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I cover breaking news in medicine, med tech, and public health

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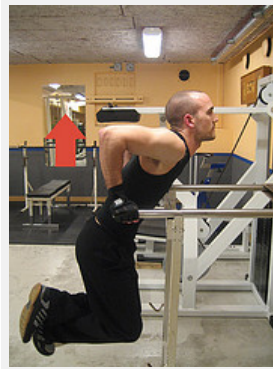
Why Strength Training May Help You Live Longer

Engaging in regular physical exercise or activities has been shown to promote good health, reduce your chances of developing many diseases, and assist you in living a longer, happier and healthier life. For the majority of older persons, “exercise” often consists jogging, walking, using an elliptical or a stair-climber, or pursuing other activities that help to elevate your heart rate and make you sweat.

However, strength training may actually have an equally if not more important role than aerobic

exercise as we age. In fact, as we approach the age of 50, strength or resistance training is crucial for maintaining the ability to have an active and independent lifestyle.

It turns out the the average 30-35 year old person will experience roughly a 25 percent decline in his or her muscle strength and tone by the age of 70-75, and up to a 50 percent decline approaching the age of 90. Simply doing aerobic exercise such as walking or light treadmill workouts will not be adequate to preserve muscle tone, bone health, balance and posture. If you are not engaging in strength or resistance training, the chances are high that you will lose strength and become less functional as you age.



Dips, Strength Training (Styrketräning) (Photo credit: Ulf Liljankoski)

Strength training can involve a number of approaches including using free weights, such as dumbbells or barbells, resistance or elastic bands that allow you to flex using your arms and legs, as well as ankle weights or vests and other special exercises that use your body weight to simulate resistance against gravity.

A simple strength or resistance workout can be as little as 10-15 minutes without significant stress or strain on your joints or extremities. Paying attention to proper form, while doing the exercises slowly and consistently on a regular basis is the most important aspect of any such program. It may take

1-2 months before you start to realize the health benefits, flexibility, ease of movement and potentially less muscle aching and joint pain. Joining a gym or health club may allow you to experience a number of equipment choices; however, using books or watching videos is another valuable option.

Its important to start slow and gradually in order to prevent injuries and to discuss your workout plan with your doctor, especially if you have coronary artery disease, diabetes or any chronic lung disease. Its not unusual to experience mild muscle soreness in the first 1-2 weeks, but if you have worsening muscle soreness or pain, its important to consult your doctor.

Its clear that strength training using weight machines, free weights or resistance bands can help build and preserve muscle mass and strength. However, more important is that strong muscles maintain and produce stronger bones. Having strong bones is a key way to reduce the risk of fractures secondary to osteoporosis.

Inactivity, poor nutrition, and age-related changes, all help to reduce bone mass at the rate of approximately 1% per year after age 40. As a result, after a minor fall, our bones are more fragile and thus likely to break after minor stress or tension.

Osteoporosis, the loss of bone mass, is an important concern as we age. Osteoporosis, which is responsible for more than two million fractures year, affects nearly 10 million people in the US (8 million women, 2 million men) Hip fractures are often the most serious concern of those with osteoporosis. Most studies have shown that nearly 60 percent of people who suffer a hip fracture never completely become independent again.

Research has clearly shown that strength training can help to reduce the pace of bone loss, while some studies have demonstrated that such training can actually help to build bone. This important role is quite helpful reduce the age-related decline in bone mass. Movements and exercises that place stress on bones help to form additional calcium deposits and stimulate bone forming cells. The combination of positive stress on bone from aerobic and strength training leads to stronger, denser and more functional bone.

Strength training also has positive benefits on bone maintenance and stability that eclipse the potential benefits of aerobic weight-bearing exercise. It targets the bones of the spine, hips, wrists, and ribs, which are common sites that fracture.

Finally, resistance workouts, especially those that include exercises focusing on balance and power, play an important role to increase strength and stability. This ultimately can increase confidence and well being, helping you to remain active, and decrease the possibility of fractures due to falls.

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