

The Art and Science Of Nutrition for Healthy Aging

JANICE L. RAYMOND, MS, RDN, CSG

“It seems to me that our three basic needs, for food and security and love, are so mixed and mingled and entwined that we cannot straightly think of one without the others.”

— M.F.K. Fisher, *The Art of Eating*

This statement by the famed food writer M.F.K. Fisher sums up the philosophy of nutrition care at Providence Mount St. Vincent, a senior care community in Seattle. Nutrition is a science and an art. Yes, it is necessary for human life, but it also gives comfort; it is culture and it is tradition. Each of these pieces is important to consider in the discussion of food and nutrition for older people.

THE SCIENCE

As the body ages there are changes that occur that affect our nutritional needs and our ability to eat and enjoy foods. These changes, like aging itself, are very individual in how and when they appear. One of the most noticeable changes is a decrease in metabolic rate and as that occurs less energy, in the form of calories, is needed. This is attributed, at least in part, to the decrease in muscle seen as we age. A decrease in muscle mass can be somewhat prevented by exercise and diet, specifically by eating enough protein.¹ Loss of muscle means loss of strength and mobility, the two factors most associated with becoming debilitated.²

Recent studies have shown that protein intake, independent of exercise, promotes maintenance of muscle mass, although the combination of both is most effective in preventing muscle loss. Previous recommendations for protein intake for adults was 0.8-1.0 gm/kg of body weight, but emerging evidence indicates that the optimal amount to prevent muscle loss is higher at 1.2-1.5 gm/kg of

body weight. Paula Gross, a registered dietitian at Providence Mount St. Vincent, explains that this means “a 150 pound woman would need at least 90 grams of protein a day.” (This is the equivalent of about three average meat servings and two glasses of milk.) Aside from loss of muscle, the decreased calorie needs of older people is attributed to less activity.³ Energy expenditure decreases with advancing age at a rate of about 150 kilocalories per day per decade, which is not a huge number so increasing activity level can offset this decrease.

There are changes in the gastrointestinal tract as a person ages that have been characterized as “slowing down.” Gastric motility changes result in feeling full longer and feeling bloated more frequently. There is also evidence that stomach acid secretion decreases with age and contributes to digestive problems. Constipation is a functional gastrointestinal disorder that becomes more prevalent as we age. Delayed bowel transit has been described as a cause of constipation associated with aging, but this has been subject to



some challenge because of the numerous secondary causes of delayed transit time that are more common in older people such as medication use, endocrine and metabolic disorders, inadequate fluid intake and decreased activity.

Dry mouth also has been reported to be a more common problem among older people. It's painful and causes difficulty eating and swallowing. This condition occurs for a variety of reasons. According to the American Dental Association, output from the major salivary glands does not undergo a clinically significant decrease in healthy older people. Some studies have shown age-related changes in saliva composition, but other evidence shows age-stable production of salivary electrolytes and proteins in the absence of major medical problems and medication use. Clinicians should not attribute complaints of a dry mouth and the lack of saliva to age alone.

Salivary disorders in the aging population usually are caused by systemic diseases and their treatments. Numerous medical conditions (diabetes, Alzheimer's disease, dehydration), medications (both prescription and non-prescription), head and neck irradiation and chemotherapy can cause or contribute to salivary gland dysfunction.⁴ Salivary glands are vulnerable to the deleterious effects of all of these conditions that are also more common in older adults. Lack of saliva can make swallowing more difficult, but actual dysphagia (diagnosed swallowing disorder) is generally related to neurological disease or stroke.

So aging is rarely the sole cause of decline, dysfunction and disability. It is instead the increased incidence of disease and the treatment of disease that can have an additive effect over time. These conditions result in the changes that we must accommodate to maintain good nutritional status and to decrease the symptoms of disease and, most importantly, to continue to enjoy food.

THE ART OF NUTRITION

So how do we use this science to care for people in our long-term care communities? Start with considering every person as unique and approaching their nutrition care not as a specific diet or diagnosis, which has long been the practice in health care facilities. That said, in an environment with

older people who need the extra care provided by assisted living or skilled nursing care, there are some menu accommodations that are helpful and some that are actually mandated due to regulations. It is important to provide a base menu that meets the U.S. dietary guidelines for sodium for the general adult population of 2300 milligrams (this is similar to the American Heart Association recommendation). This is relatively easy to accomplish with made-from-scratch cooking but requires much more diligence if the food service relies on pre-made processed foods that tend to be high in salt. The base menu of unprocessed healthy foods at Providence Mount St. Vincent has allowed the dietitians to work with residents to create individualized diet plans while eliminating therapeutic diets aimed at specific diagnoses like heart disease, kidney disease and diabetes. Foods like bacon and ham that are perennial favorites of this population are not eliminated; they are marked as high sodium on the menus and the residents ultimately decide what they want to eat. A "heart healthy menu" option is offered that meets American Heart Association/American College of Cardiology recommendations.⁵ It is offered as a choice, not as a prescribed diet. The menu has less meat, more fish, vegetarian options and is higher

The major nutrition goal for long-term care residents is their ongoing enjoyment of food. But it is also important to prevent unplanned weight loss.

in fiber than our general menu. This option tends to be more popular in the rehabilitation unit and assisted living.

The major nutrition goal for long-term care residents is their ongoing enjoyment of food. But it is also important to prevent unplanned weight loss. The only actual therapeutic diet offered is one that adds calories to food called a fortified diet. This diet helps to get more calories into less food and can be very useful with those individuals eating very small portions. Adding extra gravy or sauce is a way to add calories and moisture to food and works when there is an issue with chewing ability or dry mouth. Another favorite way to

Food is so much more than sustenance at Providence Mount St. Vincent. It is incorporated into celebrations and activities, and sometimes the meal itself is the celebration or activity.

add calories that is also easy-to-chew is to offer avocado on sandwiches and salads. Avocados are high in fat and therefore high in calories.

Many health care institutions rely on canned commercial products as nutritional supplements. The philosophy at Providence Mount St. Vincent is “real food first,” and while many residents do need liquid calories and protein to supplement their diets because it is easier to consume, homemade milkshakes are offered rather than the highly processed commercial drinks. Milkshakes can be made lactose-free when requested by using soy milk or coconut milk instead of cow’s milk. Sometimes these shakes become a meal replacement; sometimes they are a snack. The dietitians do rely heavily on them when supporting someone who is not eating well.

CULTURE AND TRADITION

Food is so much more than sustenance at Providence Mount St. Vincent. It is incorporated into celebrations and activities, and sometimes the meal itself is the celebration or activity, as is the case with the Passport Dinners. These dinners celebrate different regions of the world and different cultures. They serve the important function of breaking potential monotony by creating surprise. At Christmas there is a house-wide party and dinner, during the summers there are BBQs on the patio with entertainment. Celebrating with

food in the long-term care population is so much easier when the burden of restrictive diets has been eliminated. Yes, there are a few people who require modified texture foods due to swallowing problems but there are very few. Whenever possible, foods of their choosing and celebratory foods are worked into their menus.

CONCLUSION

It is a privilege to serve those who for the most part are in their final home and living their final years. These are people who have had many years of caring for themselves and others. I consider it my job to ensure that they continue to feel empowered to make their own choices in how and what they want to eat, but to be there to offer advice when asked.

JANICE L. RAYMOND is the clinical nutrition director for Thomas Cuisine Management at Providence Mount St. Vincent in Seattle. She is also the editor-in-chief of the textbook *Krause’s Food & the Nutrition Care Process*, which is in its 15th edition.

NOTES

1. Ben Kirk, “Use It or Lose it: Muscle, Protein, Exercise and Healthy Aging,” a presentation at the 2018 Food & Nutrition Conference and Expo on October 21, 2018.
2. Denise K. Houston et al. “Protein Intake and Mobility Limitation in Community-Dwelling Older Adults: The Health ABC Study,” *Journal of the American Geriatrics Society* 65, no. 8 (2017): 1705-11. doi:10.1111/jgs.14856.
3. L. Kathleen Mahan and Janice L. Raymond, 2017. *Krause’s Food & the Nutrition Care Process*, 14th ed. (St. Louis: Elsevier, 2017).
4. Mahan and Raymond, *Krause’s Food*.
5. The American Heart Association’s Diet and Lifestyle Recommendations, <https://www.heart.org/en/healthy-living/healthy-eating/eat-smart/nutrition-basics/aha-diet-and-lifestyle-recommendations>.

JOURNAL OF THE CATHOLIC HEALTH ASSOCIATION OF THE UNITED STATES

www.chausa.org

HEALTH PROGRESS®

Reprinted from *Health Progress*, March-April 2019
Copyright © 2019 by The Catholic Health Association of the United States
