

Nutrition: Meeting the Needs of the Elderly

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Nutritional needs change throughout life. For the elderly, these changes may be related to normal aging processes, medical conditions, or lifestyles. Assessment of nutritional status is essential for preventing or maintaining a chronic disease and for healing. Knowing the causes of changing nutritional needs and dietary preferences is needed to understand a patient's nutritional status. In order to meet the nutritional needs, consideration must be given to more than just diet.

Age-Related Changes and Nutrition

As people age, multiple changes occur that affect the nutritional status of an individual. Sarcopenia, or the loss of lean muscle mass, can lead to a gain in body fat that may not be apparent by measuring body weight. It may be more noticeable by loss of strength, functional decline, and poor endurance. This loss also leads to reduced total body water content (Tabloski, 2006). Another common loss related to aging is changes in bone density, which can increase the risk for osteoporosis.

Many changes occur throughout the digestive system. A decrease in saliva production—xerostomia—and changes in dentition alter the ability to chew and may lead to changes in food choices. There is a decrease in gastric acid secretion that can limit the absorption of iron and vitamin B12. Peristalsis is slower and constipation may be an issue because fluid intake is decreased. Appetite and thirst dysregulation also occur, leading to early satiety and a blunted thirst mechanism.

Sensory changes affect the appetite in several ways. Vision loss makes shopping, preparing food, and even eating more difficult. Diminished taste and smell take away the appeal of many foods and may lead to preparing or consuming food that is no longer safe.

Many other factors that are not necessarily part of the normal aging processes, but are often related to aging, create changes in appetite, what foods are chosen for meals, and the overall nutrition of the individual. Sedentary lifestyle, social isolation, loneliness, or depression can lead to malnourishment. Medications can also change how nutrients are

absorbed or how food tastes. Poverty and cognitive impairment are other issues that may affect eating habits and food choices.

Changes in Nutritional Needs

The overall nutritional requirements of the older adult do not change. What does change is the caloric intake. Because of the loss of lean muscle mass, the overall caloric intake requirement decreases while the need for other nutrients remains relatively unchanged. This makes eating nutrient-dense foods even more important for older adults. The nutrient requirements for older adults include increased intake of vitamins D, B12, and B6 and calcium. Of these, vitamin B12 is recommended exclusively to those over the age of 50 as a supplement because of the decreased absorption rate. Vitamin B12 deficiency can be responsible for depression, neurological disorders, and macrocytic anemia.

Protein is a nutrient that is often thought of as one to increase in aging. Unless the older adult requires additional protein for healing and strength, this is not necessarily the case. Because of the overall decrease in muscle mass, the recommended daily allowance does not suggest increasing protein requirements in the elderly.

Tufts University developed a Modified MyPyramid for Older Adults that was published in the January 2008 issue of the *Journal of Nutrition*. This pyramid emphasizes eating nutrient-dense foods, the importance of fluid intake, and activities that may be typical of the older age group. The modified pyramid also suggests that supplements (for nutrients such as calcium and vitamins D and B12) may help people meeting their nutritional needs when food alone does not yield adequate amounts. More information on the Modified MyPyramid for Older Adults can be found at www.nutrition.tufts.edu/docs/guidelines.

Assessing Nutritional Status

A comprehensive assessment of nutritional status includes anthropometric measurements, laboratory values, physical exam, and patient history. Anthropometric measures include height, weight, body mass index, body fat

measurement, muscle mass measurement, and body mass index. Laboratory values should include albumin, retinal-binding prealbumin, transferrin, complete blood count, serum folate, vitamin B12, and cholesterol. A diet history is helpful if there is good 24-hour recall or a food record for 3 days leading up to the exam can be completed.

The Hartford Foundation recommends the Mini Nutritional Assessment as a basic screening tool. This can be found on the Hartford Institute for Geriatric Nursing Web site (www.hartfordign.org) under “Try This.” There are other tools to assess areas that affect diet and nutrition including the Geriatric Depression Scale, the Mini Mental Exam, and the Katz Index. Keep in mind that part of determining diet intake is the ability to obtain, prepare, and eat food. Knowing the financial status of the individual is also important in planning interventions. For community-dwelling seniors with limited support, these items may help explain the results found in the Mini Nutritional Assessment.

Conclusion

In order to understand the dietary needs of the older adult, it is important to know what the basic requirements of the healthy older adult are. A comprehensive assessment includes a lot more than just the basic nutritional assessment and should take into account the overall physical, mental, and psychosocial status of the person. This will lead to a better understanding of how to realistically meet the nutritional needs of the older adult. 

References

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