



Resistance Train to Prevent Muscle Loss

By Sarene Alsharif, MPH

Published August 31, 2020

Reviewed July 2020



Huntstock/Thinkstock

When it comes to muscle: use it, lose it or build it! Muscle plays a crucial role in human health; it allows us to stand, walk, balance, lift and breathe. Building and maintaining muscle is important for both men and women, because strong muscles help reduce back pain, prevent falls and more. Registered dietitian nutritionists, personal trainers and physicians agree muscle mass is important for optimal calorie burning, dense bones and increased energy.

Consistent resistance training at all ages plays an important role in preventing both sarcopenia and osteoporosis. Sarcopenia is a slow muscle loss that occurs with aging. An individual that is not physically active can lose an estimated 3 to 8 percent of lean body muscle per decade after the age of 30. Sarcopenia contributes to loss of strength, mobility issues and disability, and falls are a particular concern for older adults with sarcopenia. Resistance training at least twice a week and consuming an adequate amount of high-quality sources of protein may help to slow or partially reverse the effects of natural, gradual sarcopenia.

Resistance training may help prevent osteoporosis, a condition characterized by weak, porous bones, which then become prone to fractures. Similar to sarcopenia, osteoporosis has a gradual onset, with inadequate nutrition and lack of physical activity being some of the risk factors. Adequate calcium and vitamin D consumption paired with sufficient physical activity, specifically resistance training and weight-bearing exercises, can help prevent osteoporosis, reduce severity of the disease or stop its progression.

Although resistance training strengthens and maintains the major muscle groups, it does not always equate to bulking up. Resistance training does not need to happen at the gym; in fact, it is easy to do anywhere. For best outcomes, the *Physical Activity Guidelines for Americans* recommend strength training two to three times a week, to the point at which it would be difficult to do another repetition. While some people may prefer weight machines, free weights are often a preferred method and can be used anywhere. When using weight machines, free weights or resistance bands, selecting the proper weight is crucial to improving strength and preventing injury. Set a target of eight to 12 repetitions and work up gradually to two to three sets.

If you prefer exercises that do not require weights, exercises that use your own body weight also are a good option. Pushups, squats, planks, hip lifts and dips are just some of the numerous equipment-free resistance training options. Yoga can also build muscle using body weight while improving flexibility and reducing stress.

Incorporating resistance training into a regular exercise routine is crucial for maintaining healthy muscles and bones while increased muscle mass can boost energy and metabolism.

Sarene Alsharif, MPH, is a self-employed nutrition educator and writer in Rockford, Ill.

© 2020 eatright.org. Academy of Nutrition and Dietetics, All Rights Reserved.