if you are hurt.
7. True or False - Wet floor signs are only used in resident areas when housekeeping is mopping the floor.

Slips, Trips and Falls ANSWER KEY

Safety awareness:

1. List 5 conditions that can cause slips, trips or falls.

See lists on first page

2. True or False - A slip happens when there is too little traction between the footwear and the surface one is walking on.

True

3. True or False - A trip occurs when you are off balance.

True

4. True or False - A chair can be used to change a light bulb as long as someone is standing next to you as a support.

False

5. True or False - When carrying a small load down a flight of stairs, keep one hand open for balance.

True

6. True or False - You only have to report a fall to the Supervisor if you are hurt.

False

7. True or False - Wet floor signs are only used in resident areas when housekeeping is mopping the floor.

False

How Safe are You at Work? A Self Assessment and Plan

Name: _____ Date: _____

		YES	NO
1	I take my time and watch where I am walking		
2	I immediately clean up and report spills.		
3	I do not leave clutter in the hallways, stairs or rooms.		
4	I make an effort to stay mentally alert on my job.		
5	I make sure my work area is well lit		
6	I take small, slow steps when my walking surface is wet or slippery.		
7	My shoes are appropriate for the surface conditions. Flat or low heels.		
8	I take responsibility for reporting and correcting hazards.		
9	I hold onto the railing when using the stairs.		
10	I carry and push items.		
11	I always use a ladder instead of standing on a chair.		
12	I replace or report burned out bulbs.		
13	I know and follow safety rules.		
14	I close drawers immediately.		

My plan to make my work area safer

Ergonomics

Learning Objectives: Upon completion of this inservice, the participant will be able to:
Identify at least 5 ergonomic risk factors and strategies for optimal health.

What is ergonomics?

Ergonomics is the study of the relation between workers and their environment. This includes the design and arrangement of equipment used that allows people to interact with the equipment in healthy, comfortable, and efficient manner. Ergonomics helps to improve the “fit” between the body and an activity. Other names for ergonomics include biotechnology, human engineering and human factors engineering.

Why should proper ergonomics be used?

To help prevent musculoskeletal disorders (MSDs)

What are the signs and signals of an MSD?

The possible symptoms of musculoskeletal disorders include swelling, aches, tingling, numbness, and muscle weakness. These signs may come and go.

What causes work-related MSDs?

Bending to complete tasks, lifting items above the shoulders, reaching into areas like carts, pushing items that are too heavy.

What if an MSD occurs?

Report it to the supervisor immediately. (Even minor ones)
Complete an accident/injury report form. Leave no spaces blank.
Give completed form to the supervisor at the time of injury.
All witnesses must hand write their statements and turn them in.

Ergonomics risk factors:

- **Posture:** slouching, twisting and reaching too high, low or far
- **Repetition:** same task or using same set of muscles – twisting, turning, torque
- **Environment:** hot or cold work areas, not well lit
- **Force:** pressure or strain such as griping, pulling, pushing, or lifting
- **Contact force:** leaning or pressing against hard or sharp edge surfaces
- **Duration:** long length of time
- **Recovery time:** repetitive tasks and awkward position
- **Health:** no exercise, bad diet, or previous injury
- **Combined risk factors:** pressure along with repeating a task. Two or more of above risks

How to reduce ergonomic risk factors:

- **Improve body posture:** rearrange the work area
- **Change:** adjust work habits, use opposite side
- **Dress:** for the temperature, get proper lighting
- **Change work habits:** proper use of ergonomics, keep in neutral position
- **Rearrange work area:** keep area 14 – 18 inches from the body
- **Lessen:** reduce the length, stretch etc
- **Rest:** between repetitions, reposition yourself and your work area
- **Personal Health:** take care of yourself, exercise, eat better, proper posture
- **Identify factors:** reposition body, work space, take small breaks, stretch

Discussion

Lead a discussion on tasks in the following areas in the facility that may present ergonomic risk factors. After a risk factor is identified, discuss a solution.

- Kitchen
- Production/Cooking Area
- Dishwashing Area
- Storeroom
- Office Area
- Resident Area

Identify if there are areas of concern in the workplace.

Discuss with administration or appropriate department in the facility for process improvement.

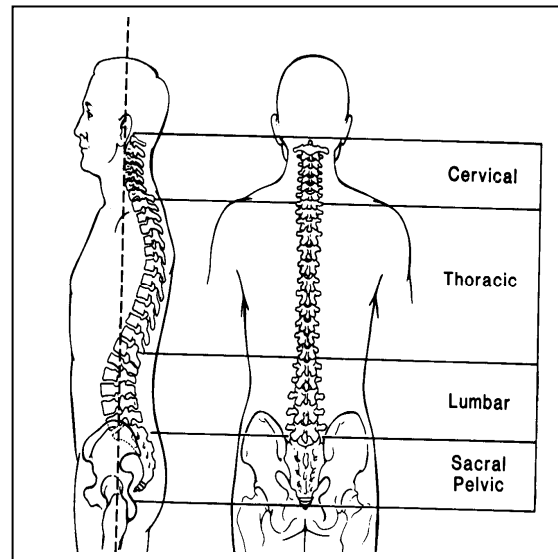
Ergonomics and Body Mechanics Handout

Back Basics

An understanding of proper sitting and standing posture is important. **Proper sitting** posture involves alignment of the spine so a line can be drawn through the ears, shoulders and hips. The natural curves of the spine are maintained. There is an inward curve at the neck and the low back.

Proper standing involves alignment of the spine so a line is drawn through ears, shoulders, hips, knees, and ankles. The natural curves of the spine are maintained in proper posture.

Body mechanics can be defined as how your body is positioned during activities. You must maintain proper body alignment and posture when performing activities in any position.



The Spine must be flexible as well as supportive. The anatomy of the spine allows for these opposing functions. Individual **vertebrae** are held together with strong **ligaments** that direct movement planes providing flexibility while being surrounded by muscles providing support.

Between the vertebral bones are **discs** with an outer fibrous layer, which provides flexibility, and an inner gel nucleus, which resists compression and provides structural support.

Almost all back injuries can be attributed to the cumulative effect of:

- Poor posture
- Faulty body mechanics
- Stressful living and working habits
- Loss of flexibility
- Poor physical condition
- Accidents

Ways to Aide in Prevention of Injuries at Work

Back Injuries

1. **Change or modify the work environment.** (*Examples – Using assistive lifting devices, better chairs, and positioning at a safe working height*)
2. **Use good body mechanics principles.**
3. **Reverse or relieve stressful positions frequently.** (*Bend backward after bending forward, alternate sitting and standing*)
4. **Control stressful living and working habits.**
5. **Stay in good physical condition.** (*Research indicates when people are in good physical condition they have fewer back problems.*)
6. **Utilize teamwork and don't take any chances**

Ten Rules of Good Body Mechanics:

1. **Test the load.** *Prior to lifting or moving an object, test the weight of the load to make sure it can be moved safely.*
2. **Plan the move.** *Check and clear the path before moving.*
3. **Use a wide, balanced stance.** *A solid base of support reduces the likelihood of slipping and jerking movements.*
4. **Keep the lower back in its normal arched position while lifting.** *With the back slightly arched, the forces are more evenly distributed on the supporting structures.*
5. **Bring the load as close to the body as possible.**
6. **Keep the head and shoulders up as the lifting motion begins.** *This helps to keep the arch in the lower back.*
7. **Tighten the stomach muscles as the lift begins.** *This reduces the load on the spine.*
8. **Lift with the legs and stand up in a smooth, even motion.** *Using the strength of the legs for lifting reduces the stress on the lower back.*
9. **Move the feet if a direction change is necessary.** *This eliminates the need to twist at the waist.*
10. **Communicate if two or more individuals are involved in a movement.** *This reduces the likelihood of an error.*
11. **When repeatedly twisting or torquing, take a break from the movement and stretch to relieve muscle fatigue and stress.** *If possible, complete another task using alternate muscles before resuming the twisting motion.*

Tips for Office Jobs:

1. Desk height should allow the elbows to rest comfortably at 90° (right angle) with wrists in neutral. Wrist rests may be necessary when using keyboard.
2. Maintain proper chair height – hips and knees at 90° (right angle) with both feet on the ground.
3. Maintain proper computer screen height – screen at eye level with your chin parallel to the ground.
4. Phone should be located within an arm length.
5. Stand up and change positions frequently during the day.
6. Rotate job tasks during the work day.

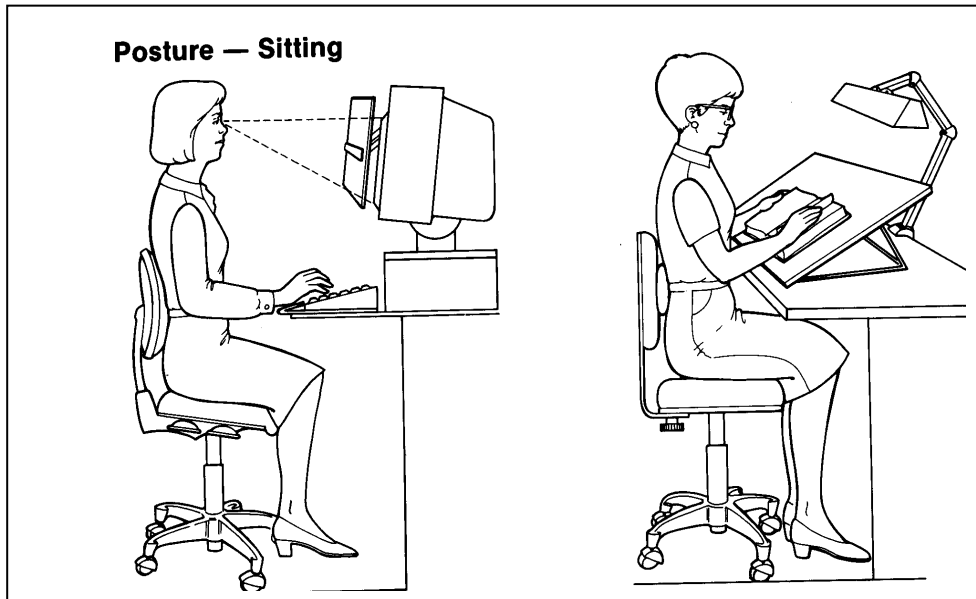
Eye Basics

To avoid eyestrain associated with computer use:

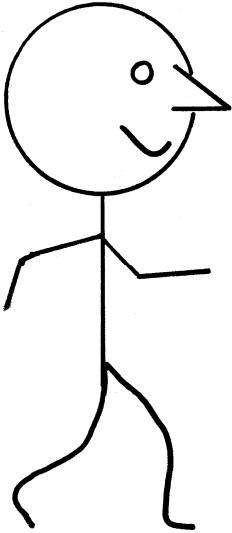
- Blink frequently (about every 5 seconds)
- Refocus your eyes periodically (about every 20 minutes) on a distant object 20 or more feet away
- Eyeglasses should be clean and have a comfortable focal distance for computer work

Monitor

- Monitor distance should be 18-26 inches from user (approximately an arm's length)
- Monitor centered on user
- Neither monitor nor user should face a window
- Monitor should be placed at a right angle to windows or between rows of fluorescent lighting rather than directly under them
- User's eyes should be in line with the top of the monitor or a point 2-3 inches below the top of the screen



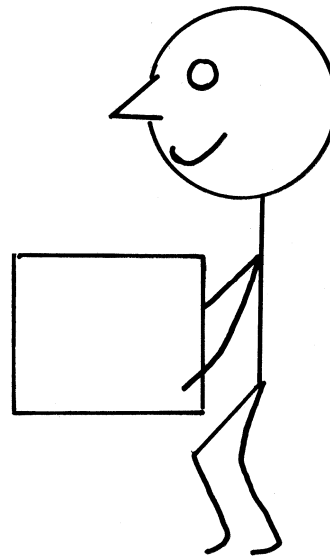
GOOD POSTURE



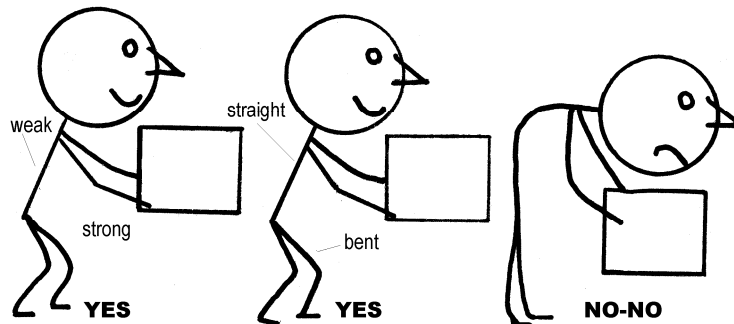
1. Stand with feet apart to maintain proper balance.
2. Keep knees straight but not stiff.
3. Raise chest and spread shoulders wide.
4. Tighten abdominal muscles to straighten spine.
5. Keep head erect (straight).

CORRECT LIFTING PROCEDURE

1. Place weight evenly on both feet.
2. Keep feet apart.
3. Face object to be lifted.
4. Squat close to object.
5. Keep back straight.



6. Hold object firmly with both hands.
7. Use strong leg muscles, rather than your back to lift.
8. Push or pull rather than lift.
9. Lift a heavy object no higher than waist level.
10. To turn, pivot feet. Do not twist body.



Ergonomics and Body Mechanics POST-TEST

Name _____ Date _____

1. The “shock absorbers” of the spine are the _____.
 - a. Discs
 - b. Facet Joints
 - c. Ligaments
 - d. Muscles

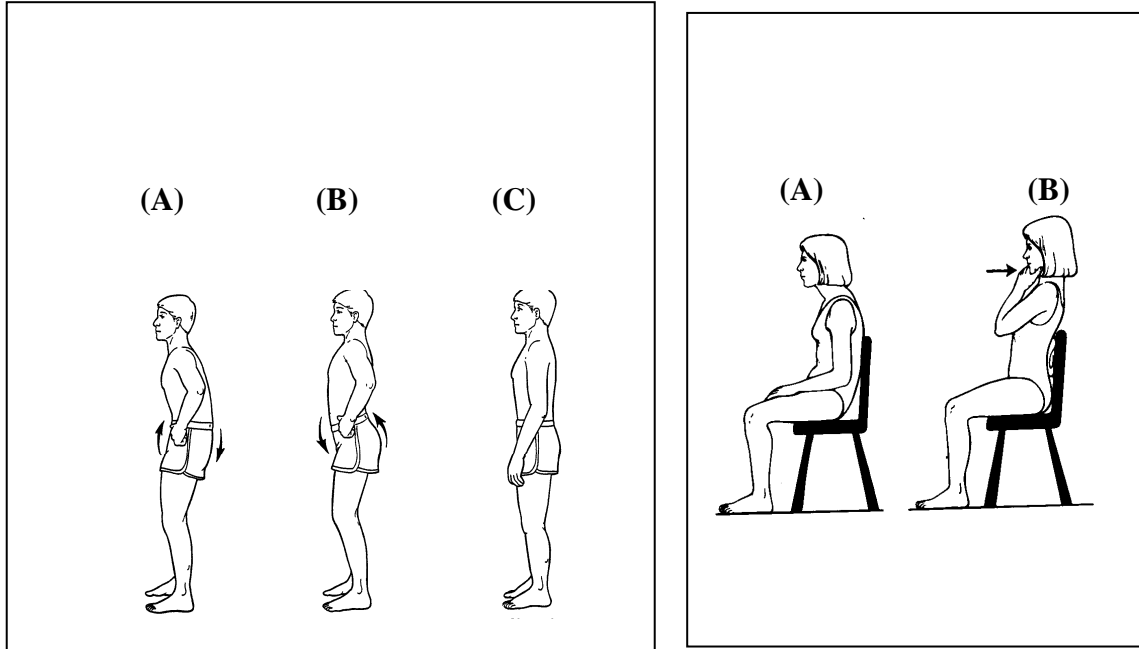
2. Which of the following is harmful to your back?
 - a. Sleeping on your stomach.
 - b. Sleeping on your side.
 - c. Sitting slouched without a back support.
 - d. Standing with a slight inward curve in the low back.

ANSWER “TRUE” or “FALSE”

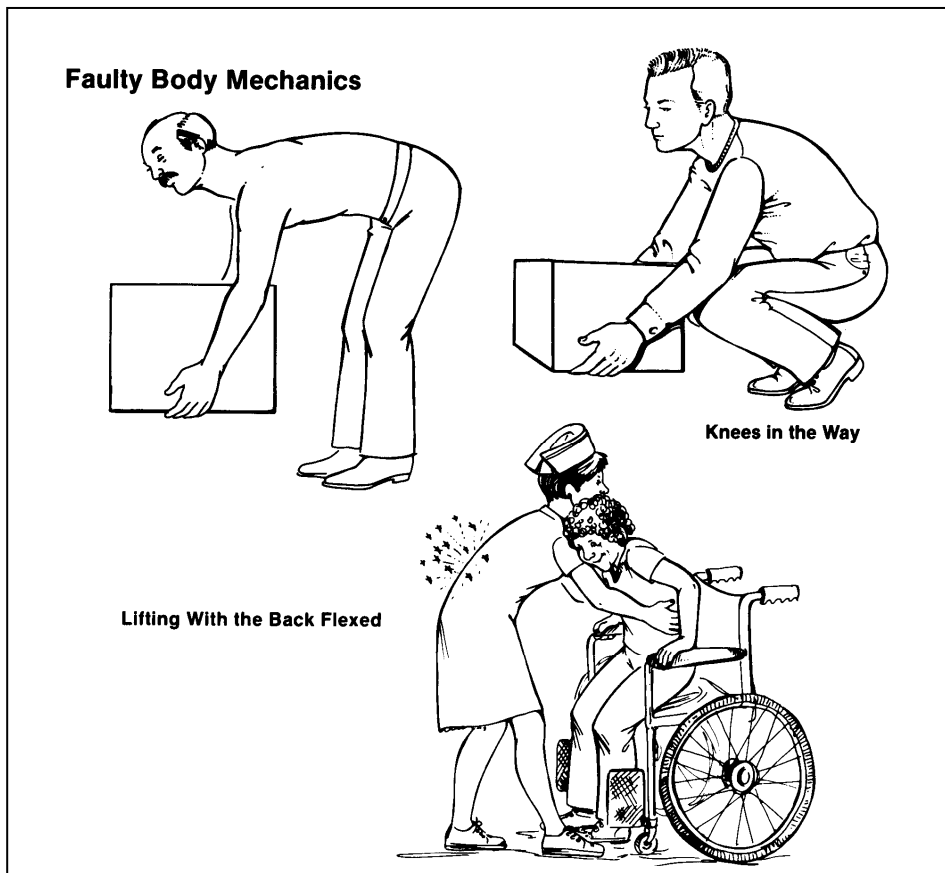
- _____ 1. Most back problems are caused by a single one-time injury.
- _____ 2. Most back problems are the result of poor posture, stressful working conditions, faulty body mechanics, and poor physical fitness.
- _____ 3. The spine has two continuous curves.
- _____ 4. Back injuries account for a significant amount of disability payments.
- _____ 5. Sitting places almost twice as much pressure on your discs as standing does.
- _____ 6. Maintaining a good posture applies only to a standing position, not sitting.
- _____ 7. With proper body mechanics, one person can lift any load.
- _____ 8. While lifting objects, it is good to twist your back because this keeps your back flexible.
- _____ 9. A principle of good body mechanics is to change positions frequently when working in stressful conditions.
- _____ 10. The back musculature stabilizes the spine in conjunction with the abdominal wall musculature.

POST-TEST

SELECT THE BEST POSTURE:

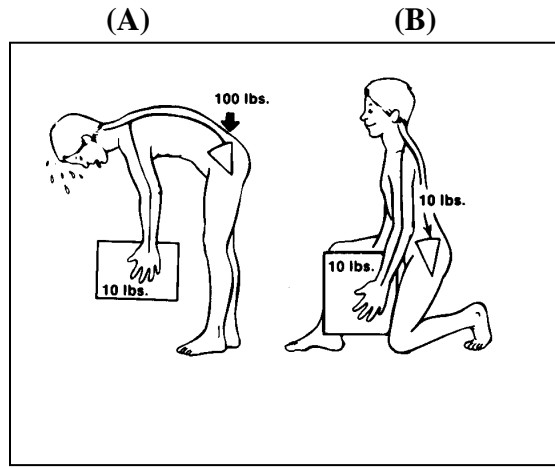
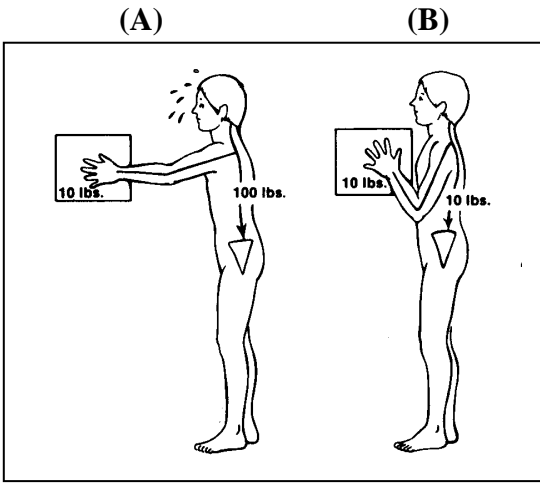


Discuss how each lifting example pictured below is faulty:



WHICH OF THE FOLLOWING DEPICTS THE BETTER BODY MECHANICS?

SELECT "A" or "B"



Ergonomics and Body Mechanics POST-TEST ANSWER KEY

Name _____ Date _____

MULTIPLE CHOICE

1. The “shock absorbers” of the spine are the _____.
 - a. **Discs**
 - b. Facet Joints
 - c. Ligaments
 - d. Muscles
2. Which of the following is harmful to your back?
 - a. Sleeping on your stomach.
 - b. Sleeping on your side.
 - c. **Sitting slouched without a back support.**
 - d. Standing with a slight inward curve in the low back.

ANSWER “TRUE” or “FALSE”

- _____F_____ 1. Most back problems are caused by a single one-time injury.
- _____T_____ 2. Most back problems are the result of poor posture, stressful working conditions, faulty body mechanics, and poor physical fitness.
- _____T_____ 3. The spine has two continuous curves.
- _____T_____ 4. Back injuries account for a significant amount of disability payments.
- _____T_____ 5. Sitting places almost twice as much pressure on your discs as standing does.
- _____F_____ 6. Maintaining a good posture applies only to a standing position, not sitting.
- _____F_____ 7. With proper body mechanics, one person can lift any load.
- _____F_____ 8. While lifting objects, it is good to twist your back because this keeps your back flexible.
- _____T_____ 9. A principle of good body mechanics is to change positions frequently when working in stressful conditions.
- _____T_____ 10. The back musculature stabilizes the spine in conjunction with the abdominal wall musculature.

Fire Safety



Learning Objectives:

1. Name at least four safety rules that should always be followed to prevent fire in the kitchen;
2. Know the location of all fire extinguishers and the nearest fire alarm box;
3. Know the location of the posted fire procedure and perform the assigned tasks.

FIRE SAFETY RULES:

1. Smoke only in designated areas.
2. Keep equipment such as stoves and hood vents clean and free from grease.
3. Know where the fire extinguishers are located and how to use them.
4. Know where exits are and keep them free of materials or equipment.
5. Do not wear loose sleeves and keep apron tied without loose ties dangling in the work area.
6. Keep matches in a covered metal container or far away from heat.
7. Store fat far away from heat at all times.
8. Never turn on gas before lighting matches and do not use a lit paper towel as a match.
9. Never leave hot fat unattended.
10. Use preventative maintenance to assure electrical cords are not frayed.

FIRE SAFETY CHECKLIST:

1. Are gas pipes free from leaks? Have gas pipes been checked by the gas company?
2. Are matches kept in a covered metal container or far away from heat?
3. Are fire extinguishers and/or fire blankets provided?
4. Is the fire extinguisher checked monthly?
5. Is hot fat watched carefully, and is fat and oil stored away from flames?
6. Are matches (not lighted paper towels) lit before turning on gas jets?
7. Are the stove and hood vents cleaned routinely by the facility and annually by a commercial contractor?
8. Are exits clearly marked and clear of materials and equipment?
9. Does each employee know how to use the fire extinguisher and know the use of a fire blanket?

DIETARY FIRE PROCEDURE

Fire Department Phone Number _____

REMEMBER: Safety – yours and others – is the most important consideration.

In the event of a fire or a fire drill outside the dietary department:

Step	Action
1	Turn off equipment.
2	Shut all doors and windows.
3	Turn off all lights.
4	Report to _____ with department fire extinguisher for further instructions.

In the event of a fire or a fire drill in the dietary department:

Step	Action
1	Shut off all exhaust fans, gas and electrical equipment.
2	Initiate attempts to control fire (e.g., smother with pan lid, baking soda, hand-held fire extinguisher).
3	Report the fire to the Administrator or person in charge at the time.
4	Close all doors and windows if there is extensive smoke or flames.
5	Evacuate the kitchen.

How to notify the fire department:

Step	Action
1	Call the local fire department by dialing _____.
2	Give the name of the facility: _____.
3	Give the facility address: _____.
4	Give the facility phone number: _____.
5	Give the location of the fire.
6	Give your name and department name.

Fire Plan/Life Safety

Fire Plan

The steps to be followed in case of fire are easy to remember by using the acronym: **RACE**

- R – Rescue anyone in immediate danger
- A – Alarm & Alert
Pull nearest fire alarm, dial 911 and identify facility and location of fire.
- C – Confine the fire and smoke by closing doors and windows.
- E – Evacuate and Extinguish. Use nearest fire extinguisher if the fire is small. Evacuate the area if necessary following facility policy.

How to Use a Fire Extinguisher

Remember how to use a fire extinguisher with the acronym: **PASS**

- P- Pull the pin
- A- Aim the hose
- S- Squeeze the handle
- S- Sweep from side to side

Know emergency exits and locations of fire extinguishers nearest your work area. Your life may depend on it. (Adapt for specific facility)

Discuss procedures specific to the dietary department such as what to do if a fire occurs during meal time.

Q. What does the emergency code “Signal F” mean? (Adapt for specific facility)

A. Signal F: A “Signal F” announcement indicates that a fire has occurred.

Q. What are smoke barriers and smoke doors?

A. Walls and doors which prevent the spread of smoke from the fire area into other areas.

Q. What should you do if you hear the alarms?

Listen for the location over the public address system. Determine if the fire situation is in your zone. Prepare for receiving evacuees, and watch for smoke and/or water from adjacent zones.

Fire Safety Post Test

Short Answer

1. List three necessary ingredients for a fire:
 - A.
 - B.
 - C.
2. List the locations of all fire extinguishers in the kitchen.
3. List the location of the nearest fire alarm box.

True or False

4. In the event of a fire, do the following

- | | | |
|-------------|--------------|---|
| True | False | a. Scream "FIRE!!" |
| True | False | b. Remove anyone who is immediate danger.
Move residents first. |
| True | False | c. After removing any person in danger and alerting the rest of the facility, you may attempt to contain the fire, if you are certain you can, using the appropriate fire extinguisher. |

Post Test Key: Fire Safety

Short Answer

1. List three necessary ingredients for fire:
 - a. Heat
 - b. Fuel
 - c. Oxygen

2. List the location of all fire extinguishers in the kitchen.

Write in exact location(s).

3. List the location of the nearest fire alarm box.

Write in exact location.

True or False

4. In the event of a fire, do the following

- | | | |
|-------------|--------------|---|
| True | <u>False</u> | a. Scream "FIRE!!" |
| True | <u>False</u> | b. Remove anyone who is immediate danger.
Move residents first. |
| <u>True</u> | False | c. After removing any person in danger and alerting the rest of the facility, you may attempt to contain the fire, if you are certain you can, using the appropriate fire extinguisher. |

Hazardous Materials

Learning Objectives: Upon completion of this inservice, the participant will be able to:

1. Identify chemicals in the workplace.
2. Understand consequences of improper use.
3. Understand the importance of an MSDS.
4. Understand why certain personal items should not be brought in for residents.

Your Right To Know About Hazardous Materials In The Workplace

Working With Hazardous Materials Doesn't Have To Be Harmful – If You Take The Right Precautions. Whatever your job duties, you have one other very important responsibility:

You are responsible for your safety – and the safety of your co-workers.

Even though your company takes many steps to protect you at work, it can't do the whole job by itself. That's why you need to know all you can about potential hazards and how to work with them.



FACT SHEET



1. The definition of a hazardous material is a substance (gas, liquid, or solid) capable of causing harm to people, property and the environment.
2. There are two types of hazardous associated with chemicals:
 - Health – long-term exposure causing serious health problems: Example: asbestos
 - Physical – immediate, short term injury: Example: spilling chemical on skin
3. There are 3 ways for hazardous materials to enter the body:
 - Absorption (through the skin or eyes);
 - Ingestion (through the mouth);
 - Inhalation (through the mouth or nose)
4. Exposure to hazardous materials with different toxicity levels can cause different levels of injury:
 - Low toxicity levels can cause temporary illness/injury
 - High toxicity levels can cause fatal illness/injury
5. Hazardous materials are classified by categories:
 - Explosives/gases
 - Flammable liquids and solids
 - Oxidizers
 - Poisons
 - Corrosives
 - Radio active materials
 - Other regulated materials
6. Information contained on labels on hazardous materials includes:
 - Identification of the material or chemical(s),
 - Precautions or warnings,
 - Additional information pertaining to the use of the material and any specific departmental instructions.

WHAT IS THE MSDS?

1. MSDS stands for Material Safety Data Sheet.
2. Safety information contained on the MSDS sheet includes:
 - a. identification of the material or chemical(s)
 - b. hazardous ingredients
 - c. the physical or chemical characteristics of the product
 - d. fire or explosive hazards
 - e. what other material(s)/chemical(s) will react with the product, and the results of the reaction
 - f. any known health hazard associated with the use of the product
 - g. precautions and instructions for the safe handling of the product



OTHER IMPORTANT SAFETY INFORMATION

1. PPE stands for Personal Protective Equipment (safety equipment to use with hazardous materials).
Examples: gloves, masks, aprons, goggles, gowns. Your supervisor can advise you as to where your department's PPE is located.
2. Notify your supervisor immediately if any of these symptoms would occur to you or a co-worker.
These symptoms could be a result of exposure to hazardous materials:
Examples: dizziness; nausea/vomiting; irritation to the eyes, nose or throat; extreme nervousness or agitation; skin rashes; sluggishness
3. Action to take if you or a co-worker were splashed in the face/eyes or skin area(s):
 - Have another employee contact a supervisor immediately
 - Eyes – immediately locate an eye wash station and flush the eyes for a **minimum of 15 minutes**, with water;
 - Skin area – immediately find a “clean sink” and flush the affected area for a **minimum of 15 minutes**, with cool water;
 - Locate the MSDS sheet for further instructions;
 - Follow the policy and procedure for completing an employee accident or injury report and seeing treatment.
4. Locations of the eye wash stations _____
5. What to do if you or a co-worker were splashed with a chemical or hazardous material, and your clothing was saturated.
 - Immediately contact your immediate supervisor and follow facility policy.
 - You or your co-worker will need to shower for a **minimum of 15 minutes**, at which time the designated supervisor will collect your clothing to be washed or laundered, and provide you with a set of clothing to wear.
 - If exposure to a hazardous chemical/material occurs this could be a medical emergency which requires immediate professional treatment.
 - Do not delay in receiving professional medical treatment.
 - If an ambulance is needed follow company policy.
 - **Send a copy of the MSDS sheet to the Emergency Room with the employee.**

This will enable the hospital physician to treat the chemical emergency quickly and efficiently.

HAZARD COMMUNICATION – Q & A

Q. How can an employee become aware of the potential hazards of the chemicals used in the department?

A. Material Safety Data Sheets (MSDS) and product labels.

Q. What does “MSDS” stand for, and what is it?

A. MSDS means “material safety data sheet.” The MSDS is the information sheet that manufacturers are required to provide the buyer of any product that contains a hazardous chemical. MSDS should be readily accessible to all employees.

Q. Where are the MSDS kept?

A. Each department keeps the MSDS for the products they regularly use. A complete listing of MSDS is kept in the _____ Office.

Q. What hazardous materials do you work with in your department

A. Know what chemicals you frequently work with in the department. Know where to find information on the hazards (MSDS, labels).

Know location of MSDS. Ask your supervisor if you cannot locate!

Q. What do you do in the event of a chemical spill?

- Clean up the spill per MSDS.
- Report the spill to the supervisor

If an unknown chemical spill is discovered, contact your supervisor.

Q. Where and when is Hazard Communication taught to employees?

A. General Orientation
Department safety training
Yearly mandatory inservice training for all staff

Chemical Safety Post Test

Name: _____ Date: _____

1. A safe work environment is.....
 - a. Not always possible
 - b. Up to the employer
 - c. An employee-employer relationship
2. Before working with hazardous chemicals...
 - a. There are no requirements
 - b. One must be trained in their use
 - c. All chemicals are alike and treated the same way
3. Two basic types of chemical hazards are...
 - a. Liquid and gas
 - b. Corrosive and flammable
 - c. Health and physical
4. Two health hazards from chemicals are....
 - a. Non-hazardous and chronic
 - b. Infections and acute
 - c. Toxic chemicals and corrosive chemicals
5. Two physical hazards for chemicals are.....
 - a. Flammable chemicals and reactive chemicals
 - b. Infections and acute
 - c. Large and small
6. Material Data Safety Sheet....
 - a. Are only for Supervisors to read
 - b. Take the place of labels
 - c. Give detailed information about hazards

Chemical Safety Post Test - Answer Key

Name: _____ Date: _____

1. A safe work environment is.....
 - a. Not always possible
 - b. Up to the employer
 - c. An employee-employer relationship**

2. Before working with hazardous chemicals...
 - a. There are no requirements
 - b. One must be trained in their use**
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 - a. Liquid and gas
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 - a. Non-hazardous and chronic
 - b. Infections and acute
 - c. Toxic chemicals and corrosive chemicals**

5. Two physical hazards for chemicals are.....
 - a. Flammable chemicals and reactive chemicals**
 - b. Infections and acute
 - c. Large and small

6. Material Data Safety Sheet....
 - a. Are only for Supervisors to read
 - b. Take the place of labels
 - c. Give detailed information about hazards**

EMERGENCY PREPARADNESS

LESSON PLAN

CLASS TITLE: Plan today – Survive Tomorrow: Emergency Management in LTC

TIME: 60 Minutes

PROGRAM TYPE: In-service

INSTRUCTOR'S SIGNATURE: _____

BEHAVIORAL OBJECTIVES	COURSE CONTENT	TEACHING METHOD	EVALUATION
<p>At the conclusion of the presentation, the participants will be able to:</p> <ol style="list-style-type: none"> 1. Organize a realistic plan that clearly defines leadership in the nursing centers dietary departments. 2. Provide the tools with which to develop a comprehensive plan to protect the residents, employees, and company in a disaster. 3. Follow the correct procedures during a disaster or emergency situation 	<p>Review the policy on Disaster and Emergency Management situations</p> <p>Departments affected</p> <ul style="list-style-type: none"> -Administration -Nursing -Dietary -Maintenance -Housekeeping/Laundry -Social Services/Activities -Therapies <p>Responsibilities for Preparedness:</p> <p>Administrator responsibility</p> <ul style="list-style-type: none"> • Provide current information • Agreements & credit lines with suppliers & purveyors to ensure uninterrupted deliveries • Discharge & admissions agreements • Assess facilities preparedness • Communicate with administration & department heads • Facilitate training • Routine inspections and data reporting • Assign staff • Maintain all guidelines and procedures current • Maintain mutual agreements file of vendors & other institutions • Ensure training and education are conducted routinely & retain documentation • Have knowledge of disaster & emergency 	<p>Lecture Discussion PPT & Handouts</p>	<p>Question and Answer Session</p> <p>Sample Questions: What are the departments affected by an emergency? ANSWER: All departments</p> <p>Sample Questions: Who is the person in charge during an emergency? ANSWER: The administrator or designee, or the DNS or designee. In their absence the highest ranking person such as nursing supervisor or other department head.</p> <p>Sample Question: Office staff has no responsibility in disasters, true or false? ANSWER: False. Office staff maintain current lists, make phone calls, issue instructions from the person in charge.</p> <p>Sample Question: In "this" location, name your greatest risk ANSWER:</p>

9/2010 D. Cassens, MHA, RD

LESSON PLAN

CLASS TITLE: Plan today – Survive Tomorrow: Emergency Management in LTC

TIME: 60 Minutes

PROGRAM TYPE: In-service

INSTRUCTOR'S SIGNATURE: _____

BEHAVIORAL OBJECTIVES	COURSE CONTENT	TEACHING METHOD	EVALUATION
	<p>management & recovery plans</p> <p>Nursing responsibility</p> <ul style="list-style-type: none"> ● Maintain current inventory lists with pharmacy & medical products supplier to ensure deliveries. ● <u>Three days</u> emergency supplies available: <ul style="list-style-type: none"> -Diapers -Treatment supplies -Enteral supplies & water for flushes -Medications -Water for hygiene, medication pass <p>Dietary responsibility</p> <ul style="list-style-type: none"> ● Maintain current inventory lists with water supplier and food purveyors to ensure deliveries. ● <u>Three days</u> emergency supplies available. -Emergency menus & inventory list posted. -Food & supplies to serve <u>residents & staff</u>. <ul style="list-style-type: none"> - 2 to 2 ½ gallons water per resident per day. ● 2 quarts per day for drinking, the remaining per day for food preparation, hygiene, sanitation. -Ensure staff training is conducted: <ul style="list-style-type: none"> ● Dietary staff ● Other staff: nursing, housekeeping, maintenance <p>Housekeeping & Laundry responsibility</p> <ul style="list-style-type: none"> ● Ensure sufficient linens & towels supplies are available to meet inventory par-levels ● Ensure all housekeeping and laundry staff understand their role in a disaster ● Protect available supplies 		<p>Participants name the greatest risk as identified during the session for the particular location.</p> <p><u>Sample Question:</u> What is commonly used to purify water?</p> <p><u>ANSWER:</u></p> <ul style="list-style-type: none"> ● Liquid chlorine bleach (laundry bleach) ● 5 ¼ % Sodium Hypochlorite solution

LESSON PLAN

CLASS TITLE: Plan today – Survive Tomorrow: Emergency Management in LTC

TIME: 60 Minutes

PROGRAM TYPE: In-service

INSTRUCTOR'S SIGNATURE: _____

BEHAVIORAL OBJECTIVES	COURSE CONTENT	TEACHING METHOD	EVALUATION
	<ul style="list-style-type: none"> ● Maintain sanitation and infection control throughout structure Maintenance responsibility ● Maintain testing and log for: <ul style="list-style-type: none"> -Generator -Utilities -Fire alarm system -Sprinkler system -Air circulating system -Elevator ● Emergency repairs ● Ensure adequate water supply available in collaboration with dietary department Social Services, Activities & Office staff responsibility ● Notify residents, families, physicians ● Maintain log of all phone calls ● Recall and assign staff as directed ● Keep current records of all residents including transfers ● Contract transportation companies contracted ● Help ready medical records, clothing, & supplies for evacuation ● Maintain current lists of employees & residents with emergency contact information Staff responsibility ● Attend drills and training offered ● Do not use emergency stock & notify supervisor of any shortages in materials ● Learn procedures for each local situation ● Remain watchful and alert at all times 		

LESSON PLAN

CLASS TITLE: Plan today – Survive Tomorrow: Emergency Management in LTC

TIME: 60 Minutes

PROGRAM TYPE: In-service

INSTRUCTOR'S SIGNATURE: _____

BEHAVIORAL OBJECTIVES	COURSE CONTENT	TEACHING METHOD	EVALUATION
	<ul style="list-style-type: none"> ● Report all problems to supervisor ● Agree to remain or return to work as soon as safely possible <p>Assess your risk by conducting a vulnerability analysis</p> <ul style="list-style-type: none"> ● Fire ● Earthquake ● Flood ● Disruption of services ● Extreme weather ● Thunderstorm ● Bomb threat ● Explosion ● Windstorm ● Civil disturbance ● Elopement <p>Procedures for disasters</p> <ul style="list-style-type: none"> ● Loss of water procedure <ul style="list-style-type: none"> ○ Water purification table ● Loss of gas procedure ● Loss of electricity procedure ● Earthquake procedure ● Flooding procedure ● Extreme heat procedure ● Extreme wind procedure ● Bomb threat procedure ● Explosion procedure ● Civil disturbance procedure ● Disaster kit contents 		

TRAYLINE ACCURACY / MENU COMPLIANCE

Learning Objectives:

1. The Employee will be aware of acceptable food presentation and seasoning
2. The Employee will be aware of how food is to be appropriately served to the resident
3. The Employee will be aware of what steps to take before each meal to ensure that the trays are accurate, menus are followed and food quality is maintained.

KEY TERMS

1. Customer Satisfaction is contentment with the purchase of a commodity or service.
2. Food Service is the product that the customer (your client) has the perception of purchasing as he or she becomes a resident or client of your facility.

There is a direct link between customer satisfaction and positive outcomes. What positive outcomes? The end results of trayline accuracy and menu compliance are

- Clients/residents maintain nutritional adequacy
- Decreased resident complaints
- Improved satisfaction of families
- Better survey results



Recipe Importance

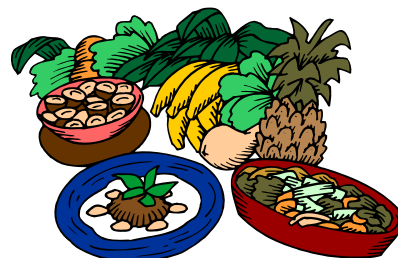
- Food preparation is important: standardized quantity recipes should be used to provide consistency of product.
- Recipes should be followed for the number of servings to be prepared so that seasoning, taste and appearance are consistent throughout the month.
- Recipes indicate temperatures that food should be cooked to, held at and served at; all to protect the food safety and quality of the product.
- Creativity in recipe preparation is not encouraged on a daily basis.



Menus are planned to provide nutritionally adequate meals within established budgetary limitations.

Menu planning considers

- color
- texture
- nutritive value
- food combinations
- preparation
- resident acceptance



If the dietary staff does not follow the menu or recipe as written, then there is no assurance of adequacy or accuracy.

Plate appearance is very important.

- Use of plates, cups, bowls that prevent spills, food juices running into breads and other foods and proper preparation of texture altered foods increases the plate appeal of food.



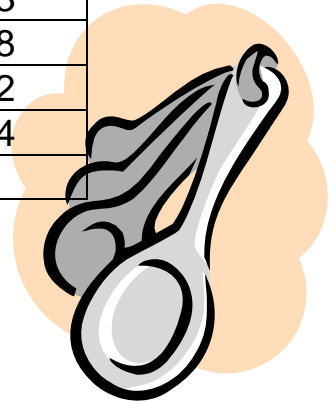
- Appearance of the finished product, including color, shape, and correct portion size is important.
- Plates should not be sloppily served.

Portion Control

- Foods should be served according to the portions noted on the menus and recipes.
- Care should be taken before each meal to make sure that the correct scoops, ladles, and spoodles are available and in the appropriate menu items ready for the meal to begin.



Scoop Chart		
Scoop	OZ	Cup
#16	2	1/4
#12	2 2/3	1/3
#10	3	3/8
#8	4	1/2
#6	5 1/3	3/4
#4	8	1



Food Temperatures

- should be taken prior to each meal
- must be recorded immediately

A trayline checklist should be done prior to each meal.



Trayline Checklist

- Food on Steam table no more than ½ hour prior to service and >135 degrees
- Temperatures taken / documented / correct
- Serving utensils correct
- Food for all diets available and correct
- Thicken liquids available and correct
- Food appetizing: not burnt / vegetables not overcooked / garnish available
- Cold food and milk on ice <41 degrees
- Beverages and extra request items prepared
- Alternate meat, starch and vegetable available
- Menu posted and easily read on trayline
- Tray cards set up properly
- Puree / Mechanical Soft consistency appropriate – smooth, not dry, with sauce or gravy
- Brief menu review held

Trayline Checklist/Menu Compliance Pre / Post Test

1. What are two positive outcomes of improving customer satisfaction?
2. Where do you find the serving sizes required for each menu item?
3. List three things that should be checked before the meal service begins.
4. Review the scoop sizes, list the ounces for scoop sizes of four scoops that you use in the facility
5. List three things that you can do to improve menu compliance in your department.

Answers to post test:

1. better nutritional status for residents, better surveys
less food complaints, happier residents, happier families
2. on the menu, next to the menu item
on the recipes
3. taste of food, temperature of food, texture of mechanical
and pureed items
4. Scoop Chart

Scoop Chart		
Scoop	OZ	Cup
#16	2	1/4
#12	2 2/3	1/3
#10	3	3/8
#8	4	1/2
#6	5 1/3	3/4
#4	8	1

5. Answers will vary

WHEELCHAIR SAFETY

Learning Objectives: Upon completion of this inservice, the participant will be able to understand the mechanics of safe wheelchair transport.

Introduction

There are opportunities when food service workers are required or asked to move or transport residents in wheelchairs. There are several safety points to be aware of and remember. (See Handout)



Demonstration and Observation

Have employees participate in role playing. Create scenarios that staff may find themselves involved in while at work.

- Removing a resident in a wheelchair from a tight spot in the dining room
- Demonstrate on and off the elevator (if applicable)
- Demonstrate with foot pedals, lap robes, transporting over doorways that might not be even.... whatever your staff may encounter.

If there is a fire drill and the residents need to be evacuated from the dining area, how is the evacuation handled?

Discuss the facility policy on transporting more than one resident at a time.

Guidelines for Wheelchairs

1. Residents should be in the wheelchair, ready to go. **Never transfer** (help) the resident into or out of the wheelchair unless you are medically trained for proper transfers. (Nurses, nursing assistants, physical therapist, etc.)
2. Be careful pushing wheelchairs with residents who do not have a footrest. Remind them to hold their feet up. If this is difficult, stop and let them rest.
3. Speak to the resident and let him/her know you are going to “push” the wheelchair before you begin any movement, telling the resident where you are taking him/her. Never surprise a resident by coming up behind them and pushing the wheelchair.
4. If you are taking a resident off the unit they reside on, know who to notify. (Review facility’s policy with staff).
5. Keep the resident’s arms, hands, and elbows within chair frame, especially when moving. Make sure resident’s feet are securely on pedals and **off the floor**. Keep coats, sweaters, and canes away from the wheels of a chair.
6. Enter the elevator backwards. Allow other people to get off before entering. Exit the elevator forward. Be careful not to tip the wheelchair when going over bumps.
7. Go slowly. There is danger of running into other residents if you move too quickly.
8. When going over bumps, stop and lift front wheels by pushing your foot on the kickspur of the chair to allow front wheels to go over more easily. Then lift back wheels with the handles. Sometimes pulling, not pushing, a wheelchair over a bump is easier but it is a dignity issue to pull residents backwards for any great distance. Pulling residents backwards can also be frightening as they cannot see where they are going.
9. If you are taking a resident outside, ask staff to assist you, especially over rough ground and grass. Watch the bumps that may be on sidewalks also.
10. To preserve dignity, use lap robes for women wearing dresses or men wearing gowns.
11. Some residents try to help by using their hands to turn the wheels. Hands and fingers can get caught in the wheels. Ask the resident to enjoy the ride and let you do the pushing.
12. Report unsafe or broken wheelchairs to a nurse.
13. Lock wheelchair brakes and inform resident that you are locking brakes.
14. Be sure to let the resident know when you are leaving him/her.
15. When leaving a resident in a room please make sure call light is within reach.
16. If there is any type of alarm on a resident’s wheelchair, **NEVER** turn it off.

Changes as We Age

Learning Objectives: Upon completion of this inservice, the participant will be able to:

1. Identify physical challenges of the residents or clients.
2. Better understand physical challenges that might lead to frustration.
3. Identify how health changes affect activities of daily living.
4. Understand why residents may need assistance.

Preparation Prior to Class

Materials:

1. Gloves for each participate (large)
2. Cotton balls - 2 per participant
3. Popcorn kernels
4. Pencil for each participate
5. 2 sheets of paper per participate
6. Yellow tinted glasses or yellow cellophane wrap
7. Containers of small candy confetti: blue, green, pink, white and orange
8. 2 crackers per participant
9. 2 knives - plastic
10. 1 jar of sugar free strawberry jelly
11. 1 jar of sugar free grape jelly
12. 3 shirts with small buttons
13. *A Crabbed Old Woman* poem
14. Signs for tables

Set up 5 tables in the following manner:

1. Large gloves, popcorn kernels and cotton balls
2. 1 sheet of paper and pencil
3. Yellow glasses or cellophane wrap, containers with colored candy
4. Pencil, paper, crackers, jelly in a bowl and plastic knives
5. Shirts
6. Add page with instructions for each table.

Overview of Session

1. Introduction:
 - Discuss
 - Facts about Aging
 - Changes as We Age
2. Have participants take turns at each of the 5 tables and follow instructions. Each participant should participate at every table.
3. After all participants have completed all 5 tables, discuss the problems and issues that occurred, what aging process could have caused these problems and what may alleviate the problems.

Examples:

- Large gloves - finger dexterity, arthritic, touch sensation decreased, etc.
- Popcorn kernels - pain, corns, diabetic feet, etc.
- Cotton balls - hearing deficit, hearing aid, etc.
- Writing with non-dominant hand - stroke, arthritis, etc.
- Yellow tinted glasses - yellowing of the lens, a normal aging process
- Jelly taste test – taste buds less sensitive,, decreased sensation of smell, etc.
- Button-up shirts - finger dexterity, arthritic, etc.

Conclusion: Read *A Crabbed Old Woman* poem.

Facts about Aging

1. Of those who live to be 80 or older, only 20-25% develops Alzheimer's disease or some other progressive form of brain disease. Most confusion/memory loss, etc. is a product of the environment. This is usually brought on and hastened by such things as job loss, death of a loved one, vision or hearing problems, loneliness, boredom and unprepared retirement. Memory loss, etc., is a symptom of an underlying problem that should be diagnosed. The word "senility" is an obsolete term meaning nothing but "old."
2. The notion of a second childhood is a myth which should be discarded by everyone dealing with older people. They should be treated on all occasions as mature adults who have a lifetime of rich experiences and knowledge. If persons are treated with respect they will respond accordingly.
3. There is some evidence that older people tend to become more stable in their beliefs and attitudes. It is also clear that most older people do change and adapt to the many major events such as retirement, children leaving home, widowhood and illness.
4. About 80% of older persons do not consider themselves to be seriously handicapped in their normal daily activities.
5. Falls and incontinence are not normal consequences of aging. Both are always symptoms, secondary to a medical problem that can be reversed. A thorough evaluation is needed. Along with confusion, these are classic symptoms of an underlying illness.
6. Only about 5% of people aged 65+ live in nursing homes at any one time. The remainder are basically able to care for themselves. For those over 85, about 80% still live in their community.
7. With age, the body's thermostat tends to function less efficiently and the body may be less able to adapt to heat and cold.
8. Each person, regardless of age, needs to be treated with dignity and respect. Calling a person by their given name, Mr., Mrs., etc., unless given permission to do otherwise, demonstrates our core value of respect.
10. Advanced age alone is not a significant factor and it has very little impact on the ability to participate in and enjoy sexual relationships. Factors that do impact this include poor physical health, depression or other emotional problems, medication side effects, etc. The death or illness of a spouse is a major factor.
11. Lung capacity does tend to decline as we age.

*"Old age is like any other. It has its good days and its bad days."
Lydia Bragger*

Changes as We Age

Did you Know

- 12.3% of U.S. population is over 65 years of age and numbers 35.9 million.
- By 2030, there will be about 71.5 million, or 20% of the population over age 65
- The 85+ population is projected to increase from 4.6 million in 2002 to 9.6 million in 2030.
- Minority elderly populations are also growing, projected to be 26.4% of the older population by 2030 (up from 17.2% in 2002).
- In 2000, 1.56 million persons, 4.5% of all Americans >65 years, lived in nursing facilities.
- 2/3 of all the people in the history of the world who have survived to age 65 years are alive today.
- Compared to 1985, residents of nursing facilities in 1999 were more functionally impaired and received more services. Approximately 97% received assistance with one or more activities of daily living (ADLs) while 77% received assistance with 4-6 ADLs.
- The average length of stay in a nursing facility is 2.5 years.
- Older adults average 4.4 chronic health problems.
- Seniors now represent 1/8 of the total population but use 1/3 to 1/2 of the total hospital days and use 58% of the hospital bed days.
- A typical American will spend 10% of his/her life functionally dependent.

A Crabbed Old Woman

What do you see, nurse - what do you see?
Are you thinking when you're looking at me?
A crabbed old woman, not very wise,
Uncertain of habit with faraway eyes.
Who dribbles her food and makes no reply
When you say in a loud voice, I do wish you'd try.
Who seems not to notice the things that you do
And forever is losing a stocking or shoe.
Who unresisting or not lets you do as you will
With bathing and feeding the long day to fill.
Is that what you're thinking - is that what you see?
Then open your eyes, nurse – you're not looking at me.

I'll tell you who I am as I sit here so still,
As I use at your bidding - as I eat at your will.
I'm a small child of ten, with a father and mother,
Brothers and sisters who love one another.
A young girl of sixteen with wings on her feet,
Dreaming that soon now a lover she'll meet.
A bride soon at twenty, my heart give a leap,
Remembering the vows that I promise to keep.
At twenty-five now, I have young of my own.
Who need me to build a secure, happy home.
A woman of thirty, my young now grow fast,
Bound to each other with ties that should last.
At forty, my young sons have grown and have gone,
But my man's beside me to see I don't mourn.
At fifty, once more babies play round my knee,
Again we know children, my loved one and me.

Dark days are upon me - my husband is dead,
I look for the future - I shudder with dread.
For my young are all rearing young of their own,
And I think of the years and the love I have known.
I'm an old woman now, and nature is cruel,
'Tis her jest to make old look like a fool.
The body it crumbles - grace and vigor depart,
There is now a stone, where once I had a heart.
But inside this old carcass, a young girl still dwells,
And now and again my battered heart swells.
I remember the joys - I remember the pain,
And I'm loving and living life over again.
I think of the years - all too few - gone too fast,
And accept the stark fact that nothing can last:
So open your eyes, nurse - open and see,
Not a crabbed old woman – look closer – see me!

Author Unknown

Table #1

Put on gloves

**Put a few popcorn kernels in
each of your shoes**

Put cotton balls in your ears

**Continue to other tables
without removing items.**

Table #2

Pick up pencil in your non-dominant hand (if right-handed, use left hand; if left-handed use right hand)

Write your FULL name

Table #3

Put on yellow-tinted glasses or put yellow cellophane wrap over your eyes

Open container

Sort the “pills” by color

Remove glasses or cellophane and check for accuracy

Table #4

Spread 1st jelly on a cracker

**Pinch your nose closed and eat
the cracker**

Try to guess the flavor

Write down your answer

Repeat the process with jelly #2

Table #5

Unfold the shirt

Unbutton all buttons

Button all buttons

**Fold the shirt and put it back
how you found it**

HIPAA



The Health Insurance Portability and Accountability Act of 1996 or “HIPAA” for short, involves many things. HIPAA protects insurance coverage – creating coverage eligibility for workers and their families when they change or lose their jobs. That was the 1st provision of the legislation. You may have received notices about health insurance eligibility when your own coverage has changed.

The provision of HIPAA that we are most interested in is the **Privacy Standards** that became effective in April, 2003. In any health care setting, including this long-term-care facility, all employees are responsible for protecting residents’ privacy of information. This information is known as Protected Health Information or PHI.

How many of you have received Privacy Notices from your own physician? What about your health insurance company? Usually, you have to sign an acknowledgement that you have received it.

Protection of information is taken very seriously! An individual can be fined for up to \$50,000 and 1 year in Federal prison for obtaining or disclosing protected health information. A person obtaining PHI with the intent for any financial gain (like selling it to newspapers, etc) can be fined up to \$250,000 and 10 years in prison.

Do you recall hearing any information in the news about a hospital staff member in California who was caught accessing PHI for celebrity patients in an effort to sell the information to tabloids?

What is confidential?

All information about residents is considered private or “confidential,” whether written on paper, faxed, saved on a computer, or spoken aloud. This includes resident’s name, address, age, Social Security number, and any other personal information.

It also includes the reason the resident is sick or living at a nursing facility, the treatments and medications he or she receives, caregivers’ notes, and information about past health conditions.

If you reveal **any** of this information to someone who does not need to know it, you have violated a resident’s confidentiality, and you have broken the law.

Do you need to know?

Before you look at resident information, ask yourself, “Do I need to know this to do my job?” If the answer is no, don’t look.

If the answer is yes, look at only the information you need, and don’t share it with anyone.

Even doctors and nurses don’t have the right to look at all the information about every resident. For example, a doctor caring for one resident has no right to look at the medical record of other residents unless that doctor is helping to care for them too.

“I couldn’t help overhearing”

There’s no doubt that you will overhear private health information as you do your day-to-day work. If you are walking down the hall or on an elevator with sensitive information/papers, make sure they are upside down. This way no one can read them. If you do hear or see private information, as long as you keep it to yourself, you have nothing to worry about.

Even the trash is private

If you see resident information in an open trash container, tell your supervisor or a supervisor in the area.

Is your computer HIPAA compliant?

In April, 2005 another provision of the HIPAA legislation went into effect: The Security Standards. Remember, PHI in all forms including electronic format – that includes information on a computer, scanned documents, fax, email and electronic medical records is considered private or confidential. So, the electronic information was included in the original Privacy Standards, but the Security Standards added even more protection! This standard mandated protection and privacy of electronic information requiring protection for physical storage and maintenance of information (whether electronic or paper), electronic transmission of information and access to information. There were not specific requirements as to how this was to be done, but most providers have implemented password-protected computer access and limited the ability for work computers to access the internet freely. If you have a password to access a computer, you should NEVER share that password with anyone!

What about faxing?

Fax data with a cover sheet containing notice of confidentiality and procedure to return misdirected fax. Verify with recipient that fax number is correct and that the fax will be received promptly by the authorized receiver.

Desk etiquette

When you leave your desk area that others may have access to, turn papers over or place them in the desk. If you sit at someone else's desk, do not read confidential materials.

Who's the boss?

Each organization must have a privacy official to make sure no one breaks the privacy rule. This person is responsible for coming up with the organization's privacy policies and enforcing them.

If you spot someone breaking the rules, report him or her either to your supervisor or directly to the privacy liaison.

Compliance

At the end of the session, ask the participants if they have ever observed any HIPAA violations based on what they learned in the session today.

Activities

Discuss how the department can become and stay HIPAA compliant.

Create a HIPAA compliance survey and assign staff to be HIPAA Compliance Officers on a rotating basis. To make it fun, create a badge they can wear with their name tag for the designated time.

Discuss findings and create solutions routinely at meetings.

What is HIPAA?

Learning Objective:

The employee will understand the definition of HIPAA and the implications of that definition to the dietary department, dietary staff and dietitian.

What is HIPAA?

- The Health Insurance Portability and Accountability Act of 1996 or “HIPAA” for short, involves many things.
- HIPAA protects insurance coverage – creating coverage eligibility for workers and their families when they change or lose their jobs. That was the first provision of the legislation. You may have received notices about health insurance eligibility when your own coverage has changed.
- The provision of HIPAA that we are most interested in is the **Privacy Standards** that became effective in April, 2003.
- In any health care setting, including skilled nursing facilities, hospitals, assisted living or any institutional setting where confidential medical or personal information is concerned, **all employees** are responsible for protecting privacy of information. This information is known as Protected Health Information or PHI.



How many of you have received Privacy Notices from your own physician? What about your health insurance company? Usually, you have to sign an acknowledgement that you have received it.

Protection of information is taken very seriously!

- An individual can be fined for up to \$50,000 and 1 year in Federal prison for obtaining or disclosing protected health information.
- A person obtaining PHI with the intent for any financial gain (like selling it to newspapers, etc) can be fined up to \$250,000 and 10 years in prison.

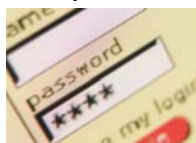


Do you recall hearing any information in the news about a hospital staff member in California who was caught accessing PHI for celebrity patients in an effort to sell the information to tabloids?



Update: Security Standards

- In April, 2005 another provision of the HIPAA legislation went into effect: The Security Standards. Remember, PHI in all forms including electronic format – that includes information on a computer, scanned documents, fax, email and electronic medical records is considered private or confidential. So, the electronic information was included in the original Privacy Standards, but the Security Standards added even more protection!
- This standard mandated protection and privacy of electronic information requiring protection for physical storage and maintenance of information (whether electronic or paper), electronic transmission of information and access to information.
- There were not specific requirements as to how this was to be done, but most providers have implemented password-protected computer access and limited the ability for work computers to access the internet freely.



If you have a password to access a computer, you should NEVER share that password with anyone!

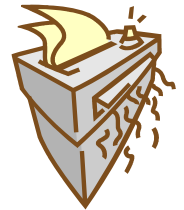
Implications and Applications

- Dietary managers and dietitians should use only password protected computers to share information about clients/patients and/or residents.
- Care should be taken not to discuss personal medical information including weights, diet changes, and changes in condition via email.
- Dietitians and dietary managers that communicate with each other via email or text should exercise the same precautions also.
- Social networking sites should never be used for exchanging information about facilities, client/patient and/or resident personal or medical information.
- With the increasing use of web based or soft ware based computer charting, work done on personal laptops should also be protected by password. Care should be taken on the transport and storage of a laptop if the laptop leaves the facility.
- Work product of the dietitian and dietary managers: reports, clinical recommendations, etc should be stored in secure, safe places in transport to corporate or home offices and in corporate or home offices.
- In dietary departments, medical information is usually not available, but



the client's diet order, room number or other personal information should not be shared with anyone who is not an employee of the facility. Trays must be identified to ensure tray accuracy, but dining room tables should not be labeled with personal diet information.

Company policies should be checked before tray cards are thrown in the trashcan. Paper information that contains weights, room numbers, diets and other personal information should not be discarded in the trash can or taken out of the facility. Facilities should have a specific area for disposing of this personal information or a policy about shredding documents.



What is HIPAA – Post Test

1. What does the abbreviation HIPAA stand for?
2. How does this law impact you in your personal life?
3. What procedures should be taken with records in the dietary department that contain personal medical or private information of the facility residents or patients?

Resident Dining Rights



A large part of the most current interpretation of the Federal Regulations for residents in a skilled nursing facility deals with resident rights and self-determination. The Minimum Data Set (MDS) and Quality Indicator Survey (QIS) process also address this aspect of our residents' care.

The rights of residents regarding dining services, food preferences, and menus are included in this aspect of care. It is important for the Dietary / Food Service staff to understand how the desires and preferences of residents regarding food, choices, and meal service affect them. Some of the most important federal tags that fall into this area include:

I. F242 Self-Determination and Participation

- A. Residents may accept favorite foods brought in by family members and friends. The regulation (F371) that addresses food procurement and sanitation applies to food prepared by staff in the facility, and served to all residents.

II. F240 Quality of Life and Dignity

- A. A misconception is that "bibs" or clothing protectors should not be used for residents, as they are demeaning. While residents should be offered the choice of whether or not to use clothing protectors, it could be a dignity issue if these are denied and the residents' clothing is soiled.

III. F325 Nutritional Status

- A. Residents have the right to refuse therapeutic diet restrictions if they don't wish to follow them. If a resident refuses a diet restriction or thickened liquid order and loses weight or becomes dehydrated as a result, the facility could be cited for not maintaining his/her nutrition parameters.

IV. F368 Frequency of Meals

- A. Residents' preferences regarding when they want to eat should be honored. As an example: If a resident's usual routine at home didn't involve getting up early to eat breakfast, the facility should accommodate this by offering a continental breakfast at a later time.

V. F252 Homelike Environment

- A. Residents have the right to partake of meals in a nice environment that is like what they were accustomed to at home, and is not institutional. Examples of this are: Using regular china dinnerware, rather than disposable (i.e.: Styrofoam); and serving dinnerware on the tables, rather than leaving it on the tray.

VI. F363 Menus and Nutritional Adequacy

- A. While the regulations state that menus should be written to meet the nutritional needs of residents, residents' preferences should be taken into account. If menus are purchased from an outside source or written by someone at the corporation, each facility should have a way of listening to their resident population and changing the standard menu items to those that their particular residents prefer.
- B. Residents may also request smaller or larger portions if these better meet their needs than the standard menu portion sizes.

VII. Other aspects of dining services that should be reviewed when considering resident rights are:

- A. Lighting in the dining room – Adequate lighting will help maintain independence and should be enough that the residents can read the telephone book with ease.

- B. Color contrast on tables – Also helpful with assisting residents to easily consume meals. A tablecloth of a contrasting color to plates; and colorful foods that stand out from each other and the white plate are beneficial.
- C. Requests for special meals – expensive items or a type of food (i.e.: Kosher) not usually served at the particular facility – should be accommodated; however, it is acceptable to have a policy that states the resident or family may be required to pay extra for these requested foods.

The bottom line is that the nursing facility is now the resident's home. Meals and food service should be planned as closely as possible to the usual and customary preferences. While it is difficult to honor the individual preferences of 100+ people, it is not impossible to provide a menu and service that are enjoyed by most. The dietary staff should always refer questionable requests or situations to their supervisor and/or nursing management.

Resident's Name: _____ Room Number: _____ Date: _____

Personal Information: (Note particular habits regarding meals)

Meal times at facility are (explain times) Are these times acceptable? (circle) Yes or No

If No, note preferred time below for each meal

Comments: Usual Time, Who Cooked, Dined Out?
--

Preferred Breakfast time & location:	
Weekdays: Entrée & beverages	
Weekends: Entrée & beverages	
Preferred Lunch time & location:	
Weekdays: Entrée & beverages	
Weekends: Entrée & beverages	
Preferred Dinner time & location:	
Weekdays: Entrée & beverages	
Weekends: Entrée & beverages	

Preferred portion size at each meal **Breakfast** _____ **Lunch** _____ **Dinner** _____

A physician order is not required to adjust portion size, add adjusted portion size to diet card, & care plan when needed. Favorite dishes & snacks: _____

Any Food Allergies / Foods Intolerants / Ethnic Food Preferences: _____

Food Dislikes _____

Note any special considerations (need assistance with setup, assist in feeding, tremors, needs encouragement, patient unable to provide information, chewing or swallowing problems): _____

UPON ADMISSION EXPLAIN DINING PROGRAMS

- Food brought in from outside facility policy (label, date, cover)
- Guest meal policy (cost, ordering meals, dining location, etc)
- Refrigerator in room policy (label, date, cover)
- Explain and provide copy of the “always available menu” and how to request a menu item
- Facility’s procedure if the resident prefers an alternate to meal served
- Facility’s policy if resident prefers foods that are not generally prepared by facility
- Where the menus are posted & how to obtain a copy of the menus
- Dining locations & options of meal times
- Policy for celebrating birthdays with special meal/ birthday cake

QUESTIONS YOU SHOULD FREQUENTLY ASK ALL RESIDENTS

Suggested approach for initiating a discussion w/ resident, "WHAT IS THE FOOD LIKE HERE?"

"Do you feel the staff treats you with respect & dignity?"(example; Does staff take the time to listen to you & is staff helpful when you request assistance?) YES or NO (explain)

Does the food taste good and look appetizing? YES or NO (explain)

Is the food served at an acceptable temperature? YES or NO (explain)

Dining location preferences:

Breakfast _____ **Lunch** _____ **Dinner** _____

Are snacks available between meals? _____

List any snack preferences and times _____

DINING CHOICES

Resident's Name: _____ Room Number: _____ Date: _____

Note preferences & habits during meal times (Include favorite condiments, food, recipes)

BREAKFAST	
LUNCH	
DINNER	
MORNING SNACK	
AFTERNOON SNACK	
EVENING SNACK	

Comments & Recommendations:

Appetite/ Special requests	
Social Behavior/ Location of Meals	
Feeding Skills/ Special Equipment	
Chewing/ Swallowing Consistency of food	

Review Conducted By: _____

RESIDENT DINING RIGHTS

1. Mary Kendrick has been sick for a long time and her appetite has been poor. She is requesting small portions at every meal. Federal regulations state standard portion sizes must be served to meet nutritional requirements. Smaller portions are not allowed.

True or False

2. Every Sunday Paul's wife brings him baked chicken and offers to share with David, Paul's roommate. The facility should not allow the roommate to eat the chicken because there is no assurance the chicken was cooked to a proper temperature. **True or False**

3. Mr. Parkinson has suffered a significant weight loss due to a downgraded diet, (Puree, nectar-thick liquid diet) which he refuses to eat. Mr. Parkinson has expressed his preferences for regular food & fluids, but the facility refused to serve him regular. The facility is not compliant with the regulation for Nutrition (F325). This could result in Immediate Jeopardy citation.

True or False

4. Barbara Hall has never eaten breakfast. She enjoys sleeping late & waking around 10:00 am. She does enjoy coffee & toast soon after waking. Can the facility honor her routine of skipping a complete breakfast meal?

Yes or No - Explain

5. Wayne Smith has requested the kitchen serve him lobster. The Chef will prepare a special lobster meal just for Mr. Smith. Can Mr. Smith legally be charged for this special request?

Yes or No

6. Debbie Lee is visually impaired and complains the dining room is too dark. Lighting in the dining room should be bright enough for Debbie to:

- a) Read a large print menu
- b) Read a telephone book

7. Lenny Confer has severe dementia. The use of contrasting color between dishes and the tablecloth is not a good idea because it might confuse him.

True or False

8. Joyce mentions some of her meals are served with plastic disposable dishes. This is not a dignity or sanitation issue and the facility should be allowed to use them. **True or False**

9. Mrs. Reese has requested a bib during meals. The facility cannot provide Mrs. Reese a bib because it is not a dignified practice in the dining room.

True or False

10. Most of the residents are complaining about certain menu items. The Certified Dietary Manager will not make changes to the menu because she says it is against regulations. Is this a standard of practice?

Yes or No - Explain

11. Serving a meal on a tray instead of placing individual dishes on the table is considered home-like?

True or False

Resident Dining Rights – Short Answers

1. **Mary Kendrick has been sick for a long time and her appetite has been poor. She is requesting small portions at every meal. Federal regulations state standard portion sizes must be served to meet nutritional requirements. Smaller portions are not allowed. True or False**

False; *(F-363); Menus; The intent of the menus is to offer a portion of food to meet nutritional adequacy. This does not mean the resident has to consume that portion size .Each resident has individual nutritional needs.. Some residents can consume a smaller portion and maintain their nutritional status.*

2. **Every Sunday Paul’s wife brings him baked chicken and offers to share with David, Paul’s roommate. The facility should not allow the roommate to eat the chicken because there is no assurance the chicken was cooked to a proper temperature. True or False**

False; *The regulatory language of (F-371); Food Procurement & Sanitation; is to monitor if the facility provided food from safe sources, not to monitor food provided by visitors, friends, family which the resident has chosen to accept. Also, (F-242); Self-Determination & Participation; protects the resident(s) right to choose to accept food from visitors, family, friends, or other guests.*

3. **Mr. Parkinson has suffered a significant weight loss due to a downgraded diet, (Puree, nectar-thick liquid diet) which he refuses to eat. Mr. Parkinson has expressed his preferences for regular food & fluids, but the facility refused to serve him regular. The facility is not compliant with the regulation for Nutrition (F325). This could result in Immediate Jeopardy citation.**

True or False

True; *The intent of the regulation (F-325-Nutrition Status) is that interventions, such as downgrading a diet, must be consistent with the resident’s choices & goals. If (F-325) is not met and this caused serious injury or impairment, i.e. significant weight loss; an immediate jeopardy to the resident may be considered.*

4. **Barbara Hall has never eaten breakfast. She enjoys sleeping late & waking around 10:00 am. She does enjoy coffee & toast soon after waking. Can the facility honor her routine of skipping a complete breakfast meal? Yes or No - Explain**

True; *Mrs. Hall has the right to refuse any particular meal or snack. The facility must offer either a snack or continental breakfast to Mrs. Hall if she desires any food before lunch time begins. The intent of CMS Regulation ;(F-368); Frequency of Meals; for meal schedules is to ensure meals & snacks are offered at specified times ,and that long periods to not lapse between the evening meal and the first meal the following day. However, each resident has the right to refuse the food offered.*

5. **Wayne Smith has requested the kitchen serve him lobster. The Chef will prepare a special lobster meal just for Mr. Smith. Can Mr. Smith legally be charged for this special request?**

Yes or No

Yes; *The facility may charge the resident for specially prepared food instead of the food generally prepared by the facility. This does not include physician ordered therapeutic diets. This policy should be shared at time of admission. (483.10 Personal Funds)*

6. **Debbie Lee is visually impaired and complains the dining room is too dark. Lighting in the dining room should be bright enough for Debbie to:**

- c) Read a large print menu
- d) Read a telephone book

b. Telephone book: *Visual impairment is one of the top four reasons for loss of independence among seniors. CMS Regulation ;(F-256, **Lighting**; defines “Adequate lighting” as providing enough lighting for suitable tasks. “Comfortable lighting” means lighting that minimizes glare & provides maximize resident control*

7. **Lenny Confer has severe dementia. The use of contrasting color between dishes and the tablecloth is not a good idea because it might confuse him. True or False**

False: *Visual enhancements can make it easier for residents with impaired vision to see & use their environment. Contrasting colors enhance vision by making it easier for residents to see their dishes & food.*

8. **Joyce mentions some of her meals are served with plastic disposable dishes. This is not a dignity or sanitation issue and the facility should be allowed to use them. True or False**

True: *CMS Regulation; (F-252-Environment) states the facility must provide a homelike environment. Plastic dishes & cutlery is not considered homelike. Although a determination of “homelike” should include the resident’s own opinion of his or her living environment...*

9. **Mrs. Reese has requested a bib during meals. The facility cannot provide Mrs. Reese a bib because it is not a dignified practice in the dining room. True or False**

False: *CMS Regulation; (F-240-Quality of Life/Dignity); Even though “bibs” are generally not thought of as enhancing the resident’s dignity & respecting his or her individuality (when all residents wear bibs). It is Mrs. Reese’s right to wear a bib if she desires to do so.*

10. **Most of the residents are complaining about certain menu items. The Certified Dietary Manager will not make changes to the menu because she says it is against regulations. Is this a standard of practice? Yes or No - Explain**

No: *The Registered Dietitian needs to make reasonable changes to the menu that the majority of the residents are requesting. The revised menu still needs to be nutritional adequate. Residents have a right to participate in menu planning.*

11. **Serving a meal on a tray instead of placing individual dishes on the table is considered home-like? True or False**

False: *A meal served on a tray can be institutional and not home-like. If the resident chooses to have the meal served on the tray, that is his/her right.*

Resident Dining Rights – Long Answers



1. Mary Kendrick has been sick for a long time and her appetite has been poor. She is requesting small portions at every meal. Federal regulations state standard portion sizes must be served to meet nutritional requirements. Smaller portions are not allowed. **True or False**

False: (F-363); **Menus;** *The intent of the menus is to offer a portion of food to meet nutritional adequacy. This does not mean the resident has to consume that portion size. Each resident has individual nutritional needs.. Some residents can consume a smaller portion and maintain their nutritional status.*

-
2. Every Sunday Paul's wife brings him baked chicken and offers to share with David, Paul's roommate. The facility should not allow the roommate to eat the chicken because there is no assurance the chicken was cooked to a proper temperature. **True or False**

False: Answer is quote from CMS Letter May 29, 2009: (**Reference S&C-09-39**)

"The Centers for Medicare & Medicaid Services (CMS) regulation at 42 CFR 483.35, (F-371); Food Procurement & Sanitation; states that foods procured by the facility must come from sources approved or considered satisfactory by Federal, State, or local authorities. The surveyors should use the regulation and interpretive guidelines of (F-37)1 when determining how the facility acquired food for resident consumption. This regulatory requirement does not expand beyond the scope of the intent to monitor how the facility procures food for the nursing home resident population.

The surveyor(s) should not use the food procurement regulatory language at (F-371) to monitor any food(s) provided by visitors, friends, family members, or resident guests which the resident has chosen to accept. The facility does have a responsibility under the food safety regulatory language at (F-371) to help visitors to understand safe food handling practices (such as not holding or transporting foods containing perishable ingredients at temperatures above 41 degrees F.) and to ensure that if they are assisting visitors with reheating or other preparation activities, that facility staff use safe food handling practices and encourage visitors and residents who are contributing to food preparation in the facility to use these safe practices as well."

42 CFR§483.15 (F-242); **Self determination & participation;** *The residents are allowed to make their own choices about eating the baked chicken. The right to make these choices is also part of the regulatory language at CMS Regulation (F-42) states that the resident has the right to, "make choices about aspects of his or her life in the facility that are important to the resident." This is a key right that contributes to quality of life. (F242) protects the resident(s) right to choose to accept food from visitors, family, friends, or other guests (e.g., facility-sponsored activities such as community pot luck).*



3. Mr. Parkinson has suffered a significant weight loss due to a dislike of his current downgraded diet, puree, nectar-thick liquid diet. Mr. Parkinson has expressed his preference for regular textured food & fluids. He refuses to eat the meals. The facility refused to serve him regular textures. The facility is not compliant with the regulation for Nutrition Status (F325). This could result in Immediate Jeopardy citation. **True or False**



True: Individuals that want to eat & drink foods that are **not** included within their therapeutic diet order, should be allowed to voice their reasons why they do not want to follow such restrictions. CMS regulation, 42 CFR§483.15 (F-242); **Self determination & participation;** states staff may need to be flexible in allowing certain foods prohibited on any resident's dietary restrictions and focus on the role of nutrition in maintaining health for the resident. While the facility is required to follow the doctor's orders for a resident's diet, staff may need to clarify information to the doctor regarding the resident. The intent of the regulation (F-325); **Nutrition Status;** is to provide a therapeutic diet that takes into account the resident's preferences, when there is a nutritional indication. Interventions, such as downgrading a diet, must be consistent with the resident's choices & goals. If (F-325) is not met and this caused serious injury or impairment, i.e. significant weight loss; an immediate jeopardy to the resident may be considered.



4. Barbara Hall has never eaten breakfast. She enjoys sleeping late & waking around 10:00 am. She does enjoy coffee & toast soon after waking. Can the facility honor her routine of skipping a complete breakfast meal? **Yes or No - Explain**

True: Mrs. Hall has the right to refuse any particular meal or snack. The facility must offer either a snack or continental breakfast to Mrs. Hall if she desires any food before lunch time begins. The intent of CMS Regulation;(F368-**Frequency of Meals;**) for meal schedules is to ensure meals & snacks are offered at specified times ,and that long periods to not lapse between the evening meal and the first meal the following day.

However, each resident has the right to refuse the food offered.

5. Wayne Smith has requested the kitchen serve him lobster. The Chef will prepare a special lobster meal just for Mr. Smith. Can Mr. Smith legally be charged for this special request? **Yes or No**

Yes: The facility may charge the resident for specially prepared food instead of the food generally prepared by the facility. This does not include physician ordered therapeutic diets. This policy should be shared at time of admission. (483.10 Personal Funds)

6. Debbie Lee is visually impaired and complains the dining room is too dark. Lighting in the dining room should be bright enough for Debbie to:

- e) Read a large print menu
- f) Read a telephone book

b. Telephone book: Visual impairment is one of the top four reasons for loss of independence among seniors. CMS Regulation; (F-256, **Lighting**; defines “Adequate lighting” as providing enough lighting for suitable tasks. “Comfortable lighting” means lighting that minimizes glare & provides maximize resident control.



7. Lenny Confer has severe dementia. The use of contrasting color between dishes and the tablecloth is not a good idea because it might confuse him. **True or False**

False: Visual enhancements can make it easier for residents with impaired vision to see & use their environment. Contrasting colors enhance vision by making it easier for residents to see their dishes & food.

8. Joyce mentions some of her meals are served with plastic disposable dishes. This is not a dignity or sanitation issue so the facility should be allowed to use them. **True or False**

True: CMS Regulation; (F-252-**Environment**) states the facility must provide a homelike environment. Plastic dishes & cutlery is not considered homelike. Although a determination of “homelike” should include the resident’s own opinion of his or her living environment.



9. Mrs. Reese has requested a bib during meals. The facility cannot provide Mrs. Reese a bib because it is not a dignified practice in the dining room. **True or False**

False: CMS Regulation; (F-240-**Quality of Life/Dignity**); Even though “bibs” are generally not thought of as enhancing the resident’s dignity & respecting his or her individuality (when all residents wear bibs). It is Mrs. Reese’s right to wear a bib if she desires to do so.

10. Most of the residents are complaining about certain menu items. The Certified Dietary Manager will not make changes to the menu because she says it is against regulations. Is this a standard of practice? **Yes or No** - Explain

No: The Registered Dietitian needs to make reasonable changes to the menu that the majority of the residents are requesting. The revised menu still needs to be nutritional adequate. Residents have a right to participate in menu planning.

11. Serving a meal on a tray instead of placing individual dishes on the table is considered homelike?

True or False

False: A meal served on a tray can be institutional and not home-like. If the resident chooses to have the meal served on the tray, that is his/her right.



Dietetics in Health Care Communities

a dietetic practice group of the
American Dietetic
Association



Medical Nutrition Therapy (MNT)



Liberalizing Diets in Long Term Care

Learning Objectives: Upon completion of this inservice, the participant will be able to:

1. List five resident's rights
2. Recognize consequences of dietary restrictions
3. Identify potential benefits of liberalizing diets
4. Understand the position of the American Dietetic Association regarding the liberalization of diets in long term care

Introduction

Maintaining and encouraging adequate nutritional intake for residents is an essential component in the quality of life. Mealtime should be more than just a time to eat. It is a time for socialization and relaxation. It is important that the staff recognize the importance of adequate nutritional intake for all residents.

Challenges for the Dietary Department

- Provide positive, creative approaches to managing nutrition
- Be mindful of the resident's happiness and peace of mind
- Serve attractive and appealing meals on schedule in a pleasant, relaxed atmosphere
- Provide adequate time to eat and socialize

Consequences Often Seen With Dietary Restriction

- Stress
- Anger
- Anxiety
- Depression
- Decreased intake / weight loss

Answer These

- Will the diet contribute to overall health and quality of life, or will it lead to loss of appetite and malnutrition instead?
- Are the resident's rights being acknowledged, or is the resident being deprived of familiar, well-liked foods for reasons that are vaguely defined?

Position of the American Dietetic Association: Individualized Nutrition Approaches for Older Adults in Health Care Communities

"It is the position of The American Dietetic Association that the quality of life and nutritional status of older adults residing in health care communities can be enhanced by individualization to less-restrictive diets."

Journal of the American Dietetic Association 2010; 110:1549-1553

Potential Benefits of Liberalization

- Increased quality of life
- Heightened satisfaction
- Improved nutritional status
- Decreased feelings of isolation
- Increased meal / nutrient intake

Clinical Findings Using a Liberalized Approach

- No significant changes in:
 - blood pressure
 - weight
 - blood glucose
 - edema

What Should You Do?

- Appreciate the resident's perception of what will improve his or her quality of life (listen to the resident and honor their requests)
- Use the tools available to measure outcomes (i.e., meal intake, weights)
- Understand regulations that impact quality of life
- Request liberalizing diets where appropriate
- Understand resident's rights and responsibilities related to MNT
- Be sure to document / care plan resident's concerns and why the diet was changed

Handout

Remember your audience/residents/customers. Typically they are the older adult population.

Effects of Aging

- Sensory changes (especially changes in taste)
- Lack of strength causing weakened ability to grasp and hold utensils/dishes
- Impaired vision
- Depression

Possible Effects of Being Placed in a Nursing Facility

- *Loss of control*
- *Loss of autonomy*
- *Loss of sense of self*
- *Loss of sense of usefulness*

A facility must care for its residents in a manner and in an environment that promotes maintenance or enhancement of each resident's quality of life.

OBRA Regulation (483.15)

In order to provide a high quality of life, we must keep in mind

Residents Have the Right

- To be treated with dignity and self-respect
- To be involved in his/her care and/or services
- To make informed decisions regarding care and services
- To be involved in resolving conflict about care and services
- To receive reasonable accommodation of individual needs and preferences, except when health or safety or the health and safety of other residents would be endangered
- To choose activities, schedules, and health care consistent with individual interests, assessments, and plan of care
- To be served nourishing, palatable, well-balanced meals that meet daily nutrition and special needs
- To be served food according to ethnic, cultural, or religious customs
- To make choices about where, when and what to eat
- To refuse any part or all nutrition treatment

Residents Have the Following Responsibilities

- To follow the nutrition care plan recommended by the registered dietitian
- To seek more nutrition information and/or clarification of information given if questions remain, and request follow up
- To accept the adverse consequences if the nutrition care plan and/or diet as outlined is refused

Liberalizing Diets in Long Term Care

Adding variety in nutritional care plans to increase resident's overall quality of life

Effect of Aging:
Sensory Changes
Lack of Strength
Impaired Vision
Depression

Possible Effects of Being Placed in a Nursing Home:
Loss of Control
Loss of Autonomy
Loss of Sense of Self
Loss of Sense of Usefulness

Resident's Rights:
To be treated with dignity and respect
To be involved in his/ her care and services
To make informed decisions
To be involved in resolving conflict about care
To receive reasonable accommodation of individual needs and preferences
To choose activities, schedules and care
To be served nourishing, palatable, well-balanced meals that meet daily nutrition and special needs
To be served food according to ethnic, cultural and religious customs
To make choices about where, when and what to eat
To refuse any part, or all nutrition treatment

How can the Dietary Department Help?

Provide positive, creative approaches to managing Nutrition
Be mindful of Resident's happiness and peace of mind
Serve attractive appealing meals on schedule and in a pleasant, relaxed atmosphere
Provide adequate time to eat and socialize

Consequences of Dietary Restriction:
Stress
Anger
Anxiety
Depression
Decreased food intake / weight loss

Potential Benefits of Liberalization:
Increased quality of life
Heightened satisfaction
Improved nutritional status
Decreased feelings of isolation
Increased meal / nutritional intake

Name: _____

Date: _____

Liberalizing Diets in Long Term Care Post Test

1. List five (5) resident's rights

2. Which of the following are consequences of dietary restrictions
 - a. Stress and anger
 - b. Decreased meal intake
 - c. Depression and anxiety
 - d. All of the above

3. Which of the following is not a potential benefit of liberalizing a diet
 - a. Decreased feelings of isolation
 - b. Decreased appetite
 - c. Increased quality of life
 - d. Improved nutritional status

4. True or False? The American Dietetic Association advocates the liberalization of diets in long term care.

Liberalizing Diets in Long Term Care Post Test

ANSWER KEY

1. List five (5) resident's rights
 - To be treated with dignity and self-respect
 - To be involved in his/her care and/or services
 - To make informed decisions regarding care and services
 - To be involved in resolving conflict about care and services
 - To receive reasonable accommodation of individual needs and preferences, except when health or safety or the health and safety of other residents would be endangered
 - To choose activities, schedules, and health care consistent with individual interests, assessments, and plan of care
 - To be served nourishing, palatable, well-balanced meals that meet daily nutrition and special needs
 - To be served food according to ethnic, cultural, or religious customs
 - To make choices about where, when and what to eat
 - To refuse any part or all nutrition treatment

2. Which of the following are consequences of dietary restrictions
 - a. Stress and anger
 - b. Decreased meal intake
 - c. Depression and anxiety
 - d. All of the above**

3. Which of the following is not a potential benefit of liberalizing a diet
 - a. Decreased feelings of isolation
 - b. Decreased appetite**
 - c. Increased quality of life
 - d. Improved nutritional status

4. True or False? The American Dietetic Association advocates the liberalization of diets in long term care

True

Dysphagia

Learning Objectives: Upon completion of this inservice, the participant will be able to:

1. Identify the four phases of a normal swallow
2. Define Dysphagia
3. Recognize diagnoses or conditions related to swallowing problems
4. Recognize warning signs of swallowing problems
5. List modifications to diet, mealtime or the dining room that would aide residents in the swallow process

Introduction

Swallowing difficulty, known as dysphagia, can occur at any age as a result of various medical conditions. Dysphagia can result in serious health consequences as it interferes with adequate nutrition and hydration. In some cases, dysphagia can cause aspiration leading to choking episodes, shortness of breath and physical discomfort. Aspiration may lead to pneumonia which can be fatal.

Normal swallowing in four phases

Oral preparation: Food is manipulated by the tongue, teeth and mandible for the purpose of mastication and pressed against the hard palate to form a bolus.

Oral transit: The tongue propels the bolus to the back of the throat where the involuntary swallowing reflex is triggered.

Pharyngeal transit: The involuntary swallowing reflex is triggered, and the bolus is carried through the pharynx to the sphincter at the top of the esophagus. The larynx or entrance to the trachea closes to keep food from entering the lungs and the soft palate lifts to close off the entrance to the nose.

Esophageal transit: Esophageal peristalsis carries the bolus through the esophagus and into the stomach.

The ability to swallow requires full movement, strength and coordination of the facial muscles, lips, tongue and throat. When the swallowing process is interrupted at any point, aspiration into the respiratory tract may occur. It is important to note that *aspiration can be silent*. Aspiration of material past the true vocal cords into the airway without response in any of the usual ways, such as coughing, is known as silent aspiration.

Dysphagia (also known as “swallowing problem”)

Dysphagia is a disturbance in the normal transfer of food from the oral cavity to the stomach and refers to the difficulty in swallowing liquids, solids or both. The nutritional implications of dysphagia result from inadequate dietary intake. They can include weight loss, dehydration and vitamin and mineral deficiencies. If untreated these problems can result in protein-energy malnutrition.

Diagnosis or conditions of patients who have swallowing problems include:

Alzheimer’s disease/dementia	Multiple sclerosis
Amyotrophic lateral sclerosis (ALS)	Muscular dystrophy
Cerebral palsy	Parkinson’s disease
Closed head injury	Stroke/CVA
Head or neck cancer	Guillain-Barre syndrome
Huntington’s chorea	History of aspiration or pneumonia

Warning signs of swallowing problems

- Pocketing of food under tongue, in cheeks, or on the hard palate
- Spitting food out of the mouth or tongue thrusting
- Poor tongue control
- Facial weakness
- Excessive tongue movement
- Slow oral transit time
- Coughing before, during or after swallowing
- Choking
- Excessive secretions, drooling
- Gurgling (wet) voice after eating or drinking
- Hoarse, harsh or breathy voice
- Slurred speech
- Regurgitation of material through nose, mouth or trachea tube
- Inadequate intake of food or fluid; weight loss
- Excessive eating time
- Mealtime resistance - clenching teeth, pushing food away or clenching throat
- Recurrent pneumonia

If dysphagia is suspected, a swallowing evaluation should be performed. This may be a bedside swallow evaluation or a video fluoroscopy swallow study. Both of these evaluations are performed by the speech language pathologist (SLP).

Dietary Modifications

Diets must be individualized based on swallowing ability and patient preference.

Thickened liquids are designed to:

- Provide beverages that reduce the risk of choking and aspiration.
- Be modified when the impairment level changes, as assessed by the SLP. Provide the appropriate thickness to stimulate the swallowing reflex.
- Provide adequate hydration (commercial thickeners that are gum-based, such as guar gum or pectin, are not recommended as they will bind fluid so it is unavailable for hydration.)

Changing of liquid consistency must be based on the recommendation of the SLP.

Dining

The mealtime experience also needs to take place in a pleasant dining atmosphere to promote socialization, enhance awareness and stimulate the appetite. Most residents will minimize their risk of aspiration by consuming a smaller bolus, ½ tsp to 1 tsp. Strong flavors such as sweet, spicy, or sour may stimulate salivation, swallowing, and mastication. Hot or cold temperatures may help to stimulate the swallowing response. Thick liquids and foods that form a bolus in the mouth, such as semisolid and pureed foods are usually easier to swallow.

In addition to modifying the foods served to a patient with dysphagia, correct body positioning and eating conditions are important for promoting adequate oral intake and reducing the risk of aspiration.

Mealtime

- Eliminate distractions.
- Do not use liquid to clear the mouth; use liquids only after the mouth has been cleared.
- Encourage small bites.
- Allow frequent dry swallows to help clear the mouth of food between bites.
- Watch for the rise of the Adam's apple to make sure the food is being swallowed.
- Check for voice quality; a wet or gurgling voice indicates food may be resting on the vocal cords.
- Have the resident rest before meals since mealtime can be very tiring.
- Assure correct positioning. The resident should be sitting upright with the hips at a 90° angle, shoulders slightly forward, and feet flat on the floor or firmly supported.

Name: _____

Date: _____

Dysphagia Post Test

1. What are the four phases of a normal swallow (in order)
 - a. Oral transit, oral preparation, pharyngeal transit, esophageal transit
 - b. Oral preparation, oral transit, pharyngeal transit, esophageal transit
 - c. Oral preparation, oral transit, esophageal transit, pharyngeal transit
 - d. pharyngeal transit, esophageal transit, Oral transit, oral preparation

2. Dysphagia is defined as
 - a. Disturbance in the normal transfer of food
 - b. Disturbance in the normal transfer of blood
 - c. Swallow study
 - d. None of the above

3. Which of the following diagnoses or conditions are related to swallowing problems
 - a. Order for thickened liquids
 - b. Alzheimer's disease / dementia
 - c. CVA
 - d. All of the above

4. Name three (3) warning signs of swallowing problems
 - a. _____
 - b. _____
 - c. _____

5. List five (5) modification to diet, mealtime, or the dining room that could aid the resident in the swallow process
 - a. _____
 - b. _____
 - c. _____
 - d. _____
 - e. _____

Dysphagia Post Test

ANSWER KEY

1. What are the four phases of a normal swallow (in order)
 - a. Oral transit, oral preparation, pharyngeal transit, esophageal transit
 - b. Oral preparation, oral transit, pharyngeal transit, esophageal transit**
 - c. Oral preparation, oral transit, esophageal transit, pharyngeal transit
 - d. pharyngeal transit, esophageal transit, Oral transit, oral preparation
2. Dysphagia is defined as
 - a. Disturbance in the normal transfer of food**
 - b. Disturbance in the normal transfer of blood
 - c. Swallow study
 - d. None of the above
3. Which of the following diagnoses or conditions are related to swallowing problems
 - a. Order for thickened liquids
 - b. Alzheimer's disease / dementia
 - c. CVA
 - d. All of the above**

4. Name three (3) warning signs of swallowing problems

Pocketing food, spitting food out, poor tongue control, facial weakness, excessive tongue movement, slow oral transit time, coughing, choking, drooling, hoarse harsh or breathy voice, slurred speech, regurgitation of material through nose, mouth or trachea tube, inadequate intake of food or fluid (weight loss), excessive eating time, mealtime resistance, or recurrent pneumonia

5. List five (5) modification to diet, mealtime, or the dining room that could aid the resident in the swallow process
 - Eliminate distractions.
 - Do not use liquid to clear the mouth; use liquids only after the mouth has been cleared.
 - Encourage small bites.
 - Allow frequent dry swallows to help clear the mouth of food between bites.
 - Watch for the rise of the Adam's apple to make sure the food is being swallowed.
 - Check for voice quality; a wet or gurgling voice indicates food may be resting on the vocal cords.
 - Have the resident rest before meals since mealtime can be very tiring.
 - Assure correct positioning. The resident should be sitting upright with the hips at a 90° angle, shoulders slightly forward, and feet flat on the floor or firmly supported.
 - Diet change such as change in texture or thickened liquids
 - Pleasant dining atmosphere
 - Smaller bolus
 - Strong flavors
 - Hot or cold food temperatures

Nutritional Care for Residents with Alzheimer's Disease

Learning Objectives: Upon completion of this inservice, the participant will be able to:

1. Define Alzheimer's Disease
2. Identify reasons for weight loss in Alzheimer's patients
3. List appropriate nutrition interventions for Alzheimer's patients.

Definition

Alzheimer's disease (AD) is a progressive, degenerative brain disease that impairs mental and emotional function in adults, causing memory loss and the ability to care for themselves. AD will affect one out of every 45 people in the United States. Currently, there are approximately 4.5 million victims of AD. Alzheimer's progresses at different rates carrying from 3 to 20 years. People with Alzheimer's will ultimately need complete care. There is no cure for this disease.

Introduction

The causes and prevention of Alzheimer's disease (AD) have been studied and debated for more than three decades, with no conclusive results about what is considered the most devastating of the degenerative diseases. All causes of AD are not presently known.

However, certain facts are known:

- The disease is progressive in nature
- It starts much earlier than initially believed—nearly decades—from when the first symptoms manifest
- It is untreatable
- It cannot be prevented

In spite of this dismal outlook, there is evidence that certain drugs, as well as nutrition and lifestyle changes, may delay onset and slow the progression of the disease. There is definitive evidence that nutritional care can provide comfort and improve the quality of life until the end stage of the disease.

Decreased Intake and Weight Loss in AD

Poor dentition, defective swallowing mechanism, inability to thoroughly chew foods, loss of taste sensation, and loss of the feeling of hunger contribute to decreased food intake and adversely affect the nutritional status of the elderly. The progressive nature of AD poses an additional risk because these patients may become combative and are increasingly forgetful and agitated.

Cachexia and unexplained weight loss are complications frequently found in patients suffering with AD. One researcher reviewed the small number of studies that examine the possibility of AD causing a hypermetabolic state, which contributes to weight loss. The reviewer concluded that there is no merit to that assumption and recommends the development of early intervention and aggressive clinical strategies to increase calorie-protein nutrition and provide nutrient-dense diets to AD patients.

It is known that the cognitive deficiencies manifested in the early stages of AD progressively worsen. Weight loss, loss of independence, special impairments, and diminished ability to eat result in weight loss and tissue degeneration. Weight loss increases the risk of infections, skin breakdown, and falls. Dietitians should plan to delay the deterioration of the AD patient through appropriate interventions that include dining programs and noninvasive nutrition intervention.

DIETARY INTERVENTIONS

Dietary factors involved in the pathological process of AD have not been identified. There is empirical data that indicates that oxidative stress is involved in cerebral aging and dementia. Although there is a lack of

conclusive evidence demonstrating that AD can be prevented or delayed by good nutritional practices, the incidence can be accelerated or worsened by poor nutritional practices.

Prevention, rapid intervention, and provision of adequate nutrition are of utmost importance in the treatment of AD residents at every stage. Based on studies, the recommendations to decrease intake of saturated fats, increase intake of fresh fruits and vegetables, particularly dark leafy greens and those high in carotenoids, should be followed for those wanting to delay the aging process. Some researchers believe that although there is still a need for additional studies to identify the specific roles of each nutrient in stalling disease processes, the relationship between AD and dementia to dietary habits is strong enough to warrant recommendations for improved nutrition and nutritional supplementation.

The dietetic professional's plans should include maintaining functional levels, appropriate and sufficient intakes of macro and micro nutrients, and altering the meals according to the resident's ability to eat. Increasing caloric density of foods allows residents to maintain acceptable weight status when intakes decline.

The American Dietetic Association, The American Heart Association, The American Diabetes Association recommend increasing fruits and vegetables consumption, along with whole grains and low-fat dairy products. Lacking conclusive studies, the Alzheimer's Association is reluctant to recommend dietary interventions to prevent AD. Spokespersons for the association agree that eating more fruits and vegetables improves cardiovascular function, delays formation of plaque in the vascular system, and prevents other diseases; therefore, the recommendation is sound.

Antioxidants and Vitamins

Antioxidants, such as vitamins C and E, are believed to protect against decline in mental acuity and delay onset of dementia. Multiple studies show that eating diets low in calories helps prevent brain deterioration.

Many vitamins have been linked by researchers to the prevention of AD. However, the subject is still very controversial, and additional research is needed to justify recommending taking supplements in excess of safe levels. Folic acid is known to maintain the integrity of the nervous system and, although some studies indicate that increasing folate delays onset of brain wasting.

Some studies suggest that Vitamins A, C, and E, as well as selenium, and vitamins B₆, B₁₂, and folic acid may protect against mental decline by promoting production of neurotransmitters, the chemical messengers in the brain that regulate mood and concentration. Eating adequate amounts of fruits and vegetables is therefore recommended.

Fats and Fatty Acids

Analysis of dietary habits in eleven countries concluded that low-fat diets and diets low in calories reduce the risk of AD and other diseases. Countries in which low-fat diets are common, show risk factors for developing AD are one percent at age 65 versus five percent for higher-fat diets.

Therefore, a diet low in saturated fat is recommended. However, some fats are necessary and even beneficial. Omega-3 fatty acids, found in high-fat fish, such as salmon, halibut, swordfish, and tuna are necessary for the development of a healthy nervous system.

Phytochemicals

Phytochemicals found in onions, garlic, apples, grapes, and red wine have long been credited with being necessary components for a good meal. They are believed to be beneficial in lowering cholesterol levels. Green and black teas, along with onions and red wine, contain flavonoids that are believed to prevent blood clots and damage done by cholesterol. Additionally, cruciferous vegetables, such as broccoli, cauliflower,

radishes, and cabbage, have long been known to provide phytochemicals essential to fighting certain diseases including cancers.

Soy Isoflavones

Another recent study indicates that in addition to their cholesterol lowering effects, isoflavones found in soy may exert a protective action that helps decrease the risk of AD in post-menopausal women. This study, however, has been conducted only with monkeys, so additional research is needed before conclusive evidence is found. However, simple dietary changes, such as adding 20 to 25 grams of soy protein to the daily diet are easy to achieve and will have other health-related benefits.

Identifying Barriers to Food Intake

There are some difficult communication barriers that care providers face when dealing with advanced cases of dementia. One is day-to-day communication, which includes being able to obtain food preferences and acceptable food alternatives. The other, and most serious one, is that of recognizing pain, or helping the AD patient express pain and discomfort. Specialists in dementia and AD state that 49 to 83 percent of institutionalized patients cannot verbalize pain and discomfort. Unwittingly, they are allowed to suffer. It is common knowledge that chronic pain is debilitating and can be one cause of anorexia and decreased nutritional intake.

The ability to express pain is the main method by which care providers are able to assess the degree and severity of the pain. However, this is a difficult task for AD and dementia patients. Because dementia involves aphasia, these patients are not able to express their discomfort to their care providers. Decreased food intake and the resulting weight loss, along with other commonly identified signs and symptoms of pain, should be considered as the result of pain until otherwise proven. Dietitians should consider the presence of pain and recommend appropriate assessment and management for those patients exhibiting appetite and/or weight loss. A study in *Geriatric Nursing* recommends that extra training and effort are needed on the part of nursing staff to communicate with dementia elders and enable identification and proper management of pain.

Multiple factors contribute to decreased food intakes, especially for the institutionalized elderly with AD. Loss of memory decreases the functional ability to eat. Reduced food consumption reduces nutrient intake, leading to deficiencies, weight loss, and other complications. As the disease progresses, patients tend to become more agitated. This is manifested in almost continuous movement, such as walking and pacing, rocking in chairs, hand wringing, wiping, touching, and reaching. Clearly, the high-energy expenditures caused by these behaviors must be compensated calorically to avoid unwanted weight loss. The cognitively impaired patient is at higher risk for decreased food intake, higher metabolic output, and other resulting outcomes. Preventing rapid deterioration should be the main goal of a nutritional plan for the AD patient.

INTERVENTIONS: NONINVASIVE

Nutritional care is fundamental to healthcare and the treatment of disease. Persons facing acute illness or chronic disease may benefit from nutrition intervention or diet therapy. Slight modifications of basic nutrients, energy, and texture should be considered and incorporated in the individualized plan of care. The least restrictive plans are always best.

Food Fortification

Increasing nutrient density of foods served to the AD patient is widely recommended. A practical approach is to plan for one fortified food per meal. The most commonly used method is to fortify the breakfast cereal, lunch starch or dessert, and dinner soup or entrée.

Developing a protocol that informs nursing staff of the foods that include fortification is necessary. It is imperative that the staff responsible for feeding the resident know which food is fortified, so they can offer those food items first.

Finger Foods

Providing “portable” foods, such as finger foods, may be necessary to maintain sufficient calorie-protein intake for those that pace or do not allow themselves to be fed. A finger-foods menu should be the first approach to feeding a combative, resistive patient. These should be planned in keeping with the daily menu to preserve the dignity and safety of the patient and increase nutrient density as much as possible. Dementia patients have been reported to gain weight on finger foods, and staff finds that their degree of agitation decreases by being allowed to eat independently while in motion. A two-fold benefit is realized: (1) preservation of the highest functional level of independence, and (2) prevention of undernutrition and weight loss. Finger-food recipes and preparation guidelines can be developed for the different food textures; some are available for purchase.

Review the sample recipe and menus for regular, fortified, finger foods and puréed, finger-foods menus and recipes.

Name: _____

Date: _____

Nutritional Care for Patients with Alzheimer's Disease Post Test

True or False

- _____ 1. Alzheimer's Disease is a progressive disease
- _____ 2. Alzheimer's Disease is untreatable
- _____ 3. Alzheimer's Disease is preventable

4. Which of the following is not an appropriate diet change for a patient with Alzheimer's Disease
- a. Decreased saturated fat
 - b. increased calories
 - c. decreased protein
 - d. increased fruits and vegetables

5. Reasons for weight loss in patients with Alzheimer's Disease include
- a. poor dentition / defective swallow
 - b. loss of feeling of hunger
 - c. change of taste
 - d. all of the above

6. List two (2) noninvasive nutrition interventions appropriate for Alzheimer's Disease patients

e. _____

f. _____

**Nutritional Care for Patients
with Alzheimer's Disease Post Test
ANSWER KEY**

True or False

 T 1. Alzheimer's Disease is a progressive disease

 T 2. Alzheimer's Disease is untreatable

 F 3. Alzheimer's Disease is preventable

4. Which of the following is not an appropriate diet change for a patient with Alzheimer's Disease

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a. poor dentition / defective swallow

b. loss of feeling of hunger

c. change of taste

d. all of the above

6. List two (2) noninvasive nutrition interventions appropriate for Alzheimer's Disease patients

e. **finger foods**_____

f. **fortified foods**_____

SAMPLE MENU - BREAKFAST

Regular	Amt	Fortified	Amt	Finger Foods	Amt	Pureed Finger Foods	Amt
Juice	½ c	Juice	½ c	Juice	½ c	Juice	½ c
Hot cereal	6 oz.	Fortified Cereal w/topping	4 oz. 2 oz	Mini-shredded wheat Jelly/syrup (dunking)	¾ c 1 t	Hot cereal - in a mug	6 oz.
Egg	1	Egg	1	Egg sandwich	1	Puréed egg sandwich	1
Toast	1 sl	Toast	1 sl	Toast	2 sl	Bread (no crust)	2 sl
Margarine	1 t	Margarine	1 t	Margarine	1 sl	Margarine	1 t
Jelly	1 t	Jelly	1 t			(OR custard in a cone)	(½ c)
Milk	1 c	Fortified Milk	1 c	Milk	1 c	Milk	1 c
Hot beverage	5 oz.	Fortified hot beverage	5 oz. opt	Hot beverage	5 oz.	Hot beverage	5 oz.
Cream/sugar	opt	Cream/sugar		Cream/sugar	opt	Cream/sugar	opt

SAMPLE FORTIFIED FOODS PREPARATION GUIDELINES

NAME: HIGH NUTRIENT DENSITY FORIFIED CEREAL	TIMING: Pre-Prep: original recipe Prep/Assembly: 10 minutes Cook/Chill: 10 minutes		TEMPERATURE: Cook Temp: 180 ^o F Chill Temp: 41 ^o F Pan Size: Saucepan	PORTION SIZE: 6 oz. Utensil: 6 oz. ladle			
PORTIONS	5	10					
INGREDIENTS	MEASURE	MEASURE	NUTRIENT COMPOSITION	<u>CHO</u>	<u>PRO</u>	<u>FAT</u>	<u>CAL</u>
CEREAL, COOKED, HOT, PREPARED W/ ENRICHED MILK	2 ½ CUPS	1 Q + 1 CUP	6 OZ. CEREAL	29 GM	13 GM	23 GM	370
EVAPORATED MILK, UNDILUTED	½ CUP	1 CUP					
SUGAR OF CHOICE	½ CUP	1 CUP					
MARGARINE	½ CUP	1 CUP					
<p>METHOD: PREPARE COOKED CEREAL FOLLOWING DIRECTIONS ON PACKAGE, SUBSTITUTING ENRICHED MILK FOR WATER. OVER BAIN MARIE OR LOW HEAT, UNDILUTED EVAPORATED MILK, SUGAR OF CHOICE AND HOT CEREAL, STIRRING TO MIX WELL. HEAT TO 160° F, STIRRING CONSTANTLY. ADD MARGARINE, STIR UNTIL MELTED. CEREAL WILL THICKEN WHILE ON STEAM TABLE. MAY ADD HOT MILK TO THIN ,TO DESIRED CONSISTENCY.</p> <p>VARIATION: MAY ADD WHITE OR BROWN SUGAR, MOLASSES, MAPLE SYRUP, OR HONEY WHILE COOKING.</p>							

NAME: HIGH NUTRIENT DENSITY COFFEE		TIMING: Pre-Prep: 0 Prep/Assembly: 25 minutes Cook/Chill: Chill 1 hour		TEMPERATURE Cook Temp: 120° F Chill Temp: 41° F Pan Size: Pitcher	PORTION SIZE: ½ CUP Utensil: cup measure			
PORTIONS	1 CUP	2 CUPS	1 QUART	NUTRIENT COMPOSITION	<u>CHO</u>	<u>PRO</u>	<u>FAT</u>	<u>CAL</u>
INGREDIENTS	MEASURE	MEASURE	MEASURE					
WITHOUT SUGAR					WITHOUT SUGAR			
EVAPORATED MILK	¾ CUP	12 OZ (1 CAN)	1 QT		17	11	7	177
NONFAT DRY MILK (NFDM)	1/3 CUP	2/3 CUP	¾ CUPS		33	22	14	355
INSTANT COFFEE POWDER	1 TB	2 TB	½ CUP					
WATER	¼ CUP	½ CUP	1 CUP					
WITH SUGAR					<i>WITH SUGAR</i>			
SUGAR	3 TB	6 TB	1 ½ CUPS		35 GM	11 GM	7 GM	250
					70 GM	22 GM	14 GM	500

METHOD:
NOTE: GND-COFFEE MAY BE PREPARED WITH OR WITHOUT SUGAR TO SUIT INDIVIDUAL PREFERENCES. IF PREPARING WITH SUGAR, MIX SUGAR IN STEP 1.

MIX NONFAT DRY MILK POWDER, SUGAR (WHEN USED) AND INSTANT COFFEE. HEAT WATER TO BOILING, REMOVE FROM FIRE. ADD DRY INGREDIENTS TO HOT WATER MIXING UNTIL DISSOLVED, FORMING A COFFEE SYRUP. IF SERVING AS A HOT BEVERAGE, HEAT EVAPORATED MILK TO SIMMER, THEN MIX WITH COFFEE SYRUP. HEAT AGAIN IF NEEDED TO MAINTAIN AND SERVE AT BETWEEN 120° F AND 140° F. IF PREPARING AHEAD AND STORING, CHILL EVAPORATED MILK FOR AT LEAST 4 HOURS, OR TO 41° F, AND DO NOT HEAT PRIOR TO MIXING WITH COFFEE SYRUP. CHILL AGAIN TO 41° F. MAY STORE REFRIGERATED, COVERED AND LABELED FOR UP TO 72 HOURS. MAY GARNISH WITH CINNAMON, OR WIPPED TOPPING (OPTIONAL AND NOT INCLUDED IN NUTRIENT COMPOSITION), OR FLAVOR WITH EXTRACTS.

NAME: HIGH NUTRIENT DENSITY - ENRICHED MILK		TIMING: Pre-Prep: Prep/Assembly: 15 minutes Cook/Chill: 1 hour		TEMPERATURE : Cook Temp: Chill Temp: 41° F Pan Size: Pitcher	PORTION SIZE: 8 oz. or according to recipe Utensil: cup measure			
PORTIONS	1	½	1					
	QUART	GALLON	GALLON					
INGREDIENTS	MEASURE	MEASURE	MEASURE	NUTRIENT COMPOSITION	<u>CHO</u>	<u>PRO</u>	<u>FAT</u>	<u>CAL</u>
WHOLE MILK	1 QT	½ GALLON	1 GALLON	1 CUP	25 GM	17 GM	8 GM	241
NONFAT DRY MILK	1 ¼ CUPS	2 ½ CUPS	5 CUPS	1 OZ.	3 GM	2 GM	1 GM	30
METHOD: MEASURE NONFAT DRY MILK INTO LARGE MIXER BOWL. SLOWLY ADD WHOLE MILK, MIXING AT LOW SPEET UNTIL BLENDED. CHILL AGAIN TO 41° F. MAY STORE REFRIGERATED, COVERED AND LABELED FOR UP TO 72 HOURS. USE AS DIRECTED IN RECIPES, OR MAY SERVE AS A FORTIFIED MILK BEVERAGE.								

NAME: HIGH NUTRIENT DENSITY CEREAL TOPPING		TIMING: Pre-Prep: Prep/Assembly: 10 minutes Cook/Chill: 15 minutes		TEMPERATURE: Cook Temp: simmer Chill Temp: 41° F Pan Size: Bowl	PORTION SIZE: 2 oz. Utensil: 2 oz. ladle			
PORTIONS	10	20						
INGREDIENTS	MEASURE	MEASURE		NUTRIENT COMPOSITION	<u>CHO</u>	<u>PRO</u>	<u>FAT</u>	<u>CAL</u>
WHOLE MILK	2 CUPS	1 QT		2 OZ. CEREAL TOPPING	16 GM	4 GM	13 GM	203
NONFAT DRY MILK	¾ CUPS	1 ½ CUPS						
BROWN SUGAR	¾ CUP	1 ½ CUPS						
MARGARINE, Melted	¾ CUP	1 ½ CUPS						
METHOD: IN A HALF GALLON SAUCEPAN, MIX: 1. MARGARINE, NONFAT DRY MILK AND BROWN SUGAR. HEAT SLOWLY STIRRING TO PREVENT STICKING FOR ABOUT 15 MINUTES OR TO 145° F. IF PREPARED AHEAD MAY COOL TO 41° F AND STORE COVERED AND LABELED FOR UP TO 72 HOURS. REHEAT IN MICROWAVE, OR IN BAIN MARIE TO 160° F.								

NAME: FINGER FOODS - PUREED EGG SANDI WCH	TIMING: Pre-Prep: original recipe time Prep/Assembly: 15 min Cook/Chill: 25 min		TEMPERATURE: Cook Temp: 350 ⁰ F Chill Temp: 41 ⁰ F Pan Size: Quarter Pan	PORTION SIZE: 1 SANDWICH Utensil: #16 scoop for filling; gloved hand or tongs for sandwich			
NUMBER:	5	10					
PORTIONS							
INGREDIENTS	MEASUR E	MEASURE	NUTRIENT COMPOSITION	<u>CHO</u>	<u>PRO</u>	<u>FAT</u>	<u>CAL</u>
EGGS, COOKED (HARD COOKED OR SCRAMBLED)	5	10	1 OZ. PORTION (# 16 SC)				
MARGARINE OR MAYONNAISE	¼ CUP ¼ CUP	½ CUP ½ CUP					
MILK, EVAPORATED, UNDILLUTED	TO TASTE	TO TASTE					
SALT & PEPPER	10	20					
SLICED BREAD, CRUST REMOVED							
METHOD: MEASURE COOKED EGGS, EITHER HARD COOKED OR SCRAMBLED, FOR THE DESIRED NUMBER (1 EGG PER 1 OZ. PROTEIN SERVING NEEDED) IN FOOD PROCESSOR, PURÉE TO SMOOTH CONSISTENCY, ADDING UNDILUTED EVAPORATED MILK AND MARGARINE OR MAYONNAISE UNTIL SMOOTH. REMOVE CRUST FROM BREAD SLICES. SPREAD WITH MARGARINE OR MAYONNAISE. SPREAD ¼ C (#16 SC) FOR EACH SANDWICH. CUT SANDWICHES INTO APPROPRIATE SIZE AND SERVE EITHER HOT (145 ⁰ F) OR COLD (40 ⁰ F). NOTE: USE MAYONNAISE FOR COLD EGG SANDWICHES AND MARGARINE FOR HOT EGG SANDWICHES.							

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Renal Diet

Learning Objectives: Upon completion of this inservice, the participant will be able to:

1. Identify functions of the healthy kidney
2. Describe the two types of kidney failure
3. Identify signs/symptoms of advanced kidney failure
4. Identify nutrition interventions for patients with chronic kidney failure

Introduction

The kidneys are organs in the body whose function is necessary to maintain life. Each kidney is approximately the size of a fist and weighs about 6 oz. The kidneys filter blood continuously throughout the day. The primary functions of the kidneys include the following:

- Removal of excess fluid and waste products. More than 200 waste products are normally excreted by the kidney
- Maintenance of the acid-base balance of the body
- Regulation of blood pressure through production of the hormone rennin and maintenance of salt and water balance
- Stimulation of red blood cell production by production of the hormone erythropoietin
- Maintenance of normal bone health by regulation of calcium and phosphorus metabolism (which is accomplished by activation of vitamin D and excretion of excess phosphorus)
- Removal of some drugs and poisons

Types of Kidney Failure

Renal failure may be either acute (ARF) or chronic (CRF), both of which require intervention with dietary management, dialysis, or both. Patients with ARF are expected to regain kidney function, while those with CRF eventually must rely on dietary management and dialysis or kidney transplantation for survival.

Acute renal failure is the rapid stopping of kidney function, which can occur during a period of a few hours or days. The most common causes of ARF include:

- Severe shock and loss of blood (auto accident, burn injury, gunshot wound, extensive surgery)
- Exposure to certain types of poisonings
- Recent streptococcal infection

Chronic renal failure is characterized by the inability of kidney function to return to normal after ARF or progressive renal decline from disease. CRF causes permanent reduction in function, eventually leading to end-stage renal disease (ESRD). Some of the most common causes of ESRD include:

- Diabetes
- Hypertension
- Chronic glomerulonephritis (results from an inflammation in the kidney that destroys kidney tissue)
- Polycystic kidney disease (an inherited disease which causes the normal kidney tissue to be replaced by cysts)
- Pyelonephritis (chronic kidney infections)
- Arteriosclerosis (hardening of the arteries)
- Abuse of analgesic or “street” drugs

A person suffering from advanced impairment of kidney function usually experiences:

- edema
- uremia (accumulation of waste products in the blood)
- nausea / vomiting
- weight loss
- weakness
- GI bleeding
- gastritis
- metabolic acidosis
- hypertension
- anemia
- bone disease
- increased sensitivity to many drugs

Nutrition Interventions

Patients generally receive dialysis three times per week for 3-5 hours per treatment. General guidelines include:

- Calories: 30-35 calories/kg ideal body weight to maintain desirable weight.
- Protein: ↑ needs to 1.2-1.3 gm protein/kg ideal body weight to account for losses during dialysis, frequent blood draws, etc. Unstable patient may require higher protein requirements.
 - ≥ 50% protein should come from high biological value protein sources (i.e. meat, fish, poultry, and eggs).
- Fluid: usually restricted to decrease fluid retention. Typically less than 2000 cc / day – will be determined by physician or requested by dialysis.
 - Anything liquid at room temperature is considered a fluid (i.e. Jell-O, ice cream, ice cubes).
- Sodium: limited (2000-3000 mg/day), individualize (no salt packet on tray).
 - May require addition restriction with elevated lab values or increased fluid retention (either edema or ascites)
- Potassium: limited (2000-3000 mg/day), adjusted to lab values
 - Goal: serum potassium levels between 3.5-5.5 mEq/L.
 - Foods high in potassium: Bananas, oranges, prunes, melons, tomato products, baked potatoes, dark greens, milk, cheese, yogurt, nuts/seeds, peanut butter, chocolate, salt substitutes (usually potassium derived).
- Phosphorus: limited (800-1000 mg/day or 10-12 mg/gm protein), adjust to lab values.
 - Goal: serum phosphorus levels between 3.5-5.5 gm/dL.
 - Foods high in phosphorus: Milk, cheese, yogurt, dried beans (chili), nuts/seeds, peanut butter, whole grain breads & cereals, chocolate.
 - Phosphate binders usually taken (with meals) to help control serum levels.
- Daily renal vitamin (to be given post dialysis) to replace losses that occur during dialysis.
- Cater to food preferences as much as possible due to taste changes.

Nutrition Interventions for Residents with Kidney Failure (Acute or Chronic Renal Failure)

Nutrient	Intervention	Sources
Protein	Slightly increased if CRF but not on HD, protein is not increased but it is restricted...	Best sources: meat, fish, poultry
Fluid	Restricted	Anything liquid at room temperature: Jell-O, ice cream, ice cubes,
Sodium	Limited	Salt packets, foods seasoned with salt, processed foods (especially luncheon meats like ham), snack foods (such as chips, pretzels, etc)
Potassium	Limited	Bananas, oranges, prunes, melons, tomato products, baked potatoes, dark greens, milk, cheese, yogurt, nuts/seeds, peanut butter, chocolate, salt substitutes (usually potassium derived – Mrs. Dash is OK)
Phosphorus	Limited	Milk, cheese, yogurt, dried beans (chili), nuts/seeds, peanut butter, white grain breads & cereals, chocolate

Learning Activity / In Class Participation

Given the below menus, which item would be inappropriate to serve to a resident with kidney failure and what would be an appropriate substitution.

**Please note answers will vary as to the appropriate alternate. An asterisk represents items that need alternates. Feel free to make up your own menus. You may want them to participate as a class or break into smaller groups.

Menu 1 **Alternate**

Chicken Fried Steak
Baked Potatoes*
Green Beans
Mixed Fruit Cup*
Orange Juice*

Menu 2 **Alternate**

Ham and Cheese Sandwich*
Tomato wedges*
Chips*
Banana*
Milk*

Menu 3 **Alternate**

Beef Tips
Noodles
Spinach*
Dinner Salad*
Angel Food Cake
Water or Tea

Renal Diet Inservice Post Test

1. Complete the following chart with the appropriate nutrition intervention. Indicate whether each nutrient is to be increased, decreased or kept the same as a normal diet.

Protein	
Fluid	
Sodium	
Potassium	
Phosphorus	

2. Chronic renal failure is characterized by
- a. Kidney function returning in three to four weeks
 - b. The inability of kidney function to return to normal
 - c. The rapid stopping of kidney function
 - d. Kidney function returning in two to three hours
3. Which of the following is a function of a healthy kidney
- a. Removal of excess fluid and waste products
 - b. Regulation of blood pressure
 - c. Stimulation of red blood cells
 - d. All of the above
4. Which of the follow is not a sign or symptom of advanced impairment of kidney failure
- a. Hunger
 - b. Edema
 - c. Nausea / vomiting
 - d. Weight loss
5. Renal failure can be managed with
- a. Nutrition intervention
 - b. Dialysis
 - c. Both nutrition intervention and dialysis
 - d. Neither nutrition intervention or dialysis

Renal Diet Inservice Post Test ANSWER KEY

1. Complete the following chart with the appropriate nutrition intervention. Indicate whether each nutrient is to be increased, decreased or kept the same as a normal diet.

Protein	Slightly increased
Fluid	Restricted / decreased
Sodium	Decreased / limited
Potassium	Decreased / limited
Phosphorus	Decreased / limited

2. Chronic renal failure is characterized by
- Kidney function returning in three to four weeks
 - The inability of kidney function to return to normal**
 - The rapid stopping of kidney function
 - Kidney function returning in two to three hours
3. Which of the following is a function of a healthy kidney
- Removal of excess fluid and waste products
 - Regulation of blood pressure
 - Stimulation of red blood cells
 - All of the above**
4. Which of the follow is not a sign or symptom of advanced impairment of kidney failure
- Hunger**
 - Edema
 - Nausea / vomiting
 - Weight loss
5. Renal failure can be managed with
- Nutrition intervention
 - Dialysis
 - Both nutrition intervention and dialysis**
 - Neither nutrition intervention or dialysis

Low Sodium Diets

Learning Objectives:

Upon completion of this inservice, the participant will be able to:

1. Distinguish between “salt” and “sodium”.
2. Understand differences between levels of sodium restricted diets.
3. Identify high sodium foods from a list of foods.

Instructional Information

Materials: Handouts showing sodium content of a variety of foods and another list of foods (some high sodium, some low sodium) that doesn't have the sodium content specified. Packages of “instant” and “regular” foods with nutrition labels.

Is it “sodium” or salt??

- Sodium is a mineral found in food, water, and some medications
 - Sodium may occur naturally in foods, may be added during processing, or added in cooking or at the table.
 - Many people use the terms “sodium” and “salt” interchangeably
- Ordinary table salt is composed of two chemical elements
 - sodium and chloride
 - Table salt is 40% sodium, the remaining 60% is chloride
 - This is potentially confusing to many people
 - Foods that are not typically “salty” may have a high sodium content
- Sodium is usually measured by weight
 - Grams and Milligrams are units of measure for weight
 - Milligram = 1/1000 of a gram, 1000 milligrams = 1 gram
 - Many foods do not have enough sodium to be measured as grams, so milligrams are used
- Chemical abbreviation for sodium is “Na”
 - Diet orders frequently use this symbol

When is a Sodium Restricted Diet prescribed by a physician?

- Edema – fluid retention
 - Sodium inside the body increases fluid retention
 - Reducing sodium in the diet helps to reduce or limit the amount of edema
- Hypertension = high blood pressure
- Heart disease, cardiovascular disease, congestive heart failure
- Impaired liver function
- Acute and chronic renal disease

How restrictive is this diet?

- Typical sodium intake can range from 3 – 15 grams per day
 - Most is taken as table salt
 - A healthy person can balance large amounts of sodium
 - Current recommendations for the general population are for moderate to reduced levels of sodium
 - Some people are “sodium sensitive” and must restrict sodium if they have any of the above mentioned health conditions
 - By eliminating salt at the table, the daily sodium intake can be reduced by one third

- Sodium restricted diets usually range from 1gram to 4grams
 - Most commonly used levels are 1, 2, or 3 grams
 - 1 or 2 gram low sodium diets are used in hospitals with acute care conditions.
 - These levels are difficult for patients to maintain when living at home
 - Need a more liberalized diet for use over a long period of time
 - In LTC facilities with elderly a liberalized diet of 3-4 grams is frequently used
 - A well written diet order will specify the sodium level, but many doctors only write Low Salt Diet or Low Sodium diet which leaves you wondering what level they want.
 - Differences between these levels can be seen by reviewing the following:

1 gram	2 gram	3 gram
2 c. regular milk	3 c. regular milk	3 c. regular milk
2 slices regular bread	3 slices regular bread	3 slices regular bread
4 oz. low sodium meat	5 oz low sodium meat	6 oz low sodium meat
No cakes or baked goods that use baking soda or powder	No cakes or baked goods that use baking soda or powder	Cakes and baked goods are allowed
No regular gelatin	No regular gelatin	Regular gelatin allowed

- There is also a No Added Salt diet that simply avoids foods that are high in sodium and no salt is added at the table. This is the easiest diet to follow and usually can be followed by older adults.

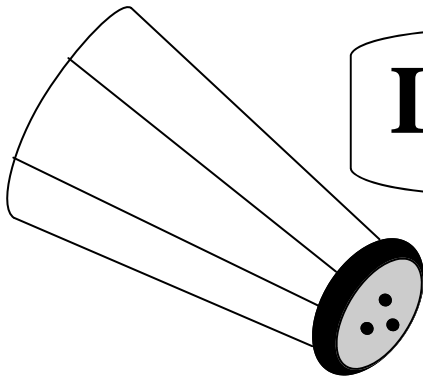
Sodium occurs naturally in many foods

- Thus, eliminating table salt may not be adequate
- Examples of foods that naturally contain high sodium levels
 - 1 slice bread = 120 mg Na, 1 slice salt free bread = 5 mg Na
 - 1 t butter or margarine = 50 mg Na, 1 t salt free butter or margarine = negligible amounts of Na
 - ½ c. canned vegetables = 250 mg Na, ½ c salt free canned vegetables = 5 mg Na
 - 1 t salt = 2300 mg Na
 - 1 t baking soda = 1000mg Na
 - 1 t baking powder = 370 mg Na
 - Tap water varies from community to community and can contribute a high load of sodium if the amount in the water supply is high.
 - Water softeners hard water minerals with molecules of sodium!
- Sodium is frequently added during processing
 - Various forms of sodium are used as ingredients in processed meats
 - Bacon, ham, lunch meats
 - Pickled foods have a high sodium content from the salty brine
 - All types of pickles
 - Sauerkraut
 - Snack foods and crackers have salt on the surface
 - Potato and corn chips
 - Snack crackers, saltines, etc
 - Reading the ingredient label and the nutrition label is imperative (refer to packaged cereals, whipped toppings, instant potato mixes and other fabricated foods for participants to look at)
 - Write the following sodium-containing compounds on a chalkboard and pronounce the names for participants
 - Sodium caseinate
 - Sodium ascorbate
 - Di-sodium phosphate

- Sodium nitrate/nitrite
- Have participants read the labels to find the “hidden” sodium (obtain labels or packages with nutrition labels from the kitchen or storeroom)
- Have participants read the nutrition labels to locate the amount of sodium in a serving of each food
 - For example: Instant versions of cooked cereals have more sodium than the Regular version, processed dry cereals have more sodium than the regular cooked cereals
 - Instant oatmeal has more sodium than old fashioned oats, Cheerios (a dry cereal made with oats) has more sodium than old fashioned oats

Low sodium diets have become commonly used and commonly disliked!

- The lack of salt is unpalatable to most people
 - Some residents will not eat their meals because of poor flavor
 - Some people will not adhere to their diet
- The burden is on the nutrition services department, cooks, dietitian, etc., to make the food appetizing without adding large amounts of salt
 - Alternative low sodium or no sodium seasonings and spices can be used
 - The list of spices and herbs that can be used is two times larger than those to avoid!!
 - Reducing the salt by half will lower the sodium content but retain some flavor
 - Use seasoning recommendations from spice and herb manufacturers and cookbooks (refer to sample lists)
 - Adjust recipes for flavor
 - Use salt substitutes if allowed and if acceptable to resident



Low Sodium Diets

What is sodium?
 Sodium (Na) is a mineral found in food, water and some medications. It's in milk, bread, sodas, canned vegetables and much more – not just in table salt!

How can sodium be bad?
 Sodium keeps fluid from your liver, heart, blood, etc, where your body actually needs fluid.

How can sodium be avoided?
 Use alternative seasonings
 Try low sodium substitutes
 Reduce salt by half in recipes
 Don't put salt on the table
 Avoid processed meats

Why a low sodium diet?
 Physicians prescribe low sodium diets to people with Edema, Hypertension, Heart disease, impaired liver function and acute/chronic liver disease.

Sodium restricted diets usually range from 1 to 4 grams. Levels 1,2 and 3 are most often seen in hospitals and acute care. The following food guide gives examples of daily sodium intake.

1 gram	2 gram	3 gram
2 c. regular milk 2 slices regular bread 4 oz. low sodium meat No cakes or baked goods that use baking soda or powder No regular gelatin	3 c. regular milk 3 slices regular bread 5 oz low sodium meat No cakes or baked goods that use baking soda or powder No regular gelatin	3 c. regular milk 3 slices regular bread 6 oz low sodium meat Cakes and baked goods are allowed Regular gelatin allowed

Name: _____

Date: _____

Low Sodium Diets - Post Test

1. Sodium and salt mean the exact same thing. True / False

2. Circle the high sodium foods in the following list:
 - Traditional, canned green beans
 - Milk
 - Baking soda
 - Dill Pickles
 - Instant Oatmeal
 - Lunch Meat
 - Banana
 - Granola

3. Which of the following is NOT a reason for a physician to restrict sodium intake?
 - a. Hypertension (high blood pressure)
 - b. Heart disease, cardiovascular disease
 - c. Impaired liver function
 - d. Cancer
 - e. Acute and chronic renal disease

4. What is a typical sodium intake per day?
 - a. less than 2 grams
 - b. 3 to 15 grams
 - c. 15 to 30 grams
 - d. 30 to 50 grams
 - e. Over 50 grams

5. Circle all appropriate alternatives for patients with restricted sodium intake:
 - a. Use alternate low sodium or no sodium seasonings
 - b. Avoid processed highly processed meats and other foods
 - c. Keep the salt off the dining table
 - d. Use other spices to supplement the missing flavor

Low Sodium Diets - Post Test

ANSWER KEY

1. Sodium and salt mean the exact same thing. **False**

2. Circle the high sodium foods in the following list:
 - **Traditional, canned green beans**
 - Milk
 - **Baking soda**
 - **Dill Pickles**
 - **Instant Oatmeal**
 - **Lunch Meat**
 - Banana
 - Granola

3. Which of the following is NOT a reason for a Physician to restrict sodium intake?
 - a. Hypertension (high blood pressure)
 - b. Heart disease, cardiovascular disease
 - c. Impaired liver function
 - d. Cancer**
 - e. Acute and chronic renal disease

4. What is a typical sodium intake per day?
 - a. less than 2 grams
 - b. 3 to 15 grams**
 - c. 15 to 30 grams
 - d. 30 to 50 grams
 - e. Over 50 grams

5. Circle all appropriate alternatives for patients with restricted sodium intake:
 - a. Use alternate low sodium or no sodium seasonings**
 - b. Avoid processed highly processed meats and other foods**
 - c. Keep the salt off the dining table**
 - d. Use other spices to supplement the missing flavor**

Diabetic Diets

Learning Objectives: Upon completion of this inservice, the participant will be able to:

1. Describe the diets available at their facility for diabetic residents;
2. Identify foods that contain carbohydrates;
3. Plan a well balanced consistent carbohydrate diet;
4. Use appropriate portion control utensils;
5. Describe the effect of food on blood sugar levels.

Instructional Information

Diabetic meal plans should control the amount of carbohydrates a resident consumes. Carbohydrates are controlled because they break down into glucose or sugar in the body. Within long-term care, the use of liberalized diets has become much more prevalent. Calorie controlled diets are used on a very limited basis; a regular diet may be appropriate for diabetic residents.¹

Overview of Diabetes

Definitions:

Diabetes: High blood sugar levels caused by

1. not making enough insulin in your own body (Type 1), or
2. not being able to properly use the insulin that your body does make, which is called insulin resistance (Type 2), or
3. a combination of both of these.

Blood glucose: Sugar in the blood.

Most blood glucose comes from foods we eat. Some is produced in the liver. Glucose is stored in the liver and in the muscles. Blood carries the glucose to all the cells in the body.

Target blood glucose values should be 80-120 fasting, and 100-140 two hours after a meal. A1C levels which indicate the average blood glucose for 3 months should be no greater than 6.5-7.² . Another diabetes test is the eAG (estimated Average Glucose), which should be 154 or below, depending on the laboratory.

Insulin: A blood glucose lowering hormone produced by the pancreas gland.

The pancreas releases insulin into the blood. Insulin removes glucose from the blood and transports it into cells or muscles. If the body doesn't make enough insulin or if the insulin doesn't work the way it should, glucose can't get into the cells and stays in the blood instead. Blood glucose level then gets too high. This results in pre-diabetes or diabetes.

There are four (4) types of Diabetes:

1. **Pre-diabetes:** formerly called borderline diabetes, impaired fasting glucose, or impaired glucose tolerance.
2. **Type 1 Diabetes:** formerly called juvenile diabetes or insulin-dependent diabetes, is usually first diagnosed in children, teenagers, or young adults.
3. **Type 2 Diabetes:** formerly called adult-onset diabetes or noninsulin-dependent diabetes, is the most common form of diabetes. People can develop type 2 diabetes at any age—even during childhood. Being overweight and inactive increases the chances of developing type 2 diabetes.

4. **Gestational Diabetes:** when diabetes is diagnosed during pregnancy.

The following is a table which shows the blood glucose levels at which pre-diabetes or diabetes can be diagnosed. It is important to know that two tests on different days are needed in order to confirm a true diagnosis of pre-diabetes or diabetes.

DIAGNOSTIC CRITERIA²

(Must be confirmed by testing again on another day)

BG* Test	Normal	Pre-Diabetes	Diabetes
Fasting	<100	100-125	126
OGTT** 2 hours past 75 gm Carb	<140	140-199	200
Casual BG			>200 with Symptoms

* Blood Glucose

** Oral Glucose Tolerance Test

What diets are available for diabetes and weight control at this facility?

(Instructor should review only those diets which are offered at the facility in which the inservice is being conducted.)

The goal of a diabetic diet is to balance the amount and type of food with the amount of insulin available. It is important for meals and snacks to be served on time to diabetic residents and for residents not to skip meals for the insulin to be most effective.

1. The **Calorie Controlled Diabetic Diet (such as 1800 American Diabetes Association)** is limited to a certain number of calories per day and the total amount of carbohydrate served is about the same from day to day. The timing of meals and snacks is critical for optimal blood glucose control. The American Diabetes Association listed with the calorie level indicates that the American Diabetic Association recommended percentages of nutrients are met, which are about 50% carbohydrate, 20% protein, and 30% fat for the day.²
2. The **Consistent Carbohydrate Diabetes Meal Plan (CCHO)** focuses on the carbohydrate level at each meal and snack and not on which food group the carbohydrate should come from. This meal plan may allow for a small piece of cake with lunch, but would also limit other sources of carbohydrates such as bread or potatoes. This meal system usually provides greater flexibility than the calorie controlled diabetic diet.
3. The **Reduced Concentrated Sweet, Low Sugar, Liberal House Diabetic Diets** are not appropriate in long term care because many individuals interpret this diet as a Regular Diet that merely restricts sucrose-sweetened food. It is now understood that this is not an effective diet for improving blood glucose control, nor is it endorsed by the American Diabetes Association.

Carbohydrate food sources

Ask the participants to name food that they consider to be carbohydrates, write them on a board as they are named, and group them into the following groups:

- Starches/Bread
- Fruits
- Milk
- Other

All carbohydrate foods (except fiber) are converted to glucose in the intestines before entering the blood.

Carbohydrates consist of:

- SUGARS – sugar, sweets, some vegetables, fruit, milk (*glucose, sucrose, fructose, lactose*)
- STARCH – cereal, grains (bread, pasta, rice), starchy vegetables, legumes (peas, beans) (*amylopectin and amylose*)
- FIBER – nondigestible carbohydrates (*fiber*)

Protein food sources

1. Meat, fish, poultry
2. Dried beans and peas (although for diabetics these are counted as carbohydrates)
3. Eggs
4. Peanut butter

Fat food sources

1. Animal fat – lard, salt pork, fat on side of meats
2. Oils, gravy
3. Salad dressings and mayonnaise

Portion Control

The proper way to serve any meal plan, especially for persons who have diabetes, is to follow the portion sizes listed on the menu.

Accurate serving sizes are as important as food choices. To ensure accurate portion sizes, measure all foods using food scales, measuring cups or measuring spoons. Follow the posted menu as written.

Portion Control Utensil Uses:

- Ladle/measuring cups – liquid foods measured in cups (soups, pureed foods)
- Scoops – solid foods measured in cups (dry grains, macaroni and cheese)
- Weighing scale – solid foods measured in ounces (meats, cheeses)

Scoop Equivalents:

- #8 scoop is equivalent to 1/2 cup
- #16 scoop is equivalent to 1/4 cup
- #12 scoop is approximately 1/3 cup

References

1. Niedert KC; American Dietetic Association. Position of the American Dietetic Association: Liberalization of the diet prescription improves quality of life for older adults in long-term care. J Am Diet Assoc. 2005 Dec;105(12):1955-65.
2. Franz MJ, et al, American Association of Diabetes Educators: A Core Curriculum for Diabetes Education, Fifth Edition, 2005

Diabetic Diets Inservice – Post Test

- Which of these foods are **carbohydrates**? Circle each one. Hint (10 items)

lettuce	potatoes	grapes	cauliflower	peanuts
beef	rice	salt	green beans	mayonnaise
oatmeal	milk	orange juice	corn	fish
chicken	spaghetti	red beans	sausage	bread
- Which of the following foods are **proteins**? Circle each one. Hint (10 items)

cabbage	pork chop	oil	fish	salad
bacon	eggs	peas	peanut butter	tomatoes
beets	sardines	slaw	hamburger	cheese
steak	flour	tuna	cornbread	chicken
- Which of the following foods are **fats**? Circle each one. Hint (10 items)

bacon	oranges	celery	salad dressing	carrots
salt pork	oil	greens	rolls	mayonnaise
pepper	pears	lard	solid white part on side of meats	
shortening	macaroni	cabbage	bacon drippings	gravy
- Which of these nutrients cause the quickest change in the BS?
 - Protein
 - Carbohydrate
 - Fat
- Which is the first and most important thing to do when trying to control your blood sugar?
 - Do not eat fried foods
 - Lose weight
 - Eat the same amount of carbohydrates at each meal.
- What is the equivalent measuring cup for a #8 scoop?
 - $\frac{1}{4}$ cup
 - $\frac{1}{2}$ cup
 - $\frac{3}{4}$ cup
 - 1 cup
- What measuring utensil would you use to serve a 3 oz serving of chicken?
 - #16 scoop size
 - Weighing Scale
 - Slotted Spoon
 - 6 oz Ladle
- Serving sizes are not important when trying to control blood glucose? True or False

Diabetic Diets Inservice – Post Test KEY

1. Which of these foods are **carbohydrates**? Circle each one. Hint (10 items)

lettuce	potatoes	grapes	cauliflower	peanuts
beef	rice	salt	green beans	mayonnaise
oatmeal	milk	orange juice	corn	fish
chicken	spaghetti	red beans	sausage	bread

2. Which of the following foods are **proteins**? Circle each one. Hint (10 items)

cabbage	pork chop	oil	fish	salad
bacon	eggs	peas	peanut butter	tomatoes
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steak	flour	tuna	cornbread	chicken

3. Which of the following foods are **fats**? Circle each one. Hint (10 items)

bacon	oranges	celery	salad dressing	carrots
salt pork	oil	greens rolls		mayonnaise
pepper pears		lard	solid white part on side of meats	
shortening	macaroni	cabbage	bacon drippings	gravy

4. Which of these nutrients cause the quickest change in the BS?

d) Protein
e) **Carbohydrate**
f) Fat

5. Which is the first and most important thing to do when trying to control your blood sugar?

d) Do not eat fried foods
e) Lose weight
f) **Eat the same amount of carbohydrates at each meal.**

6. What is the equivalent measuring cup for a #8 scoop?

a. $\frac{1}{4}$ cup
b. $\frac{1}{2}$ **cup**
c. $\frac{3}{4}$ cup
d. 1 cup

7. What measuring utensil would you use to serve a 3 oz serving of chicken?

a. #16 scoop size
b. **Weighing Scale**
c. Slotted Spoon
d. 6 oz Ladle

8. Serving sizes are not important when trying to control blood glucose? True or **False**

HANDOUTS



DEFINITION OF DIABETES

When you have high blood sugar levels caused by either

- (1) not making enough insulin in your own body (Type 1), or
- (2) not being able to properly use the insulin that your body does make, which is called insulin resistance (Type 2), or
- (3) a combination of both of these.

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DIAGNOSTIC CRITERIA

(MUST BE CONFIRMED BY TESTING AGAIN ON ANOTHER DAY)

*Blood Glucose **Oral Glucose Tolerance Test

BG* TEST	NORMAL	PRE-DIABETES	DIABETES
FASTING	<100	100-125	126
OGTT** 2 HRS PAST 75 GM CARB	<140	140-199	200
CASUAL BG			>200 WITH SYMPTOMS

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TARGET BLOOD GLUCOSE RANGES

- Fasting Blood Sugar (BS) = **80-120 mg/dl**
(In the morning, when you have not eaten in the past 8 hours) This target may go as high as 140 in elderly persons who are at risk for low blood sugar episodes and/or live alone.
- BS 2 Hours After a Meal = **100-140 mg/dl**
- A1C < **6.5 %- 7%**
(or other values as prescribed by your doctor)

4



CARBOHYDRATE COUNTING

CARBOHYDRATE FOOD GROUPS

1 CARB CHOICE = 15 GRAMS CARB

- BREADS AND STARCHES –
BREAD (1 SLICE)
STARCHY VEGETABLES, PASTA (1/2 CUP)
- FRUITS AND JUICES (1/2 CUP)
- MILK (1 CUP)
- OTHER – SUGAR, CAKE, ICE CREAM, ETC.
(VARIOUS AMOUNTS)

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Calorie Enhanced Diet

Learning Objectives: Upon completion of this inservice, the participant will be able to:

1. Understand the significance and prevalence of weight loss in health care facilities.
2. Select and prepare calorie dense foods for residents.

Instructor's Notes:

Causes and significance of weight loss

- Weight loss is one of the persistent problems found among frail, elderly residents.
- Weight loss is rarely due to inadequate amounts of food on the tray.
- Although some disease states are known to cause weight loss, in general weight loss can be traced to not eating an adequate amount of food.
- When the daily calories consumed are less than the body's need, weight loss occurs. The fact that someone loses weight indicates that they are not eating adequately.
- Weight status is the single most important nutritional indicator – nutritional status can be evaluated based on the pattern of weight history.

Reasons for not eating adequately may include:

- Confusion, forgetfulness
- Lack of appetite from disease,
- Flavor fatigue,
- Medications
- Need for assistance
- Chewing or swallowing difficulties
- Physical impairments – too weak to complete meal, short of breath, or too much energy is needed to eat and breathe.

Weight loss can lead to a variety of related health concerns making the outcome worse than necessary.

- Pressure ulcers and/or non-healing wounds
- Weakness
- Poor immune response, more likely to become ill
- May begin a cachexic cycle that is difficult to reverse
- Decreased zest for life
- Various symptoms of malnutrition

Role of the Nutrition Services Department

- A **Calorie Enhanced Diet** is ordered when a resident experiences weight loss or is not eating adequately. The goal of the diet is to increase the caloric density of foods the resident is willing to eat.
- Caloric density may be increased by adding calories to foods or selecting foods that naturally are high in calories.
- Elderly, frail adults usually do not want more food or large portions. Typically they complain about too much food, or can't eat regular servings due to health limitations.
- One solution for this is to offer regular foods that are calorie dense or have extra calories added without increasing the volume of the food.
- The goal is to add calories to something they already are willing to eat.
- When distinguishing between possible food items always choose the ones that have more calories.

Review food groups and foods that are calorie dense

- Fats – margarine, salad dressings, oils, nuts, seeds, sour cream, cream, gravy
- Proteins – meats, poultry, fish, nuts & seeds, cheese,
- Carbohydrates with fat added - cake, cookies, fruit pie, sweet rolls, vegetables with cream sauce or butter, ice cream

Present methods to add calories to foods

- Review Hints for Adding Calories to the Diet and Comparison Chart handouts.
- Be sure to customize for foods used in facility.

Departmental protocol for Calorie Enhanced Diet at meals

(Use this section to review the practices used in your facility)

- Sample protocol:
 - Whole milk to drink
 - Half & half for cereal
 - Super cereal
 - Super potatoes
 - Extra butter/margarine on potatoes, vegetables, bread, wherever appropriate
 - Add 1 t sugar to ½ c juice, 2 t sugar to 1 c juice
 - Sprinkle 1 t sugar on top of desserts where appropriate
 - Offer jelly and/or peanut butter for bread and toast at each meal
 - Other individual items per dietetics professional

Calorie Enhanced Diet Worksheet

- Work in pairs to complete the Calorie Enhanced Diet worksheet.
- Try to make selections as realistic as possible – what would you actually DO for a resident??

Recipes & Sampling

- Discuss recipes that will be used in the facility
- Sample one of the flavorful drinks while completing the worksheet.

Calorie & Protein Comparison Chart

<u>Cereal</u>	<u>Calories</u>	<u>Protein</u>
½ c Cream of Wheat (cooked with water)	60	1.5
½ c Cream of Wheat (cooked with skim milk)	105	5.5
½ c Cereal Plus cooked with 2% milk	217	12
½ c Cereal Plus cooked with water	167	6
½ c Super Cal Cereal with 2% milk	263	7.3
½ c Super Cal Cereal with water	203	3.3

Beverages

½ c water/coffee/tea	0	0
½ c orange juice (+1t. sugar)	60 (+17)	0
½ c Resource fruit drink	90	4.5
½ c Orange Appleway with water	110	3
½ c Orange Appleway with whole milk	190	7

Milk & Protein

½ c Skim milk	45	4
½ c Whole milk	75	4
½ c Half & half	140	4
1 Scoop protein powder	25	5
½ c High protein skim milk	58	9.5
½ c High protein whole milk	88	9.5

Desserts

½ c vanilla pudding with skim milk	135	4
½ c vanilla ice cream	127	3
½ c high cal pudding	289	3.6
½ c Ice Cream Plus	290	9

Others

½ c Mashed potatoes	~80	3
½ c Super Cal mashed potatoes	300	3
1 pc peanut butter	150	5
½ meat sandwich	200	10

Supplements

180 cc Whole milk, instant breakfast, ice cream	225	10
240 cc Instant Breakfast type with whole milk	280	16
240 cc (1 box) Resource Fruit Drink	180	9
240 cc Ensure Plus	355	13
240 cc 2Cal	475	19.8
240 cc Appleway with water	220	6

Note: Brand names included for comparison purposes only. No endorsement of products is intended.

Sample Recipes

Select a few recipes for use in facility, print and handout to staff.
These are provided as examples.

Super Hot Chocolate

1 pkg Hot Chocolate
4 oz Half & Half or Cream
1/4 cup Nonfat dry milk
1/4 cup whole milk
Mix, Serve Hot, 309 calories, 16 gm Protein

Creamy Fruit

Add 2 t. sugar and 1 T. cream to 1/2 c fruit
Makes it about 110 calories and it is popular
as a snack.

High Protein Milkshakes

1 c Fortified milk (made with 1 c nonfat dry
milk to 1 qt whole milk)
1 big scoop of ice cream
1/2 tsp vanilla
2 Tbsp flavoring (choc, berry, caramel, etc.)

Measure all ingredients into blender. Blend
at low speed for 10 seconds.
Yield: 1 serving (8oz) 485 cal, 22 gm
protein

Pineapple Buttermilk

1/2 ripe banana, sliced
1/2 c canned crushed pineapple
1 c buttermilk

Combine all ingredients in a blender and
blend until smooth. Serves 1.
235 calories, 10 grams protein

Orange Juice Shake

1 c orange juice
1/2 c vanilla ice cream

Combine ingredients in a blender and blend
to desired thickness. Serves 1.
260 calories, 5 grams protein

Orange Buttermilk Shake

1 c buttermilk
1/2 c orange juice
2 Tbs. brown sugar
1 c vanilla ice cream

Combine ingredients in a blender and blend
to desired thickness. Serves 1.
530 calories, 15 grams protein

High Protein Smoothies

These smoothies are like milkshakes, thin or
thick, depending on the temperature.

Blend until smooth:

1 c cottage cheese
1 c yogurt

Add one of the following:

- 1 banana + some strawberries + 1 t
vanilla + honey to taste
- 1 peach + some strawberries + 1 t
vanilla + honey to taste
- 1 banana + 2 T peanut butter + 1 t.
vanilla + honey to taste

475 calories, 43 grams protein

Calorie Enhanced Diet Worksheet

Substitute or change the food items to add calories without adding more food!

	Regular Diet		Calorie Enhanced Diet		
	<u>Calories</u>	<u>Protein</u>	<u>Substitute food item</u>	<u>Calories</u>	<u>Protein</u>
<u>Breakfast</u>					
½ c Cream of Wheat	80	3			
1 slice toast	80	3			
1 t. margarine	45	0			
1 jelly packet	20	0			
½ c orange juice	60	0			
1 c skim milk	90	8			
(for cereal and to drink)					
 <u>Morning Snack</u>					
1 c coffee	0	0			
1 slice toast	80	3			
1 t margarine/butter	45	0			
 <u>Noon Meal</u>					
2 oz roast beef	150	14			
1/3 c mashed potatoes	80	2.5			
2 T gravy	90	0			
1/3 c green beans	20	2.5			
½ c. chocolate pudding	100	4			
½ sl bread	40	1.5			
1 pat margarine/butter	45	0			
Juice/milk/coffee					
 <u>Afternoon Snack</u>					
1 c coffee	0	0			
1 cookie	100	2			
 <u>Evening Meal</u>					
1 c. tomato soup	100	8			
½ grilled cheese sandwich	195	6			
cucumber slices	0	0			
Brownie	125	2			
Juice/milk/coffee					
 <u>HS Snack</u>					
½ c juice	60	0			
3 vanilla wafers	68	0			

TOTALS

Decubitus Ulcer/Pressure Ulcer

Learning Objectives: Upon completion of this inservice, the participant will be able to:

1. Define a decubitus ulcer and explain their cause
2. Identify factors that contribute to skin break down
3. Recognize susceptible body site for decubitus ulcers
4. State appropriate nutritional interventions for decubitus ulcers.

Instructional Information

Decubitus: Recumbent or horizontal position, the act of lying down

Decubitus Ulcer: Ulceration of the skin and subcutaneous tissues. Due to prolonged, unrelieved pressure on bony prominences, poor nutritional status. Seen commonly in aged, paralytic, bedridden persons with poor food intake.

Why do decubitus ulcers occur?

- Occur in areas of the skin where the blood supply has been reduced because of prolonged, unrelieved pressure.
 - Examples:
 - lying in bed or sitting in one position without turning or moving
 - immobility that occurs with paralysis or in coma
- Certain body sites are highly susceptible
 - Areas where tissue is compressed between bony prominences and external surface
 - Areas of back that press against the bed – shoulder blades, sacrum, heels, sides of feet, inner and outer ankles
- Other contributing factors
 - *Moisture* from urine, feces, perspiration
 - *Heat:* skin to bed, skin to skin, increased room temperature
 - *Irritation* from wrinkled sheets
 - *Friction* during turning
 - *Malnutrition* or poor nutritional intake
 - *Underweight or weight loss* leads to loss of muscle tone and fat that cushion the bones. The bones then protrude against the skin and the blood supply is cut off when pressure is applied

Nutrition Interventions for Pressure Ulcers

- Adequate calories, protein, and hydration are the three most important nutrients for those with pressure ulcers
 - Adequate calories are needed:
 - To support healing of injured tissue (anabolism)
 - So carbohydrates are used for energy rather than protein (needed for repair)
 - May need to offer high calorie foods, supplements, between meal snacks
 - Additional protein is needed to replace protein/nitrogen losses
 - Protein is lost when it seeps out of the open areas and onto dressings
 - Protein is used to rebuild damaged tissue
 - Extra protein is required when healing a pressure ulcer; calculated based on body weight and status of pressure ulcer
 - May need to offer additional sources of protein or supplements

- Adequate hydration facilitates healing
 - Water dissolves vitamins, minerals, glucose, amino acids needed for healing
 - Transports nutrients to cells, removes waste from cells
 - Maintains blood volume, fluid and electrolyte balance
 - Extra protein increases fluid needs
- Vitamins & mineral supplements may be added by the health care professional
 - Common recommendations include:
 - Multivitamin with minerals
 - High Vitamin C food daily
 - Vitamin C functions in collagen formation (part of rebuilding tissue)
 - Vitamin C stores decrease with stress, wounds, burns, bacterial infections, after surgery, with certain medications
 - If a deficiency exists additional vitamin C will optimize healing
 - Food sources of vitamin C include: citrus juices, broccoli, strawberries, tomatoes, green peppers
 - Zinc supplementation
 - Involved in wound /tissue healing
 - If a deficiency exists additional zinc will optimize healing
 - Zinc supplements are typically used to guarantee clinically effective levels
 - Short term use of 10 – 14 days
 - Additional vitamins/minerals may not be needed unless there is a specific vitamin or mineral deficiency.
 - Interventions with Vitamin C and Zinc are common, but there is no research to support their use

Responsibilities of Food Service Workers

- Be familiar with the high calorie, high protein foods and supplements that are used in the Dietary Department (review products and practices used in the Dietary Department)
- Observe and report to supervisor, dietitian, nurse when a resident has a poor intake or change of intake at meals, snacks
- For residents with High Calorie or High Protein diet orders
 - Make sure they receive the proper foods (high calorie, high protein items)
 - Observe and report intake of these foods
 - Report to supervisor, dietitian, nurse, if resident expresses dissatisfaction with any of these foods so they can be changed
- Serve appropriate liquids and encourage intake

Name: _____

Date: _____

Decubitus Ulcer/Pressure Ulcer Post Test

1. The word “decubitus” means
 - a. Ulceration of the skin and subcutaneous tissue
 - b. Recumbent or horizontal position
 - c. Pressure wound
 - d. None of the above

2. Decubitus or pressure ulcers occur in areas of the skin when the blood supply is reduced because of prolonged, unrelieved _____.

3. Susceptible body sites for pressure areas: (circle all that apply)

Back bone	Fingers	Neck
Head	Heels	Shoulder blades
Tail bone	Arms	Ribs
Sides of feet	Thighs	Ankles

4. Which of the following are factors that contribute to skin breakdown
 - a. Heat
 - b. Moisture
 - c. Malnutrition / poor intake
 - d. All of the above

5. Adequate calories are needed to heal pressure ulcers
 - a. So the resident does not feel hungry
 - b. So protein is used for tissue repair rather than energy
 - c. So muscles will function properly
 - d. So fat stores are increased

6. Circle all nutrition interventions that optimize healing of decubitus ulcers
 - a. Serve a meat sandwich for a snack
 - b. Increase calories by switching from 2% to whole milk
 - c. Cut up food and open condiments
 - d. Use a large rather than a small glass of juice

Decubitus Ulcer/Pressure Ulcer Post Test ANSWER KEY

1. The word “decubitus” means
 - a. Ulceration of the skin and subcutaneous tissue
 - b. **Recumbent or horizontal position**
 - c. Pressure wound
 - d. None of the above

2. Decubitus or pressure ulcers occur in areas of the skin when the blood supply is reduced because of prolonged, unrelieved **pressure**_____.

3. Susceptible body sites for pressure areas: (circle all that apply)

Back bone	Fingers	Neck
Head	Heels	Shoulder blades
Tail bone	Arms	Ribs
Sides of feet	Thighs	Ankles

4. Which of the following are factors that contribute to skin breakdown?
 - a. Heat
 - b. Moisture
 - c. Malnutrition / poor intake
 - d. **All of the above**

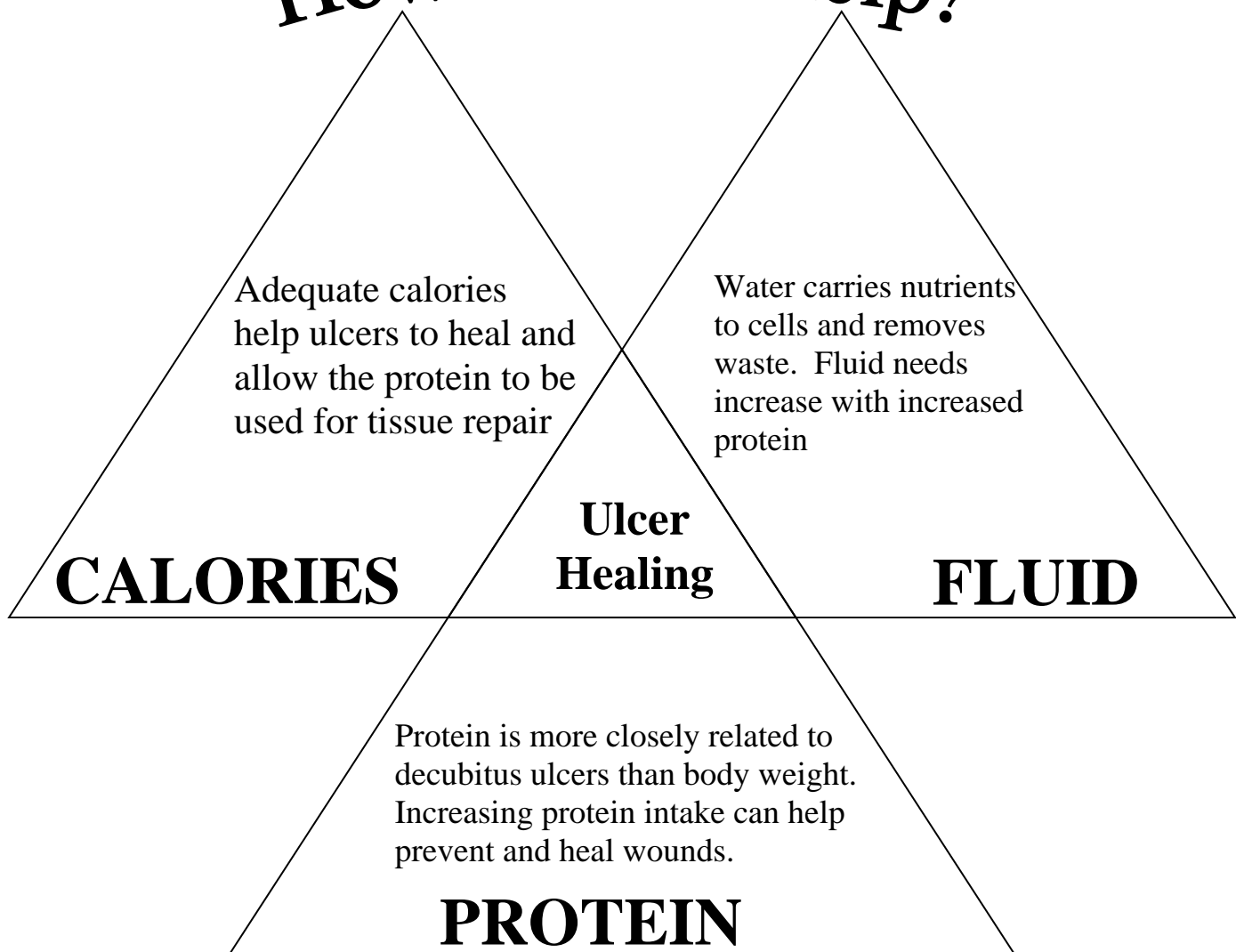
5. Adequate calories are needed to heal pressure ulcers
 - a. So the resident does not feel hungry
 - b. **So protein is used for tissue repair rather than energy**
 - c. So muscles will function properly
 - d. So fat stores are increased

- 6 Circle all nutrition interventions that optimize healing of decubitus ulcers.
 - a. **Serve a meat sandwich for a snack**
 - b. **Increase calories by switching from 2% to whole milk**
 - c. Cut up food and open condiments
 - d. **Use a large rather than a small glass of juice**

Decubitus Ulcers/ Pressure Ulcers

What: Ulceration of the skin and subcutaneous tissues due to prolonged, unrelieved pressure on bony prominences, poor nutritional status.
Who: Seen commonly in aged, paralytic, bedridden persons with poor food intake.
Why: Caused by pressure, poor nutrition, moisture, heat, irritation, friction and low muscle and fat contents.
Where: Certain body sites are highly susceptible such as the shoulder blades, sacrum, heels, sides of feet, inner and outer ankles.

How can we help?



Gluten Restricted Diets

Learning Objectives: Upon completion of this inservice, the participant will be able to:

1. Demonstrate an understanding of the need for gluten free diets
2. Will be able to identify gluten containing foods.

Description

Celiac Disease (CD), also known as gluten-sensitive enteropathy, is a genetically based, autoimmune disorder in which the small intestine is damaged by the presence of gluten. Subsequently, the small intestine is unable to absorb nutrients and malnutrition may result. Symptoms vary from person to person and with the degree of gluten sensitivity. CD is difficult to diagnose and is considered the most underdiagnosed common disease in America.

Once a diagnosis is confirmed, a strict gluten restricted diet must be followed for life. Vitamin and mineral supplements may be needed to correct nutrient deficiencies. Some people also have to eliminate lactose (found in milk products) until the lining of the small intestine has healed.

Common Signs or Symptoms of Gluten Intolerance

- abdominal bloating, pain, gas
- diarrhea and sometimes constipation
- increase fat in stool
- fatigue & weakness, depression
- vitamin and/or iron deficiency
- mouth ulcers
- lactose intolerance

Identifying Gluten in Food

Gluten is a protein found in *wheat, barley, rye and possibly oats*.

- Gluten is evident in baked products, cereals, and pastas made from wheat, barley and rye
- Oats do not contain gluten naturally but are avoided because they can be cross contaminated with wheat crops, in processing and delivery from plants that use the same machinery for all types of grains. Some oats now are labeled “wheat free.”
- Gluten is frequently a “hidden” ingredient in sauces, seasoning, salads dressings, soups, etc. It may also be found in vitamins and other medications. These are more challenging to identify and reading labels is imperative
 - Many ingredients **contain gluten** but may not have it listed such as:
 - Malt or malt flavorings
 - Vegetable gums
 - Textured vegetable protein, hydrolyzed vegetable protein
 - Cereal products
 - Starch and modified food starch

Products containing these ingredients in the food label should be avoided.

Always read labels carefully as ingredients may change without notice.

- There are many gluten free products now available in the specialty section of most large grocery stores. Products are also available at health food stores, online, and by mail order from specialty

food companies. Some facilities choose to purchase and use these products for residents requiring gluten free foods. Family members may be encouraged to bring these items for their resident in lieu of wheat-containing baked goods.

- For diabetics: **Many gluten free products are higher in carbohydrate than the gluten containing food they are substituted for.** The registered dietitian will need to individualize the meal plan for a resident who is diabetic on a gluten free restriction.

Gluten Restricted Diet Foods Allowed/Avoided

Food Group	Foods Allowed	Foods to Avoid
Beverages	Coffee, tea, carbonated beverages, apple cider, distilled alcohol beverages such as rum, whisky and vodka; brandy and wine.	Beer, ale, lager and other malt beverages; Postum, cereal beverages; flavored coffees and teas; herbal teas that contain barley or malt; check labels on soy beverages and thickened beverages. Food thickeners for beverages are not allowed.
Breads and Cereals: Grains	Gluten-free: breads, pancakes, waffles, muffins, rolls etc made from allowed grains and flours: amaranth, arrowroot, buckwheat, cornstarch, cornmeal millet, whole bean flours, potato starch or flours, rice flours, quinoa, sorghum and soy flour tapioca starch. Rice cakes, corn taco shell and corn tortilla.	All bread and products etc. made with bran, wheat, barley and rye. Check labels on oat products. Communion wafers, pretzels and wheat germ.
Cereals	Cream of rice, grits, Corn Pops, Puffed Rice, oatmeal if labeled gluten/wheat-free; buckwheat groats; specifically labeled gluten-free cereals made from allowed grains.	All cereals made from wheat, barley, rye and malt; cereals made from oats <i>–unless labeled wheat free</i> ; all cereals with malt as an ingredient.
Desserts	Gelatin dessert, homemade pudding made with cornstarch, frozen fruit pops, frozen yogurt, sherbet and ice cream without malt or malt flavoring; commercially prepared gluten-free cakes, cookies and baking mixes.	Most commercially prepared cakes, pies, cookies, pastries and mixes; ice cream cones. Most commercial chocolate flavorings.
Fats	Butter, vegetable oils, cream, salad dressings made from allowed ingredients and sour cream. Check low fat dairy products for “wheat starch” which is not allowed.	Wheat germ, nonstick cooking sprays containing flour, commercial gravies and “wheat starch” (often an ingredient in low fat dairy products).
Fruits and Fruit Juices	Fresh, frozen, canned fruits and 100% fruit juices.	Any thickened or prepared fruits or fruit fillings that contain flour; fruit juice blends or drinks containing ingredients not allowed.

Food Group	Foods Allowed	Foods to Avoid
Meats and Meat Substitutes	Fresh, frozen and canned beef, pork, fish and poultry; most Kosher meats, Hormel brand meats; luncheon meats and frankfurters if labeled gluten free.	Meatloaf made with bread, canned fish or meats in vegetable broths that contain unspecified plant protein products; imitation crabmeat (sirimi); commercially breaded meat, fish or poultry.
Cheese	Aged cheese, processed cheese including American cheese and cream cheese.	Cheese spreads and dips, such as nacho; Roquefort and bleu cheese <i>grown on bread mold</i> .
Eggs	Fresh eggs	Egg substitutes, dried eggs and egg whites.
Other	Lentils, chickpeas, beans- (kidney, navy, red etc.), nuts Tofu and soybeans.	Most vegetarian burgers— need to check label. Seitan (Wheat Meat).
Milk and Milk Products	Fresh, dry, evaporated or condensed milk; cream, buttermilk; plain, flavored and fruited yogurt prepared without vegetable starches or flavorings.	Malted milk, commercially prepared milkshakes, chocolate milk and cocoa mixes. CHECK LABEL: for <i>wheat starch</i> on low fat dairy products.
Potatoes and Starches	All plain -fresh, frozen and canned potatoes, 100% potato chips, and special pasta made from corn, rice, potato, legume, soy flours.	Batter dipped French fries, pasta made from “not allowed” grains and flours.
Soups	Homemade broth and soups made with allowed ingredients; gluten-free bouillon cubes and broth.	CHECK LABEL: many canned soups, broths, dried soup mixes, soup bases and bouillon cubes may be made with gluten containing ingredients.
Vegetables and Vegetable Juices	Fresh, frozen, and canned vegetables and juices.	Vegetables in sauces, batter fried vegetables and frozen vegetables made with wheat starch.
Sugar, Sweets and Other Miscellaneous Condiments	Sugar, salt, pepper, sugar substitute, plain herbs and spices, honey, pickles, relish, olives, ketchup, mustard, vinegar, molasses, corn syrup, 100% maple syrup, pure cocoa powder, cream of tarter, corn starch, baking soda, brewer’s yeast, aspartame, Splenda, sucralose, vanilla extract, tapioca starch and vegetable gums (xanthan, guar, carageenan, acacia, carob bean, cellulose, arabic, locust bean, tragacanth).	Soy or tamari sauce made from wheat; sauces and gravies unless made with allowed ingredients; mixed spice blends; some vitamin/mineral supplements may contain gluten; some candy: need to check labels for gluten-containing ingredients.

Gluten Restricted Diet Worksheet

Using the lists of Foods Allowed & Avoided, what foods could be substituted for the following foods:

Meal	Usual Food	Gluten Free Food
Breakfast	Wheat Toast	
	Cream of Wheat	
	Wheaties	
	Bran Muffin	
Noon Meal	Buttered Noodles	
	Dinner Roll	
	Chocolate Cake	
Evening Meal	Commercially prepared beef stew	
	Biscuit & Honey	
	Gelatin & Fruit Salad	
	Ice Cream	
Snacks	Hot Cocoa	
	Cookies	

Name: _____

Date: _____

Gluten Restricted Diet Post Test

5. Gluten is a protein found in which of the following:
 - a. wheat
 - b. barley
 - c. rye
 - d. oats
 - e. all of the above

6. List 5 foods to avoid for residents with gluten intolerance.
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____

7. T F Many gluten free products are higher in carbohydrate than the gluten containing food they are substituted for.

8. What are some signs and symptoms of gluten intolerance?
 - a. diarrhea
 - b. abdominal bloating
 - c. pain in the kidney
 - d. A and B

9. List a substitute for each of the following:
 - a. Tuna fish sandwich = _____
 - b. Hamburger with bun = _____
 - c. Flour tortilla chips = _____
 - d. Flour for breads = _____

Gluten Restricted Diet Post Test ANSWER KEY

1. Gluten is a protein found in which of the following:
 - a. wheat
 - b. barley
 - c. rye
 - d. oats
 - e. **all of the above**

2. List 5 foods to avoid for residents with gluten intolerance.

Refer to Table of Foods Allowed and to be Avoided.

3. **T F** Many gluten free products are higher in carbohydrate than the gluten containing food they are substituted for.

4. What are some signs and symptoms of gluten intolerance?
 - a. diarrhea
 - b. abdominal bloating
 - c. pain in the kidney
 - d. **A and B**

5. List a substitute for each of the following:

Answers may vary:

- a. **Tuna fish sandwich = Tuna fish with lettuce**
- b. **Hamburger with bun = Hamburger on gluten free bread**
- c. **Flour tortillas = Corn tortillas**
- d. **Flour for breads = Whole bean flour**

Gluten Restricted Diet

Celiac disease, also known as gluten-sensitive enteropathy, is caused from damage to the small intestine from eating food containing **gluten**.

Gluten is a protein found in *wheat, barley, rye and usually oats*.

Gluten may be hidden in soups, sauces, mixes, and food additives.

Lactose may also need to be eliminated

Reading labels is essential!!

Allowed:

Rice, corn, soy, potato, tapioca, legumes, sorghum, quinoa, millet, buckwheat, arrowroot, amaranth and nut flours.

Common Signs and Symptoms:

Abdominal bloating, Diarrhea, Malodorous flatulence (foul smelling gas), Increase amounts of fats in stool.

Not Allowed in any form:

Wheat (durum, graham, kamut, semolina, spelt), rye, barley, and triticale.

Labels

The key to understanding the Gluten Free Diet is to become a good ingredient label reader. The following ingredients **should not** be consumed. They are derived from prohibited grains:

Barley

Malt or malt flavoring

Malt vinegar

Rye

Triticale

Wheat (durum, graham, kamut, semolina, spelt)

Frequently overlooked foods that often contain Gluten:

Breading, Coating mixes, panko

Broth, soup bases

Brown rice syrup

Candy

Croutons

Flour or cereal products

Imitation bacon

Imitation seafood

Marinades

Pastas

Processed luncheon meats

Sauces, Gravies

Self-basting poultry

Soy sauce or soy sauce solids

Stuffing, Dressing

Thickeners (Roux)

Communion wafers

Lactose Restricted Diets

(Low Lactose and Lactose-Free Diets)

Learning Objectives: Upon completion of this inservice, the participant will be able to:

1. Understand Lactose Restricted Diets.
2. Identify foods allowed and to be avoided.
3. Identify potential nutritional inadequacies.

Description

Lactose intolerance is the inability to adequately digest lactose, the sugar found in milk. The diet for lactose intolerance is used to prevent or reduce symptoms associated with ingesting lactose-containing products. Possible symptoms that may be alleviated include nausea, bloating, flatulence, cramping and diarrhea.

The Low Lactose Diet restricts the major sources of milk in the diet, whereas the Lactose-Free diet eliminates all milk and milk products, even in trace amounts.

- After obtaining a diet history, the dietitian may include some lactose-containing foods in the resident's meal plan based on their food tolerance history.
- Many residents can tolerate more lactose in their diet by taking lactase enzyme (Lactaid[®]) tablets at mealtime. This medication helps to digest the lactose in the foods eaten.
- Some residents may only need to restrict milk as a beverage and can substitute lactose reduced milk, such as Lactaid[®] or Dairy Ease[®], without further food restrictions.

NUTRITIONAL ADEQUACY

- This diet may be low in calcium, riboflavin, vitamin A and vitamin D, depending upon the extent of lactose restriction and of age-related nutritional requirements.
- The Dietary Reference Intakes (DRIs) for all these nutrients can be met if lactase enzyme treated milk and milk products, such as LactAid[®], are substituted for regular milk products.
- Use of lactase enzymes tablets will help improve digestion and subsequently the nutritional adequacy of the diet. These products require a doctor's order and administration by nursing.
- If lactase treated products or lactase enzymes are not used, lactose free nutritional supplements may be indicated. In particular, the need for calcium, vitamin D and riboflavin supplementation should be considered when all types of fluid milk products are not allowed.

FOODS ALLOWED/AVOID

A. The **Low Lactose Diet** restricts milk, milk products and some foods that use large amounts of milk products in manufacturing or preparation. This diet may be acceptable for residents who can tolerate small amounts of lactose. For these individuals, regular margarine or butter, regular bread, yogurt, and aged cheeses can be included in the meal plan.

B. The **Lactose-Free Diet** eliminates all sources of milk and milk derivatives, including small amounts used in commercial food processing, breads, margarine and butter.

LOW LACTOSE DIET

FOOD GROUPS	FOODS ALLOWED	FOODS TO AVOID
Beverages	Coffee, tea and carbonated beverages.	Any beverages that contain dried milk powder such as hot chocolate; cream-based liquors.
Bread and Cereals	Cereal consumed with lactose treated milk. Pancakes, crepes and waffles made with milk may not be tolerated.	Cereal consumed or prepared with regular milk.
Desserts	Cakes, cookies, fruit, gelatin desserts and pies made without milk/cream; sorbet and Italian ice; Whip and Chill™ and commercial baked desserts that are not milk based.	Any prepared with milk or milk products, such as pudding, custard, ice cream, sherbet, cream/custard pies and commercial desserts and mixes made with milk products.
Fats	Regular butter and margarine; cream cheese; salad dressings made with allowed ingredients; non-dairy creamer; and all oils.	Cream sauces, such as Alfredo and cheddar; cream, sour cream, whipped cream and party chip dip.
Fruit and Fruit Juices	All fruits and fruit juices.	No restrictions.
Meat and Meat Substitutes	All meat, poultry, fish, eggs, peanut butter, nuts and dried peas and beans. Aged cheese if tolerated.	Meat croquettes, cottage cheese and ricotta cheese; cheese sauces and quiche, unless tolerated; processed cheese (including American) unless tolerated.
Milk and Milk Beverages	Lactose reduced milk or milk treated with Lactaid® or Dairy Ease®; non-dairy creamer; soy milk; other lactose-free liquid supplements and shakes. * Yogurt may be tolerated.	Milk, buttermilk, and other milk products; creamers, shakes and liquid supplements made with milk.
Potato and Starches	Potatoes, including instant mashed potatoes, rice, pasta and barley.	Potato, rice or pasta dishes made with milk or cheese, such as au gratin potatoes and macaroni and cheese.
Vegetables and Vegetable Juices	All vegetable and vegetable juices without milk-based sauces.	Vegetables prepared with milk or milk products such as creamed or au gratin.
Soups	Broth, bouillon and soups made with allowed ingredients.	Soups made with milk or milk products such as creamed soups and chowders; commercial soups made with milk solids or lactose containing products.
Sugar, Sweets and Other Miscellaneous Condiments	All spices, seasonings and flavorings; any product marked Pareve or Parve which denotes a Kosher, milk free product.	Any prepared with milk or milk products, such as caramels and crème lifesavers.

LOW LACTOSE DIET
Sample Meal Plan

Breakfast

4 oz. orange juice
 ¾ c. cream of wheat
 1 cooked egg
 2 slices toast
 2 tsp. margarine
 8 oz. Lactaid milk
 coffee
 non-dairy creamer
 2 tsp. sugar
 salt, pepper

Dinner

3 oz. sliced turkey
 2 Tbl. turkey gravy
 1 oz. cranberry sauce
 1/2 c. carrots
 1/2 c. mashed potatoes
 (made without milk)
 1 slice bread
 1 tsp. margarine
 1/2 c. fruit cocktail
 4 oz. Lactaid milk
 tea
 1 tsp. sugar
 salt, pepper

Supper

6 oz. vegetable soup/2 crackers
 tuna fish salad sandwich
 1/2 c. tuna fish
 2 Tbl. mayonnaise
 2 slices bread
 lettuce/tomato
 2 sugar cookies
 4 oz. Lactaid milk
 tea
 1 tsp. sugar
 salt, pepper
 water

water

Mid Morning

4 oz. *allowed* fluid

Mid Afternoon

4 oz. *allowed* fluid

Bedtime

4 oz. *allowed* fluid
 3 graham crackers

B. LACTOSE FREE DIET

Avoid foods restricted on Low Lactose Diet with these *additional* restrictions:

- ▶ Regular margarine or butter.
- ▶ Bread, cereal and cracker products made with milk solids, cheese or whey, such as cheese crackers or curls.
- ▶ Yogurt, aged cheese and commercial egg substitutes.
- ▶ Potato mixes made with ingredients not allowed.
- ▶ Cold cuts, hot dogs, etc. with lactose or milk fillers.
- ▶ CHECK LABELS: Avoid foods with the following ingredients: whey, milk, lactose, curds, cheese flavors, milk powder, milk solids, sweet or sour cream, buttermilk and malted milk. Possible foods with these ingredients are: candy, cookies, frostings, instant flavored hot cereals, gravies, dessert mixes, some ready-to-eat cereals, salad dressings, sugar substitutes and processed meats, cold cuts, and hot dogs.
- ▶ Medications can contain lactose. Check with the pharmacy for ingredients of specific medications.

Name: _____

Date: _____

Lactose Restricted Diets Post Test

1. What is Lactose Intolerance?

2. T F Lactose Restricted Diets exclude all milk products in every meal.

3. What Nutrients could be lacking in a Lactose Restricted Diet:

- a. Calcium
- b. Riboflavin
- c. Vitamin A
- d. Vitamin D
- e. All of the Above

4. Circle all the foods to be avoided in a Lactose Restricted Diet:

Cream sauces	Potatoes
Buttermilk	Ice Cream
Eggs	Soft Cheeses
Rice	Peanut Butter

5. Write a Breakfast Meal Plan for a Lactose Free Diet:

Lactose Restricted Diets Post Test ANSWER KEY

1. What is Lactose Intolerance?

Lactose intolerance is the inability to adequately digest lactose, the major sugar in milk.

2. T F Lactose Restricted Diets exclude all milk products in every meal.

1. What Nutrients could be lacking in a Lactose Restricted Diet:

- a. Calcium
- b. Riboflavin
- c. Vitamin A
- d. Vitamin D
- e. **All of the Above**

2. Circle all the foods to be avoided in a Lactose Restricted Diet:

Cream sauces	Potatoes
Buttermilk	Ice Cream
Eggs	Soft Cheeses
Rice	Peanut Butter

5. Write a Breakfast Meal Plan for a Lactose Free Diet:

Answers may vary, refer to foods to avoid list to check answers.

4 oz. orange juice
¾ c. oatmeal
1 cooked egg
2 slices toast
2 tsp. margarine
8 oz. rice milk
Coffee
Non-dairy creamer
2 tsp. sugar
Salt, pepper

Lactose Restricted Diets

Lactose intolerance is the inability to adequately digest **lactose**, the major sugar in milk.

There are 2 major Lactose Restricted Diets:

Low Lactose Diets restrict the major sources of milk, but allow some.

Lactose-Free Diets eliminate all milk and milk products from the diet.

Foods to avoid:

- Milk
- Cheese
- Ice Cream
- Butter
- Yogurt
- Sour Cream
- Creamer
- Cream Sauces
- Some medicines

Nutrients that might be missing in a Lactose Restricted Diet:

- Calcium
- Vitamin D
- Vitamin K
- Riboflavin

Options for Lactose Intolerant Residents:

- Avoid food and beverage containing lactose
- Consume lactose reduced or lactose free substitutes
- Take Lactase Enzyme substitute

Improving Hydration in Long Term Care

Learning Objectives: Upon completion of this inservice, the participant will be able to:

1. Determine appropriate levels of fluid intake for individuals, using current formulas.
2. Explore all dietary sources of fluids.
3. Identify signs and symptoms of dehydration.
4. Define dehydration clinically and objectively.
5. State three results of maintaining an adequate hydration status for a resident
6. List three opportunities in each day's events to increase fluid intake.

Definition - Dehydration: The state in which fluid intake is less than fluid output. Dehydration is classified as mild, moderate, or severe based on how much of the body's fluid is lost or not replenished. When severe, dehydration is a life-threatening emergency. Dehydration can be caused by losing too much fluid, not drinking enough water or fluids, or both. Vomiting and diarrhea are common causes. The elderly and those with illnesses are at higher risk of dehydration than the general population.

Review of physiology relating to fluid:

1. 45-70% of body weight is water: muscle is 75%, fat is 20%.
2. Intracellular tissue may contain 25 liters, extra cellular tissue 15 liters.
3. Blood contributes a volume of 5 liters of fluid.
4. Body composition varies by gender: women 50%, men 60% water.
5. Obese individuals average 40% water due to higher percentage of fat.
6. Body composition shifts in older years to a lower water content.
7. Sensation of thirst decreases with age

Importance of adequate hydration:

1. Water is essential for all metabolic processes:
 - Fluid provides the medium for digestion, absorption, metabolism, secretion and excretion
 - Fluid is needed for the senses of taste (saliva) and smell (moist nasal passages)
 - Fluid transports nutrients to the cells and carries nutrients within cells, carries waste products out of the body through urine; adequate water in bowel contents makes elimination easier
 - Fluid is the regulator of body temperature through perspiration
 - Fluid provides lubrication around joints, heart, and intestines; provides the cushion for brain and spinal cord
 - Adequate fluid improves the condition and elasticity of skin
2. Fluid loss occurs daily and must be replaced:
 - Fluid is lost daily in urine, sweat (perspiration), feces, lung evaporation
 - Fluid loss increases with increased air temperature, declines in humidity, increases with physical exercise or exertion
 - Effects of fluid loss are significant:
 - Loss of 1% of body fluid results in impaired regulation of body temperature
 - Loss of 3-5% of body fluid results in decreased oxygen utilization
 - Loss of 7% of body fluid is likely to result in physical collapse

3. Determination of fluid need:

- Based on physical size (height, weight, gender), level of physical activity, possible recent injury, and climate.
- **Fluid needs may be calculated using various methods**
 - i. Most facilities use: 30 ml per kg body weight
 - ii. Need is increased with injury, infection, or diagnosed dehydration. Suggest using 35cc per kg body weight. (Bibliography #5)
 - iii. Blanket recommendation of 1500 ml. of fluid per day, regardless of body weight (Bibliography #2)
- Occasionally fluids are restricted by the physician and RD needs to divide total through out the day and meals.

4. Indicators of dehydration:

- It is important to note signs and symptoms of potential and actual dehydration
 - Dehydration increases nutrition risk
 - Dehydration is related to other serious health concerns such as decline in cognitive status, urinary tract infections, constipation, effectiveness of medications
 - Food service workers need to report occurrence of the following to the supervisor or nurse:
 - Mental confusion or change in cognitive status
 - Loss of appetite, failure to eat
 - Change in eating habits
 - Insufficient fluid intake over a 3 day period
 - Leaves 25% or more of meals consistently
 - Nausea or Vomiting
 - Complaints of Dizziness
 - Complaints of Constipation

NOTE: There are many clinical signs and symptoms of dehydration not mentioned here. The ones listed above may be observable by food service employees as they interact with residents.

Opportunities for fluid consumption: (Bibliography #1, 9)

Meals: for both beverages (free fluids) and fluid in foods.*

Activities: as part of the social experience

With Medications: to properly transport, dissolve, and absorb the medication

Any time staff gives care in the resident room

Demonstrate ml. content of all beverage and tray service containers

Fluid Content of Foods: Handout on fluid content of foods.

Sources of Fluids

- Anything liquid at room temperature: gelatin, ice cream, frozen desserts, soups, juice with canned fruit
- Any beverage, including coffee, tea, water, milk, juices, flavored beverages, carbonated beverages.
- All foods contain some fluid and; this should be estimated in the daily fluid intake.

Food Item	Fluid Content Per Serving
Main Dishes (meats, casseroles)	60 ml. for 3 oz. serving
Vegetables	65 ml. for 4 oz. serving
Eggs	30 ml. for 1 Egg
Soup	100 ml. for 4 oz. serving
Fruit	90 ml. for 4 oz. serving
Juice	110 ml. for 4 oz. serving (or use 120 ml. per facility policy)
Pasta, Grains (prepared)	30 ml. for 4 oz. serving, <i>except rice</i>
Cereal, hot; or Cold with 4 oz. milk added	150 ml. for 6 oz. serving (105 ml/ for 4 oz. serving)
Milk	220 ml. for 8 oz. serving (or use 240 ml. per facility policy)
Desserts (frozen yogurt, ice cream, gelatin)	60 ml. for 4 oz. serving (add 20 ml. for gelatin made with aspartame)
Pudding	80 ml. for 4 oz. serving

(Bibliography # 7)

Hydration Inservice Post Test ANSWERS

1. **T F** Residents get their entire fluid intake at meals.
2. The human body contains approximately 45-70% water. (range of fluid)
3. **T F** Coffee, Tea and other caffeinated beverages are included in beverages that contribute to fluid consumption.
4. **T F** The fluids contained in food should be counted in the amount of fluid consumed daily.
5. Fluids contribute to which of the following bodily functions:
Refer to “Water is essential for all metabolic purposes”
6. Signs of dehydration include:
Refer to “Signs and Symptoms of Dehydration” for list of signs.
7. **T F** Thirst is a reliable indicator of fluid need in older persons.
8. **T F** All older adults require 1500 ml. of fluid daily.
9. **T F** Warmer climates require more fluid intake.
10. Dehydration is defined as: The state in which fluid intake is less than fluid output per day.



Ensuring Adequate Hydration

How to Provide Adequate Fluids and Preferred Fluids

1. Determine fluids of preference for meals for the individual resident.
2. Determine amounts of fluids provided in each type of beverage container.
3. Determine fluids of preference for between meal snacks.
4. Prepare schedule of fluids provided for the resident at each meal and each snack time.
Be sure to include fluids provided in the resident's room.
5. Total up the fluids provided. This schedule will include the established fluid intake goal for the individual resident.

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Vegetarian Diets

Learning Objectives: Upon completion of this inservice, the participant will be able to:

1. Better understand vegetarian diets and why people choose them.
2. Identify health benefits of vegetarian diets
3. Identify possible problems of vegetarian diets
4. State appropriate nutritional alternatives for common menu items.

Instructional Information

Definition: Overall, a vegetarian diet includes no meat, fish or fowl and is centered-around plant-based foods. There are multiple variations to this theme.

American Dietetic Association Statement:

“It is the position of the American Dietetic Association that appropriately planned vegetarian diets, including total vegetarian or vegan diets, are healthful, nutritionally adequate, and may provide health benefits in the prevention and treatment of certain diseases. Well-planned vegetarian diets are appropriate for individuals during all stages of the life cycle, including pregnancy, lactation, infancy, childhood, and adolescence, and for athletes. A vegetarian diet is defined as one that does not include meat (including fowl) or seafood, or products containing those foods.”

Vegetarian Diet Position Statement
American Dietetic Association, 2009

Types of Vegetarian Diets

- **Lacto-Vegetarian:** Diet based on grains, legumes, vegetables, fruits, nuts, seeds and DAIRY
- **Ovo-Vegetarian:** Diet based on grains, legumes, vegetables, fruits, nuts, seeds and EGGS
- **Lacto-Ovo Vegetarian** (most practiced): Diet based on grains, legumes, vegetables, fruits, nuts, seeds, DAIRY and EGGS
- **Vegan:** Diet based on grains, legumes, vegetables, fruits, nuts, and seeds.
- **Macrobiotic:** Diet based on in-season foods - grains, legumes, vegetables (nuts, seeds, fruits to a lesser extent), sea vegetables, seafood may be consumed.
- **Fruitarianism:** Based only on fruits, botanical fruits, nuts, and seeds. Excludes meat, fish, poultry, dairy foods, eggs, grains, legumes and most vegetables.
- **Raw Foodism:** Includes raw vegetables, fruits, nuts, seeds, sprouted grains and beans. Excludes anything cooked past 118° F.

Nutrients of Interest to Vegetarians

The following nutrients are found most readily in meat products and therefore require substitutes and supplements for vegetarian diets.

- High Quality Protein
- Vitamin B₁₂
- Vitamin D
- Iron
- Calcium
- Zinc
- Essential Fatty Acids

Vegetarians need to eat a wide variety of grains, legumes, eggs, and dairy products in order to obtain all the essential amino acids found in meat products.

Common Food Substitutions

- Protein, Iron, Zinc
Among plant foods, the most concentrated sources of protein are legumes: dry beans, peas, lentils, and soy foods. Soybeans contain all of the essential amino acids, but other legumes do not. These foods, as well as eggs are also good sources of iron and zinc. Dairy products are low in iron but provide protein and zinc. Whole grains and vegetables also provide small amounts of protein and a variety of minerals.
- Calcium, Vitamin D
Dairy products provide calcium, as do many other foods. These include calcium-fortified soymilk, rice milk and orange juice; calcium-set tofu (check labels); certain green vegetables (broccoli, kale, collards, bok choy, Chinese cabbage, and okra); almonds; figs; and blackstrap molasses. Fortified soymilk, fortified rice milk, and cow's milk (but not other dairy products) all are fortified with vitamin D, which aids calcium absorption. Vitamin D₃ supplements are recommended.
- Vitamin B₁₂
Vegetarians must take special care to include sources of vitamin B₁₂ in their diets. Sources include vitamin B₁₂-fortified soymilk and veggie "meats" (check labels), dairy products, and eggs. A vitamin B₁₂ supplement that supplies 3 micrograms (mcg) of vitamin B₁₂ per day can also meet the need for this essential nutrient.
- Essential Fatty Acids
Whereas non-vegetarians may rely on fish for their omega-3 fatty acids, vegetarians get these essential fats from food such as walnuts, ground flaxseed, and flaxseed oil. Long chain omega-3 fatty acids, also known as DHA (docosahexaenoic acid) are available as a supplement in veggie capsules. These are produced from microalgae, which is the original source of the DHA in fish.

Why do People Choose Vegetarianism?

- Health Choices
- Protect the earth/environment
- Ethical reasons
- Religious reasons
- Economical Reasons
- Athletic performance change
- Animal Rights Beliefs

Potential Health Benefits of Vegetarian Diets

- Vegetarians have lower rates of:
 - Coronary Heart Disease
 - Lower saturated fat and cholesterol intake for vegetarians compared to omnivores -> lower blood cholesterol
 - Vegetarians consume 50% - 100% more fiber than omnivores
 - Soy foods - 25 grams of soy protein shown to lower cholesterol and may increase HDL cholesterol
 - Higher intakes of antioxidant vitamins - C, A, and E
 - Hypertension
 - Beneficial compounds in plant foods may protect against hypertension.
 - Diabetes - Type 2
 - Higher fiber intake with plant foods and lower body mass index (BMI) results in improved insulin sensitivity.

- Some types of cancer
 - o Higher fiber intake - believed to protect against colon cancer
 - o Vegetarians have higher phytochemical intakes with anti-cancer activity compared to omnivores.
 - o Breast cancer has been linked to elevated estrogen levels - possible that vegetarians have lower estrogen levels than non-vegetarians.
- Obesity
 - o Studies show - BMI higher as meat consumption increases vs. vegetarians - with vegans having lowest BMI.
 - o Lower BMI in vegetarians - linked to lower protein, fat, animal protein intake, increased fiber and increased intake of fruits and vegetables.

Potential Health Consequences of Vegetarian Diets

Vegetarians may lack essential nutrients if they are not diligent in their food choices because so many of the fat soluble vitamins, high quality proteins, fatty acids and minerals may be missing from their food choices.

Vegetarian Diets in Long Term Care – What can you do?

- Identify what type of Vegetarian Diet a resident follows.
- Recommend and provide alternatives to each meal.
- Pay attention to the “Nutrients of Interest” to vegetarians, and make sure residents are receiving adequate amounts of each.
- Provide a variety of alternatives – liberalize the diet.
- Consider a multivitamin with mineral supplement.

Vegetarian Diet - Post Test

1. Which of the following is the most restrictive Vegetarian Diet?
 - a. Lacto-Ovo Vegetarian
 - b. Vegan
 - c. Ovo-Vegetarian
 - d. Raw Foodism

2. What can be substituted for chicken to add protein to an Ovo-Vegetarian Diet?
 - a. leafy green vegetables
 - b. eggs
 - c. baked fish
 - d. all of the above

3. List two good vegetarian sources of essential fatty acids:
 1. _____
 2. _____

4. Circle all of the following which apply.
Vegetarians have a LOWER risk of:

- Anemia (caused by low iron)	- Type 2 diabetes
- Obesity	- Depression
- Some types of cancer	- Coronary heart disease

5. What should you do to better serve residents with Vegetarian Diets?
 - a. Identify what type of Vegetarian Diet a resident follows.
 - b. Recommend and provide alternatives to each meal.
 - c. Provide a variety of alternatives – liberalize the diet.
 - d. “Nutrients of Interest” to vegetarians, and make sure residents are receiving adequate amounts of each.
 - e. All of the above

Vegetarian Diet - Post Test ANSWER KEY

1. Which of the following is the most restrictive Vegetarian diet?
 - a. Lacto-Ovo Vegetarian
 - b. Vegan
 - c. Ovo Vegetarian
 - d. Raw Foodism**

2. What can be substituted for Chicken to add protein to a Ovo-Vegetarian Diet?
 - a. leafy green vegetables
 - b. eggs**
 - c. baked fish
 - d. all of the above

3. List two good Vegetarian sources of essential fatty acids:
 - 1. walnuts**
 - 2. flaxseed**

4. Circle all of the following which apply.
Vegetarians have a LOWER risk of:
 - Anemia (caused by low iron) - **Type 2 diabetes**
 - **Obesity** - Depression
 - **Some types of cancer** - **Coronary heart disease**

5. What should you do to better serve residents with Vegetarian Diets?
 - a. Identify what type of Vegetarian Diet a resident follows.
 - b. Recommend and provide alternatives to each meal.
 - c. Provide a variety of alternatives – liberalize the diet.
 - d. “Nutrients of Interest” to vegetarians, and make sure residents are receiving adequate amounts of each.
 - e. All of the above**

Gastroesophageal Reflux Disease (GERD)

Learning Objectives: Upon completion of this inservice, the participant will be able to:

1. Define and explain GERD.
2. Identify foods to avoid and their substitutes.
3. Understand preventative measures.

Introduction

Gastroesophageal Reflux Disease (GERD) is a digestive disorder affecting the lower esophageal sphincter (LES), the muscle connecting the esophagus with the stomach. Gastro-esophageal reflux is the backflow of stomach contents into the esophagus, which comes from weakening of the LES. Gastric contents are very acidic and can damage the esophageal mucosa. This can result in heartburn, the most common symptom of GERD. Other typical symptoms include regurgitation and dysphagia. Complications of GERD include esophagitis, peptic esophageal stricture, esophageal ulcer, hemorrhage, and Barrett's esophagus.

Description

The treatment of GERD is a multidisciplinary approach and includes diet, lifestyle changes, medications, either over-the-counter or prescribed, and surgery, in some cases. The purpose of dietary management, if needed, is aimed at minimizing the symptoms associated with the reflux of gastric fluid into the esophagus and to eliminate foods that irritate the esophageal mucosa. GERD symptoms vary greatly among individuals. Many residents can manage their disease without diet restrictions.

Foods Allowed

Encourage foods that do not affect the lower esophageal sphincter pressure, which include protein foods with a low-fat content and carbohydrate foods with a low fat content. For symptoms that do not respond to treatment, see fat restricted diet.

FOODS TO AVOID (These reduce LES competence)

- High fat foods – fried foods, gravies, cream sauces, excess butter or margarine, peanut butter
- High fat meats, oils, salad dressings, sour cream
- Alcohol
- Chocolate
- Coffee, caffeine, decaffeinated coffee, strong tea, cola drinks – limit intake
- Carminatives – peppermint and spearmint oils, garlic, cinnamon, onion
- Citrus and tomato juice, carbonated beverages
- Spicy foods including pepper
- Any foods that regularly cause heartburn, including rich pastries and frosted cakes

PREVENTION

- Lose weight, if overweight.
- Eat smaller, more frequent meals.
- Eliminate items listed under “Foods to Avoid.”
- Add problem foods in small quantities as part of a regular meal.
- Avoid lying down after eating.
- Loosen tight clothing.
- Elevate the head of the bed.
- Avoid bending or stooping.
- Do not smoke.
- Take prescribed medication.

GERD Bibliography

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Name: _____

Date: _____

GERD Post Test

1. GERD is a digestive disorder affecting:
 - a. the left lobe of the brain
 - b. the lower esophageal sphincter
 - c. the large intestine
 - d. the liver

2. The treatment of GERD includes: (Circle all that apply)
 - a. Diet
 - b. Lifestyle changes
 - c. Medications
 - d. Surgery

3. T F Many residents can manage their disease without diet restrictions.

4. Persons with GERD should avoid which of the following:
 - a. High fat foods
 - b. Alcohol
 - c. Coffee and chocolate
 - d. Raw fruits and vegetables
 - e. A, B and C

5. List 3 options for prevention of GERD
 1. _____
 2. _____
 3. _____

GERD Post Test ANSWER KEY

1. GERD is a digestive disorder affecting:
 - a. the left lobe of the brain
 - b. the lower esophageal sphincter**
 - c. the large intestine
 - d. the liver

2. The treatment of GERD includes (circle all of the following which apply):
 - a. Diet**
 - b. Lifestyle changes**
 - c. Medications**
 - d. Surgery**

3. **T F** Many residents can manage their disease without diet restrictions.

4. Persons with GERD should avoid which of the following:
 - a. High fat foods
 - b. Alcohol
 - c. Coffee and chocolate
 - d. Raw fruits and vegetables
 - e. A, B and C**

5. List 3 options for prevention of GERD

Refer to list under PREVENTION heading.

GERD

Gastroesophageal Reflux Disease

GERD is a digestive disorder affecting the lower esophageal sphincter (LES), the muscle connecting the esophagus with the stomach. Gastroesophageal reflux is the backflow of stomach contents into the esophagus, which comes from weakening of the LES. Gastric contents are very acidic and can damage the esophageal mucosa.

Foods to Avoid:

- High fat foods
- Alcohol
- Chocolate
- Caffeine
- Carminatives
- Citrus / tomato juice
- Carbonated drinks
- Spicy foods

Foods Encouraged:

- High Protein foods
- High Carbohydrate foods
- Low Fat foods

Prevention

- Lose weight, if overweight.
- Eat smaller, more frequent meals.
- Eliminate "Foods to Avoid."
- Add problem foods in small quantities as part of a regular meal.
- Avoid lying down after eating.
- Loosen tight clothing.
- Elevate the head of the bed.
- Avoid bending or stooping.
- Do not smoke.
- Take prescribed medication.

Meal Percentage Intake

Objectives: Upon completion of this inservice, the participant will be able to:

1. Calculate the meal percentage utilizing money to represent percent.
2. Correctly identify and document the amount of food consumed by a resident.
3. Will be able to identify beverages that contain no caloric value

Description:

Many health care employees have a difficult time determining the percentage of food consumed by residents. The following exercise is one way to help illustrate and reinforce the concept of percentage. It is important to relate the amount of money to an amount of food so employees understand that when half the money is removed, this represents half the food item.

Facilities vary in the percentages allotted to each food item and percentages vary with the type of meal (breakfast vs. dinner, soup and sandwich vs. meat and potatoes). Percentages need to be adjusted to coordinate with facility meal patterns and practices for the best outcome from this inservice. Several types of percentage and meal patterns are provided as examples.

Instructions for Estimating Meal Percentage Using Money

1. Refer to attached sheet with noted money amounts in each circle. Create similar sheets with percentages that are appropriate for facility meal patterns. Separate sheets with varying circles and amounts of money may be needed.
2. Explain to participants that each cent represents one percent – total amount of money on the sheet is 100 cents or 100%. The amount of pennies and nickels placed on each food item represents a percentage of the total meal.
3. Next the instructor is to remove some or all of the money from one or more of the circles. As the money is removed from the circle, the instructor hands the money to the staff and asks what percentage this represents.
4. Staff then adds up the amount of money to determine the amount of total money removed from the tray.
5. Once they have a total amount of money added up, the instructor is to equate the cents amount to percentage amount of food consumed.
6. Repeat the process a few times, varying the meal pattern for breakfast, noon and evening meals. Repeat until participants grasp the concept.
7. Obtain a food tray with some of the food consumed or removed and practice estimating percentage eaten using an actual tray. Practice until participants are comfortable and can estimate without the percentage and pennies sheets.

Follow Up

1. Be sure to point out that coffee, tea, and water are NOT included in the meal percentage calculation because they do not provide calories, protein vitamins or minerals (none of the circles are designated for these items). However they are fluids and may need to be totaled for Intake & Output records.
2. Show participants the appropriate place to document resident meal percentages.
3. Remind staff that residents who consistently leave more than 25% of their meals may need to be offered a meal substitute and should be referred to the supervisor, dietary manager or dietitian.

Recording Resident Food Intakes

CNA's often ask how to mark the meal percentages when a resident refuses or doesn't eat the regular meal and a substitute food or supplement is offered as a replacement.

The procedure below is an appropriate method:

1. When a regular, planned meal is NOT eaten, mark the intake of the meal as 0% or R (for refused). Do this even when it occurs over and over.
2. Substitute food items such as soup or sandwich and supplements such as Mighty Shakes, Ensure, etc. All need to be recorded separately from the meal percentage chart – **WHEN THEY ARE OFFERED AND CONSUMED IN PLACE OF A MEAL.**
3. Record what food/supplement was offered and how much was eaten. If there isn't room to write this down, report it to the nurse so that this information can be included in nursing charting.
4. When recording intake of extra or substitute items, these **DO NOT REPLACE** the percentage allowed for a regular meal. It is important to know if the resident is or is not eating the regular planned meals.
5. If a replacement bowl of soup or sandwich is counted as part of the regular meal, it is not possible to know the person is refusing the meals.
6. As always, it is important to report when there is a change in a resident's eating habits.
7. Thank you for asking me this question and for doing such a great job with our residents.

Meal Percentage Intake Post Test

1. Are ten pennies equal to ten percent?
2. If a resident consumes five pennies of milk or juice, eight pennies of bread or roll, three pennies of soup, ten pennies of dessert, and seven nickels of main plate, what is the value of the meal consumed and what percent of the meal does this represent?
3. Based on the above meal consumed, would you offer a meal substitute to the resident?
4. Do coffee, tea, or water count toward meal percentage? Why or why not??
5. High protein nourishment is part of the food tray served. Is it part of the meal percentage documented in the record?

Meal Percentage Intake Post Test Answer Key

1. Are ten pennies equal to ten percent?

ANSWER:

Yes

2. If a resident consumes five pennies of milk or juice, eight pennies of bread or roll, three pennies of soup, ten pennies of dessert, and seven nickels of main plate, what is the value of the meal consumed and what percent does this represent?

ANSWER:

Sixty one cents or percent.

3. Based on the above meal consumed, would you offer a meal substitute to the resident?

ANSWER:

Yes because the amount consumed was less than 75%.

4. Do these beverages count toward meal percentage – coffee, tea, or water?

ANSWER:

No. Because they do not have any calorie content.

5. High protein nourishment is part of the food tray served. Is it part of the meal percentage documented in the record?

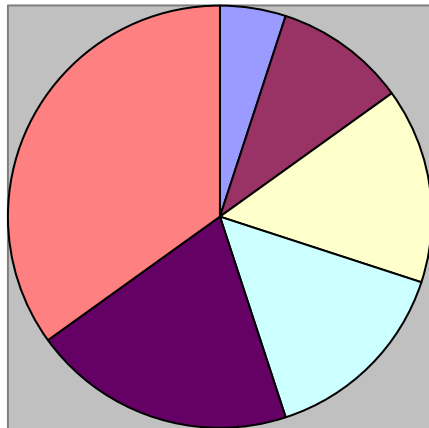
ANSWER:

No.

Meal Percentages

Breakfast

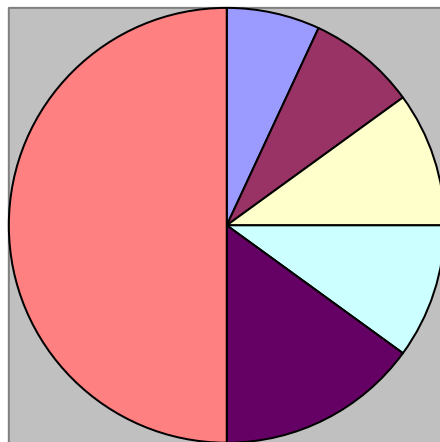
% of
Calories
Served



- Bacon - 5%
- Sausage - 10%
- Juice - 15%
- Toast or Cereal - 20%
- Milk - 20%
- Eggs - 35%

Lunch or Dinner

% of
Calories
Served



- Vegetable - 7%
- Bread - 8%
- Starch - 10%
- Milk or Drink - 10%
- Dessert or Fruit - 15%
- Entrée - 50%

10%
10 Pennies
Soup or Salad

10%
10 Pennies
Milk or Juice

10%
10 Pennies
Bread or Roll

10%
10 Pennies
Dessert

60%
12 Nickles
Main Plate



Lunch or Dinner