Malnutrition with aging continues to be a focus area, and each year we learn more about the complexity of early recognition and effective treatment. In 2016, it would be wonderful to see fewer seniors experiencing malnutrition. Unfortunately, we currently see increasing rates and a staggering number of malnourished elderly adults. One in three patients who are admitted to the hospital is affected by this condition. Patients diagnosed with malnutrition have a length of stay three times longer than those who do not arrive in a state of malnutrition. Patients who are malnourished prior to undergoing surgery have a four times higher risk of developing a pressure ulcer during the healing process as well. The annual burden of disease-associated malnutrition in the United States is currently an overwhelming $156 billion.

This article will address some of the causes and consequences of malnutrition, along with suggestions for proactive screening/assessment and treatment. Proactive interdisciplinary involvement of healthcare providers, involvement of the resident and family members, along with proper transitional care is essential in making a
FOCUS ON PROACTIVE SCREENING, ASSESSMENT AND TREATMENT FOR MALNUTRITION

positive difference in quality of life and care for our seniors.

MULTIPLE CAUSES OF MALNUTRITION WITH AGING

Malnutrition is diagnosed when certain changes in weight and functionality are present in an individual. There are a variety of causes of malnutrition, such as poor dentition, difficulty swallowing, decreased appetite, and lack of access to foods for adults on a lower income, which can result in reduced intake of food and nutrients. Over time, this leads to fat loss and, even more importantly, muscle loss due to poor nutrient intake of vitamins and minerals. All of these factors combined over a period of time can lead to malnutrition.

For a person experiencing malnutrition, the most common health problems include unintentional weight loss, fatigue, muscle weakness, loss of strength, poor memory, depression, anemia, and a weakened immune system. It is also possible for an individual experiencing weight gain to be malnourished from consuming a diet of low nutrient but high calorie foods, which leads to fat gain while muscle is being lost.

BRINGING ATTENTION TO THE ISSUE

Identifying Those At Risk: Validated Screening Tools

Older adults comprise an increasing percentage of the population who disproportionately experience functional decline and increased health services utilization. Identification of modifiable risk factors that may impede healthy aging processes and increase the use of health services is important to improve outcomes.

A study of aging conducted at the University of Alabama looked at admissions and mortality in community-dwelling adults and included more than eight years of follow-up.

The study pointed to one such modifiable factor—nutritional risk. Many programs targeting older adults with nutritional needs already exist, including the federally funded Older Americans Act services such as home-delivered and congregate meals, state-level programs for nutritionally at-risk older adults, and Medicare policies that support nutrition counseling for diabetes and renal disease. It was noted that the efficiency of these programs and their ability to curtail nutritional risk should be examined in future work.

Additionally, the study findings highlighted the potential value of routine nutritional screening of all older adults. The DETERMINE checklist or a similar tool may be used in community-based settings and in primary care clinical settings to inform physicians, nurses, dietitians, social workers, or other practitioners of patients’ or clients’ need.
Continued from page 15

for assistance with their nutritional health and related physical or social factors.

Increasingly, hospitals and nursing facilities are now screening newly-admitted patients and residents for malnutrition or for being at high risk of malnutrition. These screenings generally include several key questions. These include inquiring about recent weight loss—with an indication of how much weight they have lost in what span of time—as well as changes in appetite. If the patient answers positively to these questions, they may be at risk for malnutrition and will be referred to a Registered Dietitian to assess their weight status and whether or not malnutrition might be present. Some screening tools that have been validated can be seen in Table 1.

Diagnosing Malnutrition

Malnutrition or “undernutrition” in the aging population is often unrecognized and untreated, even in the hospital or nursing facility setting, despite being a prominent risk factor for increased rate of complications, longer hospital stays, higher readmission rates, and increased mortality. This is primarily due to the historical lack of evidence-based criteria used to diagnosis malnutrition and the inconsistent approaches used to determine adult malnutrition.

In 2009, the Academy of Nutrition and Dietetics and the American Society for Parenteral and Enteral Nutrition collaborated with the European Society for Clinical Nutrition and Metabolism to design an etiology-based approach to diagnose adult malnutrition. Additional work then continued to develop characteristics to improve the diagnosis of malnutrition.

In 2012, the article *Consensus statement of the Academy of Nutrition and Dietetics/American Society for Parenteral and Enteral Nutrition: characteristics recommended for the identification and documentation of adult malnutrition (undernutrition)* was simultaneously published in the May 2012 issues of the Journal of the Academy of Nutrition and Dietetics and the Journal of Parenteral and Enteral Nutrition.

**Table 1. Validated Nutrition Screening Tools**

<table>
<thead>
<tr>
<th>TOOLS</th>
<th>SCREENING POPULATION</th>
<th>WEBSITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MiniNutrition Assessment SF</td>
<td>Identifies individuals aged 65 who are malnourished or at risk for malnutrition</td>
<td><a href="http://www.mna-elderly.com">http://www.mna-elderly.com</a></td>
</tr>
<tr>
<td>Malnutrition Universal Screening Tool (MUST)</td>
<td>Identifies adults who are underweight and at risk of malnutrition</td>
<td><a href="http://www.bapen.org.uk/must_tool.html">http://www.bapen.org.uk/must_tool.html</a></td>
</tr>
</tbody>
</table>
| Short Nutritional Assessment Questionnaire (SNAQ) | • Identifies patients at risk for malnutrition  
  • SNAQ for patients in hospital  
  • SNAQRC for older adults in care home or residential setting  
  • SNAQ65+ for 65+ in community | http://www.fightmalnutrition.eu/fight-malnutrition/screening-tools/       |
| Simplified Nutritional Appetite Questionnaire (SNAQ) | Identifies risk for significant weight loss within 6 months for older adults in community and/or residential care settings | http://www.fightmalnutrition.eu/fight-malnutrition/screening-tools/snaq-tools-in-english/ |
The Academy of Nutrition and Dietetics (the Academy) and the American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) recommended that a standardized set of diagnostic characteristics be used to identify and document adult malnutrition in routine clinical practice. An etiologically-based diagnostic process that incorporated a current understanding of the role of the inflammatory response on malnutrition’s incidence, progression, and also resolution was proposed. Universal use of a single set of diagnostic characteristics facilitates malnutrition’s recognition, improves accuracy of the estimates of its prevalence and incidence, helps guide interventions, and influences expected outcomes.

Since there is no single parameter that is definitive for adult malnutrition, identification of two or more of the following six characteristics is recommended for diagnosis:

- Insufficient energy intake
- Weight loss
- Loss of muscle
- Loss of subcutaneous fat
- Localized or generalized fluid accumulation that may sometimes mask weight loss
- Diminished functional status as measured by hand grip strength

This standardized approach will help to more accurately predict quality of life and care, along with costs associated with prevention and treatment of malnutrition.

**Focus on Malnutrition in 2016**

So in 2016, let’s make a difference in proactive screening, assessment, intervention, and follow-up related to malnutrition. This is possible through review and implementation of some integral systems and processes in both hospitals and nursing facilities, such as:

- Prompt nutritional screening through use of a validated nutritional screening tool along with a defined screening process.
- Timely referral to appropriate healthcare professionals for those having a diagnosis of malnutrition or being identified at high nutritional risk (i.e. Registered Dietitian for nutrition assessment and medical nutritional therapy, Nutritional At Risk Committee, Certified Dietary Manager for Food/Nutrition/Dining preferences and needs, and others as appropriate).

- Completion of a Comprehensive Nutritional Assessment for those with a diagnosis of malnutrition or identified at nutritional risk.
- Interventions developed based on patient/resident informed choices that are promptly implemented.
- Follow-up for effectiveness of interventions and any changes in conditions that might warrant a different approach.
- Review of current processes and systems to identify patients and residents with or at risk for malnutrition. Include all appropriate healthcare disciplines and agree to a facility-wide program.
  > Identify the role of all healthcare professionals.
  > Coordinate care transition and discharge planning with providers in the community related to nutritional status.

**Continued on page 18**
• Train all appropriate staff on the facility nutritional at risk program.
• Review Quality Measures, Data and Statistics that reflect current status of prevention and management of malnutrition in your facility. Incorporate the data into the facility Quality Assurance Performance Improvement to track progress.
• Review your Food/Nutrition and Dining Programs for inclusion of Person-Centered Care in your menus, dining, modified diets, and overall satisfaction.
• Start now (early in 2016) so you can track improvement over the year.

CONCLUSION
Bringing together members of the facility team (e.g., physicians, registered dietitians, certified dietary managers, nurses, pharmacists, therapists, etc.) to focus on prevention and management of malnutrition will result in providing high-quality, cost-effective nutrition care. In 2017, let’s look back at 2016 as the year we truly improved prevention, diagnosis, and treatment of adult malnutrition.

REFERENCES
• Buys DR, Roth DL, Ritchie CS, et al. Nutritional Risk and Body Mass Index Predict Hospitalization, Nursing Home Admissions, and Mortality in Community-Dwelling Older Adults: Results From the UAB Study of Aging With 8.5 Years of Follow-Up. The Journals of Gerontology Series A: Biological Sciences and Medical Sciences. 2014;69(9):1146-1153. doi:10.1093/gerona/glu024.
• Dietetics in Health Care Communities (DHCC), Dietetic Practice Group of the Academy of Nutrition and Dietetics, Pocket Resource for Nutrition Assessment. 2013.

Brenda Richardson, MA, RDN, LD, CD, FAND is a lecturer, author, and consultant. She works with Dietary Consultants Inc. in business relations and development, and is president/owner of Brenda Richardson Associates, Inc.
brendar10@juno.com

Learn More and Order at www.ANFPonline.org/market

Analyze Workflow Development for Foodservice Operations

Online Course | 5 Hours CE

Analyze Workflow Development for Foodservice Operations is a 5 hour CE course designed to prepare learners to be equipped to describe workflow development—both human and material. Learners will also be able to investigate motion economy in their own facility, and summarize employee attitudes about change.