

Commission on Dietetic Registration Oncology Nutrition Examination Content Outline

Content Domain (and subdomain)	Percentage Of Exam Questions	Number of Scored Questions
I. Nutrition Assessment and Diagnosis	45%	61
A. Screening and Assessment	4%	5
B. History and Physical	16%	22
C. Treatment Effects	15%	20
D. Signs and Symptoms	10%	14
II. Nutrition Care	40%	54
A. Nutrition Care Process	6%	8
B. Interventions	14%	19
C. Education	8%	11
D. Prioritization of Care	7%	9
E. Nutrition Support	5%	7
III. Reassessment and Outcomes	11%	15
IV. Risk Reduction	4%	5
TOTAL	. 100%	135

I. NUTRITION ASSESSMENT AND DIAGNOSIS (45%)

A. Screening and Assessment (4%)

- 1. Age-specific standardized and/or validated tools used in screening for nutrition risk in the oncology and hematology populations (e.g. PG-SGA, MST)
- 2. Tools and equipment for assessing nutrition status in adult and pediatric cancers (e.g. bioelectrical impedance analysis, Patient Generated Subjective Global Assessment)
- 3. Standardized tools to evaluate functional and nutrition status in the oncology population (e.g. ECOG, KFS, CDC growth chart)

B. History and Physical (16%)

- 1. Specific types of cancer and cancer treatment and their implications for nutrition
- 2. Comorbidities that affect nutrition status of individuals with cancer
- 3. Latent health and disease conditions in cancer survivors
- 4. Nutrition, physical activity, and lifestyle practices that negatively impact nutrition status during cancer treatment (e.g. tobacco use, sedentary lifestyle)
- 5. Characteristics of nutrition practices, behaviors, food preferences for different cultures, ethnicities, religions, and general beliefs that could impact cancer treatment

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- 6. Interactions between medications and/or dietary supplements and nutrients that impact cancer treatment or nutrition status in individuals with cancer
- 7. Integrative medicine and alternative therapies that may be used by individuals with cancer
- 8. Cancer screening, staging, and diagnostic methods (e.g. tumor markers, cytology, pathology, radiology)
- 9. Trade name medications and generic equivalents of medications used in pharmacotherapy regimens for cancer
- 10. Age-specific macronutrient and micronutrient needs of individuals with cancer

C. Treatment Effects (15%)

- 1. Impact of psychosocial, socioeconomic, and psychological aspects on nutrition status and tolerance of therapy
- 2. Effects of cancer treatments on nutrition status
- 3. Effects of cancer and cancer treatments on gastrointestinal tract
- 4. Effect of cancer treatment on growth and development of pediatric individuals
- 5. Classifications and side effects of radiation therapy regimens
- 6. Common surgeries performed on individuals with cancer
- 7. Classifications and side effects of hematopoietic stem cell transplant (HSCT)
- 8. Classifications and side effects of chemotherapy agents and routes of administration (e.g. intravenous, oral, intrathecal)
- 9. Classifications and side effects of biotherapy regimens
- 10. Classifications and side effects of hormone therapy regimens
- 11. Intent of care (e.g. curative, control, palliative) on treatment goals
- 12. Nutrition implications of pain and pain management
- 13. Nutrition implications of supportive care pharmacotherapies

D. Signs and Symptoms (10%)

- 1. Signs of malnutrition, nutrition-related problems, and nutrition impact symptoms in adult and pediatric patient populations with cancer
- 2. Physical signs of muscle wasting and loss of fat stores
- 3. Effect of hematological disorders on nutrition status
- 4. Altered laboratory values and biomarkers in individuals with cancer resulting from cancer diagnosis and treatment
- 5. Altered physical conditions impacting nutrition intake in individuals with cancer
- 6. Conditions resulting from cancer and cancer treatment

II. NUTRITION CARE (40%)

A. Nutrition Care Process (6%)

- 1. Nutrition care process in cancer care
- 2. Development of measureable outcomes to determine effectiveness of nutrition interventions throughout the continuum of cancer care

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B. Interventions (14%)

- 1. Age-specific energy needs and methods to determine energy needs of individuals with cancer
- 2. Age-specific fluid requirements for individuals with cancer
- 3. Nutrition strategies to manage side effects related to pain and pain management
- 4. Nutrition strategies to manage side effects of cancer and cancer treatment (e.g. chemotherapy, biotherapy, hormone therapy, surgery, radiation therapy, stem cell transplant)
- 5. Oral medical food supplements
- 6. Care, use, and diet modifications for gastrointestinal devices and equipment for treatment or palliation (e.g. stents, tubes, drains)
- 7. Nutrition strategies for alterations in hematological conditions
- 8. Programs, services, and referrals for nutrition related care
- 9. Medication and other supportive care to manage nutrition impact symptoms
- 10. Nutrition issues involved in discharge planning to and from different care settings

C. Education (8%)

- 1. Nutrition recommendations for treatment-related side effects and comorbidities in individuals with cancer
- 2. Food safety guidelines and safe food-handling practices
- 3. Age-specific Dietary Reference Intakes and limits of acceptable supplementation in cancer care
- 4. Risks and benefits of integrative medicine and alternative therapies

D. Prioritization of Care (7%)

- 1. Nutrition issues in palliative and end-of-life care
- 2. Intent and goals of treatment regimes (e.g. palliative, curative)
- 3. Anticipated side effects of cancer and cancer therapy
- 4. Effect of cancer staging on nutrition care plans
- 5. Malnutrition and relative importance of nutrition impact symptoms throughout the continuum of care
- 6. Ethical and legal issues pertaining to artificial nutrition and hydration in end-of-life care

E. Nutrition Support (5%)

- 1. Indications, benefits, and risks of enteral nutrition support
- 2. Indications, benefits, and risks of parenteral nutrition support
- 3. Guidelines for the selection of enteral nutrition formulas in cancer care
- 4. Guidelines for the formulation parenteral nutrition recommendations in cancer care
- 5. Guidelines for the initiation, advancement, transition, and discontinuation of enteral nutrition, parenteral nutrition, and intravenous hydration

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III. REASSESSMENT AND OUTCOMES (11%)

- 1. Changes in intent and goals of treatment regimens (e.g. palliative, curative) and their impact on nutrition interventions
- 2. Alterations in metabolism resulting from cancer or cancer treatment
- 3. Standardized scales and criteria for side effects of cancer treatment (e.g. National Cancer Institute-Common Toxicity Criteria, World Health Organization)
- 4. Quality improvement measures to evaluate nutrition outcomes
- 5. Acute, chronic, and latent nutritional complications of cancer and cancer treatments
- 6. Impact of pain and pain management in individuals with cancer
- 7. Impact of fatigue and fatigue management in individuals with cancer
- 8. Neurological and cognitive changes as a result of cancer and cancer treatment
- 9. Indicators that determine need for adjustment of nutrition interventions based on changes in fluid balance, laboratory values, functional status, weight changes, and treatment goals

IV. RISK REDUCTION (4%)

- 1. Nutrition and lifestyle issues related to survivorship
- 2. Effect of diet, body weight, and physical activity on risk for cancer and other chronic diseases
- 3. Evidence-based and consensus guidelines on nutrition and physical activity for cancer prevention (e.g. American Cancer Society, American Institute for Cancer Research)
- 4. Evidence-based and consensus guidelines on nutrition and physical activity for survivorship (e.g. American Cancer Society, American Institute for Cancer Research)
- 5. Relationship among diet, cancer risk, and cancer prevention
- 6. Risk factors for cancers and their effect on cancer prevention
- 7. Latent effects of cancer treatment that impact nutrition status and chronic disease