

Protein Tip Sheet

The Dietary Guidelines for Americans (DGA) provide nutrition recommendations tailored to each stage of life, offering age-specific guidance to help individuals meet their nutrient needs and support long-term health. Protein intake is an important nutrient for older adults due to their susceptibility of increased loss of lean muscle mass as they age. Adequate protein intake prevents sarcopenia and frailty later in life. Sarcopenia is the age-related loss of muscle, and frailty is age-related weakness and decreased ability to live independently. Adequate dietary protein is the main preventative factor for muscle loss and maintaining independence.

Older adults 60-70 years of age have a higher intake of protein than those 71 years and older. Among those 71 years and older, about 50% of women and 30% of men do not consume enough protein. As we age, it is found that many older adults do not process protein as efficiently, and adding more protein to meals daily helps increase the body's usage. As a practical guide, 25-30 grams of protein per meal is a good rule of thumb for senior nutrition program meal planning.

The quality of protein is also important. Consuming high-quality, nutrient-dense protein foods with no or limited added sugars, refined carbohydrates, or chemical additives is recommended. This includes unprocessed or minimally processed meats, poultry, seafood, eggs, and plant proteins.

Menu Planning Tips

- Include high-quality, unprocessed protein at every meal.
- Choose a variety of unprocessed protein sources (e.g., chicken, turkey, fish, shrimp, crab, etc.) with no or limited added sugars, refined carbohydrates, or chemical additives; add herbs and spices to increase flavor as desired.
- Avoid or limit highly processed meat products (e.g., hot dogs, sausage, deli meats, cured meats, etc.).
- Include a wide variety of protein sources from both animal sources (e.g., eggs, poultry, seafood, red meat) and plant sources (e.g., beans, peas, lentils, legumes, nuts, seeds, soy, tempeh, tofu).
- Use legumes (e.g., beans, peas, lentils) in soups, salads, and pastas.
- Include unsalted nut butters and variety of nuts and seeds as protein-rich snacks or meal additions.
- Bake, broil, grill, or roast when cooking rather than frying.
- Plan menus that feature different high-quality protein sources throughout the week. For example, casseroles, stews, and mixed dishes are good, cost-effective ways to provide variety while meeting the 1/3 DRI protein requirement per meal.
- Include dairy with no added sugar.

Protein

Food sources of protein often overlap with different nutrient categories, such as starchy vegetables and dairy. Two examples of this are legumes and milk. States often enforce policies that allow one of these food sources to count toward one nutrient category in a meal. It is recommended that the state unit on aging specify what foods count toward protein intake and other nutrient categories.

Example, Maryland Department of Aging: Legumes (beans and peas) may be considered part of the protein group OR the vegetable group, but not both groups simultaneously.

Meat/Proteins

Animal sources of protein foods include beef (red meat), chicken, fish, shrimp, crab, eggs, and turkey. In addition to protein, animal sources of protein often contain vitamin B12, iron, and vitamin D.

Including a wider variety of protein sources (animal and non-animal sources) helps increase food sources of calcium, vitamin D, and dietary fiber.

Meat Alternative Portion Size Equivalents

Non-animal sources of protein are often referred to as “meat alternatives.” Serving non-animal protein alternatives helps increase dietary fiber and decrease sodium in meals. Each meat alternative food listed below is equivalent to 1 ounce of a meat-based protein.

Protein source	Serving size
Nuts & Seeds	½ oz of nuts
	½ oz of seeds
	1 tablespoon of almond, cashew, peanut, or sunflower butter, or sesame paste (tahini)
Beans, peas, and lentils	¼ cup cooked beans
	¼ cup of baked beans or refried beans
	¼ cup (about 2 ounces) of tofu
	1 oz tempeh
	¼ cup soybeans
	1 falafel patty (2 ¼”, 4 oz)
	6 tablespoons hummus

Adapted from the National Institute on Aging (NIA) — [Healthy Eating as You Age: Know Your Food Groups](#)

Nutrition Education

Research suggests that the aging population requires 1.2-1.6 grams per kilogram of body weight of protein a day. Providing nutrition education to participants on the health benefits of adequate protein and consistent protein intake throughout the day can help participants to understand the importance of protein for healthy aging, to make healthier menu choices and to plan. Educating participants that each meal should include a high-quality, unprocessed protein source (either from animal or plant foods) helps reinforce the message in practical, actionable terms.

Calculating Protein Needs for the Aging Population:

For an older adult that is 160 pounds:

- Divide the weight by 2.2, that will be the weight in kilograms (kg) = 72.7kg
- Then, multiply 72.7 x 1.2 = 87gm protein
- Then multiply 72.7 x 1.6 = 116gm protein
- The older adult would need 87-116gm of protein a day

Some older adults, due to dietary needs, may have difficulty getting enough protein into their diet. Providing those older adults with meal replacement options and connecting them with nutrition counseling are great ways to ensure you are meeting the needs of those we serve.

Visit the [Nutrition and Aging Resource Center](#) and the [Aging and Nutrition Guidelines webpage](#) for more resources on nutrition counseling and education.

High-Protein Food Sources

Meat, Poultry, Eggs	Serving Size	Protein Content
Beef	3 oz	23 g
Chicken	3 oz	23 g
Egg, whole	2 large	12 g
Egg whites	2 large	7.2 g
Turkey	3 oz	20 g
Pork	3 oz	18 g
Seafood	Serving Size	Protein Content
Cod	3 oz	15 g
Salmon	3 oz	21 g
Halibut	3 oz	19 g
Tilapia	3 oz	22 g
Shrimp	3 oz	19 g
Tuna	3 oz	24 g

Nuts, Seeds, Soy Products	Serving Size	Protein Content
Almonds	1 oz	6 g
Beans	½ cup	7 g
Edamame	1 cup	17 g
Hummus	2 tablespoons	2 g
Peanut butter	2 tablespoons	7 g
Refried beans	½ cup	7 g
Tempeh	½ cup	15 g
Tofu	½ cup	10 g
Dairy	Serving Size	Protein Content
Cottage cheese	½ cup	13 g
Yogurt, plain, whole milk (full fat)	1 cup	~9 g
Yogurt, plain, low-fat	1 cup	9 g
Cow's milk, whole, low-fat, skim	1 cup	8 g
Calcium fortified soy beverage	1 cup	8 g
Cheddar cheese	1 oz	7 g

Adapted from [USDA Food Data Central](#)

Resources

[Dietary Guidelines for Americans](#)

[Nutrition and Aging Resource Center](#)

[Sarcopenia Defined and Diagnosis Criteria](#) (National Institutes of Health (NIH))

[Frailty Explained](#) (NIH)

[Healthy Eating as You Age: Know Your Food Groups \(protein food groups and ounce equivalents for older adults\)](#) (NIA)

[Nutrition Needs for Older Adults: Proteins](#) (Nutrition and Aging Resource Center)

[Nutrition Guidelines](#) (Nutrition and Aging Resource Center)

[Protein Consumption and the Elderly: What Is the Optimal Level of Intake?](#) (NIH)

[Protein Requirements and Recommendations for Older People: A Review](#) (NIH)

Disclaimer: All resources provided are from government websites