

A Cup of Health with CDC

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[Announcer] This podcast is presented by the Centers for Disease Control and Prevention. CDC – safer, healthier people.

[Matthew Reynolds] Welcome to A Cup of Health with CDC, a weekly broadcast of the MMWR, the Morbidity and Mortality Weekly Report. I'm your host, Matthew Reynolds

Did you know that as we get older, we lose some of the muscle mass in our bodies? Over time, we can lose muscle mass in places like our arms, shoulders, and legs. It's a natural part of the aging process, but there's some good news—it is possible to slow down, or even reverse that process with physical activity, exercise, and strength training.

According to a new study by the CDC, strength training can have benefits for everyone, especially older adults. Here to talk about strength training and how it may be able to help you—even if you are a hopeless couch potato—is Dr. Bill Kohl from the CDC's Division of Physical Activity and Nutrition. Thank you for joining us today Dr. Kohl.

[Dr. Kohl] Thank you, Matthew. It's good to be here.

[Matthew Reynolds] First of all Dr. Kohl, what is strength training?

[Dr. Kohl] Well Matthew, we oftentimes define strength training as muscle-strengthening activities that are really any exercises to help strengthen and support our muscles and connective tissues. Anything that loads or overloads our muscles can count as muscle strengthening activities, although we commonly think of strength training as lifting weights in a gym or other kinds of athletic environments, many other activities count and can help promote a healthy musculoskeletal system.

[Matthew Reynolds] It sounds like there's a wide range of options for people in strength training, but why is it so important?

[Dr. Kohl] Well Matthew, our study didn't actually look at health benefits associated with muscle strengthening activities; we were interested more in understanding the number of adults in the US who actually participate in such activities. We can however get an insight into the health benefits from other studies. Muscle strengthening activities are oftentimes overlooked as key parts of a good physical activity program. Muscle strengthening activities, also known as resistance training, helps promote health in a variety of ways. For example, research has taught us that such activities help adults maintain muscle mass, bone health, balance, injury prevention, and are particularly important as we age.

Muscle strengthening activities don't do much to promote heart health; instead they help primarily with our muscular and skeletal systems. Although we typically think of weightlifters being big men who lift heavy barbell sets in the Olympics, or athletes where strength is an important part of their sport, such as football or basketball, muscle strengthening activities can be done and should be done by virtually everyone, young and old, men and women, athletes or not...and importantly a gym is not needed.

[Matthew Reynolds] Are Americans doing enough strength training now?

[Dr. Kohl] Well Matthew, the nation's health goals, Healthy People 2010 goals, and national professional scientific organizations have set a goal that adults participate in muscle strengthening activities to help promote musculoskeletal health on 2 or more days each week. Our recent study showed that just under 20 percent of US adults reported doing such activities at that recommended frequency in 2004. Men reported such activities more frequently than women and younger adults, those under 35 years of age, were much more likely than older adults to report doing these kinds of strength training activities. On the positive side, there appears to have been an upward trend in participation in the US. In 1998, only 18 percent of adults reported strength training...so it looks like we're moving in the right direction. Overall however, we're still falling far short of the nation's goal which is to get at least 30 percent of all adults strength training at least two days each week.

[Matthew Reynolds] Well Dr. Kohl, what can happen if you don't do any strength training?

[Dr. Kohl] Well Matthew, as we age, we lose muscle mass and strength...some estimates are up to 30-40 percent loss in between our 20s and into our early 70s, across the age span. Additionally, bone mass and bone quality, two very important physiologic criteria, deteriorate across the life span as well. This loss in strength and skeletal support translates into impairments in our ability to function throughout our life span. Losses in function may be small to start, but do add up over time. Muscle strengthening activities that we've been talking about help to slow or prevent this loss...in some very old people it has been shown that muscle mass actually can be increased with strengthening activities. An extremely important message is that it's never too late to begin. Loss in muscle mass and strength over time prevents us from doing what we want to do physically and ultimately increases our risk of falls and injuries related to those falls. Strength training helps us to maintain our ability to live independently for as long as possible, something we all want to accomplish.

[Matthew Reynolds] What is the recommended amount of strength training for your average older adult?

[Dr. Kohl] Everyone can benefit from participating in regular strength training activities. Two times each week, focusing on major muscle groups will be of great benefit, particularly for older adults. For people not used to these kinds of exercises, starting out slow and working up to multiple repetitions for each exercise over a period of weeks is recommended. The CDC has produced a program called *Growing Stronger* that can be found on the CDC website that not only provides details on recommended amounts, but also types of strength training activities that older adults can do.

[Matthew Reynolds] What are some of the types of activities that could be considered strength training?

[Dr. Kohl] Well Matthew, as I said, you don't have to be an Olympic weightlifter or a professional athlete to benefit from muscle strengthening activities. Also, you don't have to join a gym. Activities that load up your muscles, such as gardening, heavy housework, and other common activities can be very helpful for our musculoskeletal system. Repetitive stair climbing is another great example of a muscle strengthening activity that doesn't cost anything but is very helpful to the large muscles in the legs and lower back. Yoga and other kinds of similar group fitness activities can be great. Even moving milk jugs full of water repeatedly can maintain strength in our arms and in our shoulders.

[Matthew Reynolds] Well thanks Dr.Kohl, for talking with us here today.

[Dr. Kohl] Thank you, Matthew.

That's it for this week's show. Don't forget to join us next week. Until then, be well. This is Matthew Reynolds for A Cup of Health with CDC.

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