

Sarcopenia

Sarcopenia. Doctors and physical fitness experts have been familiar with that term for a long time. Ordinary Americans, especially older people, soon will be. Why? Because as researchers are discovering, sarcopenia, the lack of muscle mass, a condition that typically accompanies aging, not only reduces the quality of life but apparently even shortens it.

"It's a big problem when we age because we not only lose muscle mass but also strength," says Dr. Robert Keith, an Alabama Cooperative Extension System nutrition and physical fitness specialist and Auburn University professor of nutrition and food science.

Over time, as the loss of muscle mass accelerates, seniors become less able to perform the day-to-day activities that were once taken for granted. In the worst cases, muscle loss is so severe that people are unable to rise out of chairs or walk any distance.

Older people require an adequate level of muscle mass just to be able to carry on with the routine activities associated with a normal life. But as researchers are learning, this may be only the beginning of their challenges. Other problems are associated with this loss. First and foremost is electrolyte potassium. Muscle mass is closely tied with body potassium content.

Researchers have discovered skeletal muscle comprises a reservoir for this electrolyte potassium. People with low muscle mass also typically have low body potassium content. "This can cause electrolyte imbalances and neurological problems," Keith says.

On top of that, most of the water in our bodies is stored in our muscle mass. "Skeletal muscle is almost three-quarters water," Keith says. "So people with large amounts of skeletal muscle have this large reservoir of water from which they can draw."

On the other hand, people with low levels of skeletal muscle may face major risks, especially when they are bordering on or already dealing with dehydration. "They lack this large reservoir of water and may even be more prone to dehydration and related problems," Keith says.

A growing number of researchers are realizing this for what it is — a serious problem — and are searching for solutions. They already know that blood flow to muscle tissue tends decline as people age. In some cases, medications may resolve this problem. But medical researchers also believe another solution may help: increased physical activity, especially through strength training.

"Through strength training, you make your muscles bigger but you also do something more," Keith says. "You're also allowing more blood to enter the muscle area — and with this blood come nutrients, hormones, including insulin, which enhance muscle function."

Strength training doesn't necessarily involve membership in a gym. "You can do it at home, and it can be as simple as alternately standing and sitting on a chair," Keith says, adding that these types of activities may be especially attractive options for less mobile seniors.

Whatever the case, seniors should be exploring ways to improve their muscle mass.

Research is showing that the efforts can pay huge dividends, even for people of advanced ages. One study revealed that fewer than 7 percent of physically active 85 year olds involved in a longitudinal study died by age 88, compared with 24 percent who were physically inactive.

"Losing muscle mass is a big problem, and if you are moving up through the years, you should take steps to maintain your muscle mass as best you can," Keith says.