## Applying the EAL Oncology Guideline 2013 Recommendations at Work

Go to: www.eatright.org , choose Evidence Analysis Library on the left, choose Guidelines, Guideline List, Oncology Guideline 2013, and Major recommendations

How can you use the Evidence Analysis Library information at work?

- to demonstrate that it is best practice to screen patients for malnutrition, and
- assess those identified patients,
- to intervene if nutrition impact symptoms or cachexia is identified,
- to keep current on evidence based practices, and
- to show the positive impact nutrition intervention has on improving outcomes in oncology patients.

## To justify your role in the care of the oncology patient:

The registered dietitian nutritionist (RDN) should collaborate with other health care professionals, administrators and public policy decision-makers to ensure that the evaluation of nutrition status is a key component of the adult oncology patient care process. Research indicates that poor nutrition status is associated with higher rates of hospital admissions or re-admissions, increased length of hospital stay (LOS), lower quality of life (QoL) and mortality in adult oncology patients. Poor nutrition status is also associated with decreased tolerance to chemotherapy and radiation treatment in adult oncology patients undergoing these therapies.

# To justify the importance of screening oncology patients for nutrition risk –

Adult oncology patients should be screened using a malnutrition screening tool validated in the setting (inpatient or ambulatory/outpatient) in which the tool is intended for use.

To show that all patients should be screened on entry into oncology services, and periodically rescreened during treatment.

All adult patients should be screened for malnutrition risk on entry into oncology services. Early identification and management of malnutrition risk improves and protects nutrition status and quality of life (QoL), which leads to improved outcomes. Re-screening should be repeated routinely throughout treatment to facilitate referral as needed.

To show that any patient identified to be at risk for malnutrition should be assessed by a RD, and justify the need for more RD FTEs.

If an adult oncology patient has been identified at screening to be at risk for malnutrition, the patient should be referred to a registered dietitian nutritionist (RDN) for evaluation.

#### To begin assessing for cancer cachexia in your oncology patients:

As part of the nutrition assessment, in patients with lung, pancreatic or head and neck and gastrointestinal (GI) cancers or those who are at high risk for weight loss or have experienced unintended weight loss, the registered dietitian nutritionist (RDN) should assess for nutrition impact symptoms, markers of inflammation [e.g., elevated C-reactive protein (CRP)] and other signs of wasting, which may indicate pre-cachexia or cancer cachexia. The presence of cachexia does not always indicate end of life or need for hospice. Therefore, the identification of cachexia leading to intervention can positively impact clinical outcomes.

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#### To correctly diagnose malnutrition in your oncology patients:

The registered dietitian nutritionist (RDN) should use clinical judgment in interpreting nutrition assessment data to diagnose malnutrition in adult oncology patients. Early identification and diagnosis of malnutrition leading to intervention can positively impact body composition, function, quality of life (QoL), treatment tolerance and clinical outcomes. The presence of two or more of the following criteria or characteristics supports a nutrition diagnosis of malnutrition in the adult oncology patient (See Clinical Characteristics to Document Malnutrition).

- Insufficient energy intake
- Unintended weight loss
- Loss of subcutaneous fat
- Loss of muscle mass
- Localized or generalized fluid accumulation (that may mask weight loss)
- Reduced grip strength.

## To know you should intervene early in patients with cancer cachexia:

In adult oncology patients who have been identified to have pre-cachexia or cancer cachexia, prompt and aggressive intervention to address nutrition impact symptoms and preserve or prevent loss of lean body mass (LBM) and weight should be initiated by the registered dietitian nutritionist (RDN). Early rather than later intervention to prevent weight loss in this population is more likely to be effective. The metabolic derangements in cancer cachexia that promote wasting can lead to loss of weight and LBM and poor outcomes.

## To know that if patients have cancer cachexia, what nutrition intervention works:

If sub-optimal symptom control or inadequate dietary intake has been addressed and the adult oncology patient is still experiencing loss of weight and lean body mass (LBM), the registered dietitian nutritionist (RDN) may consider use of dietary supplements containing eicosapentaenoic acid (EPA) as a component of nutrition intervention. Research indicates that dietary supplements containing fish oil (actual consumption, 0.26g to 6.0g of EPA per day), resulted in a significant effect on preservation or improvement of weight and LBM in adult oncology patients with weight loss.

If sub-optimal symptom control or inadequate dietary intake has been addressed and the adult oncology patient is still experiencing loss of weight and LBM, the RDN may consider use of a medical food supplement (MFS) containing EPA as a component of nutrition intervention. Research indicates that MFS containing fish oil (actual consumption, 1.1g to 2.2g of EPA per day) resulted in significant weight stabilization or weight gain and preservation or improvement of LBM in adult oncology patients with weight loss.

# If the question about use of glutamine comes up in practice:

If use of parenteral glutamine is proposed to prevent or treat oral mucositis in oncology patients with solid tumors, the registered dietitian nutritionist (RDN) should advise that its use may or may not be beneficial. Limited research in head and neck and stem cell transplantation patients receiving parenteral glutamine has not established the effectiveness of L-Alanyl-L-Glutamine in treating or preventing oral mucositis. Enteral or oral provision of glutamine was not

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evaluated.

When parenteral nutrition (PN) is required for patients undergoing hematopoietic cell transplantation (HCT), the registered dietitian nutritionist (RDN) may or may not recommend parenteral glutamine (GLN) in doses ranging from 0.2g to 0.5g per kg per day. Research indicates parenteral GLN should be initiated early in the treatment course. Parenteral GLN is associated with improved nitrogen balance and decreased morbidity. However, decreased hospital length of stay (LOS) was found only when data from allogeneic and autologous transplants were combined.

#### To answer questions about CIPN and nutrition:

If an adult oncology patient is at risk for or has chemotherapy-induced peripheral neuropathy (CIPN), the registered dietitian nutritionist (RDN) should advise the patient that the use of nutrition substances (vitamin E, calcium and magnesium infusions, acetyl-L-carnitine, glutamine, glutathione) may or may not be beneficial as a means of preventing or improving CIPN. Research indicates that these substances have had only limited success in preventing or improving CIPN in oncology patients receiving specific chemotherapeutic agents.

## To finally put the questions about the neutropenic diet to rest:

If an adult oncology patient has neutropenia, the registered dietitian nutritionist (RDN) should provide dietary counseling on safe food handling and foods which may pose infectious risks during the period of neutropenia. A neutropenic diet is not necessary, but safe food counseling is recommended as a prudent precaution. Research has not demonstrated the effectiveness of low-microbial diets.

If an adult oncology patient is undergoing bone marrow transplant, the RDN should provide dietary counseling on safe food handling and foods which may pose infectious risks during the period of neutropenia. A neutropenic diet is not necessary, but safe food counseling is recommended as a prudent precaution. There is conflicting research regarding the effectiveness of neutropenic diets in the bone marrow transplant population.

#### Other ways the 2013 EAL can be used in practice-

- To justify adequate RD FTE that can provide MNT in the oncology setting,
- To expand the scope and practice of the RD learning and developing oncology specific skill sets,
- To provide evidence based practice information to students and peers,
- To promote development of nutrition care related policies and procedures,
- To promote outcomes based research, and
- To generate recommendations for future research.

## Ways the 2007 EAL can be used in practice-

- To provide evidence based practice regarding the use of medical food supplements, honey, arginine, glutamine, and antioxidants for the oncology patient,
- To practice evidence based nutrition interventions for breast, colorectal, esophageal, head and neck, hematological, lung and pancreatic cancer patients, and
- By using the Oncology Toolkit (which has care recommendations based on the EAL) for your patient's care.