Aging and Sarcopenia

The effects of aging on our body begin earlier than we realize. Starting at about age 30, we begin to lose muscle mass and strength, and between ages 40 and 80 we lose between 30-50% of our muscle mass. Decreasing muscle mass not only affects the way we look, it also makes it more difficult to complete everyday activities like playing with our children or grandchildren, climbing stairs, putting groceries away, and participating in activities like hiking, biking, or sports.

This loss of muscle mass and strength is known as sarcopenia, and it is a major predictor of frailty, hip fracture, disability, and mortality as we age. Possible effects of sarcopenia include decreased muscle strength, problems with mobility, weak bones (osteoporosis), falls and fractures, decreased activity levels, diabetes, middle-age weight gain and a loss of physical function and independence that affects about 50% of the elderly population. **Often as we age we lose muscle mass and gain body fat, a condition called sarcopenic obesity**, which is a double-whammy on our health. The risk of disability is 1.5-4.6 times higher in people with sarcopenia than in older people with normal muscle strength, and the direct U.S. healthcare costs of sarcopenia are estimated at over $18 billion a year.

What you can do to prevent sarcopenia: It's well-established that regular physical activity that includes some type of muscle-strengthening exercise at least three times per week increases muscle size and strength, even as we age. Optimal protein intake combined with exercise leads to greater gains in muscle function. The **research recommends 25-30 grams of protein in each meal to prevent sarcopenia**. Eating a meal or snack that contains protein within 1 hour after exercise helps the muscles repair themselves and make gains in muscle mass.

What does 25-30 grams of protein look like?

- 3-4 ounces of chicken, turkey, fish, red meat, or pork is about the size of a deck of cards
- 4-5 ounces of seafood, or about 8 medium shrimp, or one 4.5 oz can of tuna
- 1 cup of cottage cheese or Greek yogurt
- 2 cups of regular yogurt
- 4 large eggs
- 1.5 cups of tofu

Optimum Vitamin D intake is also important to maintain muscle mass. The RDA for Vitamin D is 600 IU per day for everyone age 1 to 69 years, and 800 IU per day for people over age 70 or who are experiencing sarcopenia. Our body produces vitamin D when ultraviolet rays from sunlight triggers vitamin D synthesis in our skin. However, as we age our body produces less vitamin D, and a majority of elderly people have low blood levels of Vitamin D. Vitamin D is a fat-soluble vitamin that is naturally present in good amounts in salmon, tuna and mackerel and in small amounts in beef liver and egg yolks. Vitamin D is added to milk, most cold breakfast cereals, and other foods such as orange juice.

To prevent age-related sarcopenia, follow the tips on this page!

By Lynn Grieger RDN, CDE, CPT, CWC

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