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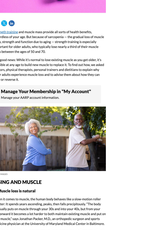
AARP Smart Guide to Muscle Health

Why muscle is critical to your strength – and how it's disappearing – as you age

By Kathleen Mithers, AARP | Medically Reviewed by Leigha Kelly
Published January 16, 2020



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Muscle tissue and muscle mass provide all sorts of health benefits. Regardless of your age, the because of sarcopenia — the gradual loss of muscle mass, strength and function due to aging — strength training is especially important for older adults, who typically lose nearly a third of their muscle mass between ages 30 and 80.

You get some "bonus" benefits from maintaining muscle as you age. Older people at any age to build muscle may be trickier. To find out how, we asked doctors, physical therapists, personal trainers and dietitians to explain why older adults experience muscle loss and to advise them about how they can slow or reverse it.

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AGING AND MUSCLE

1. Muscle loss is natural

When it comes to muscle, the human body behaves like a stone-rocker collector: It spends years accumulating, aside, then falls precipitously." The body gradually puts on muscle through your 20s and into your 40s, but from about 50 onward, it loses muscle at a rate of 1% to 2% a year, according to a review of research on sarcopenia published in the University of Maryland Medical Center in Baltimore.

Starting in later 40s, the average person loses approximately 8 percent of their muscle mass every decade, according to the Mayo Clinic. Between ages 70 and 80, that number is about 15 percent. According to Jay Dean, a physical therapist at the Rehabilitation Hospital in White Plains, New York, "Between ages 40 and 80, you lose almost 40 percent of your muscle." He adds that "That's muscle cross-section, that is, muscle's physiological function is strength, and that unfortunately declines at a faster rate than muscle size. Muscle size is the result of muscle mass."

2. Muscle loss is common

If you feel like you're weaker than you used to be, that's because you probably are, says Mindy Kelly, a registered nurse instructor for the National Academy of Sports Medicine and assistant professor of exercise science at Pennsylvania California in California, Pennsylvania.

3. Weight gain can amplify the risks of muscle loss

Most Americans are at their heaviest by the time they reach middle age, according to the National Institutes of Health (NIH), which says the average adult gains about 1 pound a year. Yet, at the same time, muscle is disappearing, or fighting and losing gains ages 40 to 70. All 4 percent of others are obese, according to the U.S. Centers for Disease Control and Prevention (CDC). With 30 percent of your muscle, "It's like carrying a 10-pound bag of potatoes."

"When we're older, we tend to be more sedentary, so the weight we gain ceases to be proportionate to our muscle," Dean explains. Dean, who is also a physical medicine and rehabilitation physician at Kansas City Bone & Joint Clinic in Overland Park, Kansas, and treasurer of the American Academy of Physical Medicine and Rehabilitation, says, "Unfortunately, we lose muscle and more weight up and over the regular health of muscle, and it's obvious.

4. Muscle loss can lead to fatal falls

Falls are the leading cause of death among adults 65 and older, according to the CDC. Falls are dangerous for older people, and sometimes deadly, because of falls. Research has says muscle weakness plays a major role in fall risk.

"There are so many older adults who cannot even get out of a chair without using their hands, and that is a sort of fall's risk. That's a guess that their legs are no longer strong enough to get them up," says physical therapist Dean. Falls are dangerous for older people, and sometimes deadly, because of fatalities. Research has says muscle weakness plays a major role in fall risk.

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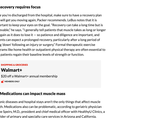

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MEDICAL ISSUES AND MUSCLE LOSS

5. Keep moving

While it's critical to grow and maintain muscle as we age, many older adults have conditions that make exercise in general — and strength training in particular — more difficult. That's why it's important to consult a doctor, physical therapist, or fitness professional before you begin an exercise program. Dr. Kelly says.

"Older adults may have arthritis, for example, or they may have tendonitis," she says. However, having a condition like arthritis doesn't mean you can't build strength. It means you might have to do it differently. "Movement of any kind ... would have the health and mobility versus doing nothing at all," Kelly says.

Giorgio Lalla, M.D., an orthopedic shoulder, knee and sports medicine surgeon in Fairfax, Virginia, and a fellow of the American Academy of Pain Medicine, says, "Movement and therapy exercises are some of the best treatments for arthritis. We commonly see patients who attribute their inability to exercise to their arthritis, but it is one of the most evidence-based treatments."

6. Strong muscles make strong joints

While some health conditions make strength training more difficult, maintaining muscle can help you avoid others. Muscle loss is linked to weakened and stiff joints, increasing the risk of injuries," Rylee says. Older adults with osteoporosis may need to avoid high-impact exercises and focus on strengthening muscle, which can help prevent bone loss and decrease the risk of injury. Weight-bearing exercises are good for individuals with this condition and can help prevent instances where falls and fractures are a concern."

Muscle health and joint health are closely related. "For example, one of the most common joints that people have trouble with is the knee joint," says Dean, who also specializes in sports medicine. "If you have a knee joint, the joint's Packer injury.

7. Chronic diseases can accelerate muscle loss

When you have a chronic disease, you might lose even more muscle at an even faster rate. Some medical conditions — having a heart disease, the diabetes or heart disease, for example — can make you lose muscle mass in an accelerated way, Dean says. "Some of the medical conditions that we see that lead to loss in muscle sarcomere are hormonal diseases like Addison's disease and hypothyroidism, neurological conditions like multiple sclerosis and Parkinson's disease," he says. Chronic kidney infections like hip, joints diseases and meningitis, and cancer.

8. Strength fades during hospital stays

Extended hospital stays can be disastrous for muscle health. In a 2018 issue of the journal Geriatric Nursing, for example, researchers reported a 2 to 3 percent decline in muscle mass per day among hospital patients on bed rest. Immobile older adults can lose up to 10 percent of their muscle mass during a week-long stay, the study found. Even if you're going to be in the hospital for any reason, I would make an effort to try to get up as much as possible — as long as you're cleared by the medical staff and can do so safely," Packer says.

9. Recovery requires focus

Once you're discharged from the hospital, make sure to have a recovery plan that will get you moving again. Packer recommends. Lalla notes that it is important to consult with your doctor, physical therapist, or other health care professional. "In our case, "I generally tell patients that muscle takes a long or longer to regain as it does to lack it — so patience and diligence are important and underrated," he says. Dean recommends that you start with a program of being down following an injury or surgery." Formal therapeutic exercise programs the home health or outpatient physical therapy are often essential to help patients regain their baseline levels of strength or function.

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10. Medications can impact muscle mass

Chronic diseases and hospital stays aren't the only things that affect muscle health. Medications also can be problematic, according to geriatric physician Steve Sacco, M.D., president and chief medical officer with HealthQ Clinics, the provider of primary and specialty care services in Arizona and California.

"There are many medications across the spectrum that can cause muscle weakness or muscle loss," Sacco says. "Statins are a very common one. And I will tell you, there are many to list," Sacco says. Among the many medications that can potentially cause muscle weakness or decreased bearing drugs like statins and fibrates, corticosteroids such as prednisone, and some of the medications used to treat Parkinson's disease and Alzheimer's Disease. Be sure to read about the side effects with your prescriber or pharmacist and talk to your doctor about maintaining muscle while on these medications.

11. Weight loss drugs can be muscle-loss drugs

Weight-loss drugs may help patients who take popular new weight-loss medications, such as Ozempic and Wegovy, lose weight, but they are controlled side effects. If you do use one of these medications, be sure to talk to muscle building regimen to your doctor. Dr. Sacco says. Without a regimen, researchers are working on variants of weight-loss drugs that can reduce or prevent muscle loss, and still the weight-loss prescription drugs that can help muscle can be problem.

12. Hormones play a role

If you're wondering why sarcopenia happens, hormones probably are a major culprit." As the years go through you lose muscle consistently over time. But hormones are a major factor in that," Dean says. Hormones are chemical messengers that flow into and dropping muscle. And in those of men and women, the hormones that starting at age 40 Packer says. "That might have to do with testosterone in men and estrogen in women. Both of those hormones play a role in the maintenance of muscle function. ... And it's harder to gain muscle back when your hormones are against muscle.

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HOW TO BUILD AND MAINTAIN MUSCLE

13. Do strength training every week

You've never too old or too weak to start strength training, according to Nash. "Even 80-year-olds and 90-year-olds can build muscle as long as you are consistently challenging your muscles," she says. To maintain optimal muscle health, the National Institutes of Health recommends that adults aged 65 or at least two or three days of strength training exercises per week. "By incorporating regular strength training into their routine, older adults can significantly improve their muscle health, physical function and overall quality of life," Rylee says.

14. Target the whole body

When you maintain muscle, you simultaneously think about big, lasting arm or leg muscles, and smaller muscles. Strength training is important for all muscles. "Muscle is all over the body," Dr. Pam says. "So, you want to exercise the whole body. And if you want to do a really good full-body workout, that's a great way to do it," she says. Dean says, "Muscle is muscle, but pay attention upon to start of your muscles. Packer says focus on your biggest muscle groups, which are your glutes, quads, lats and chest. "You can get in a good workout with those muscles," he says. Dean says, "Focus on the gross motion of the smaller ones." Yes.

15. Focus on fatigue

If you're new to strength training, it's crucial to work with a professional who can teach you the proper form to avoid injury. However, understand that "sets" does not necessarily mean "comfort." In fact, weight training only does the trick if you push yourself to a point of some exertion — and then determining when you've reached that point. Dean says. "Fatigue is a good sign," he says. "If you don't feel your muscle fatigue, you're not going to do a progression each week by increasing the load."

16. Understand sets and reps

Strength training is a difficulty consists of reps and sets. Reps is the number of times you do a particular exercise without rest. Sets is the number of rounds you complete it that exercise.

"Doing fewer reps with heavier weights increases intensity, while doing more reps with lighter weights decreases intensity but improves endurance," Rylee explains. "For an older adult new to exercise, I highly recommend starting with lighter weights and more reps to build muscle endurance." Dean says, "It should be performed at a slow, controlled tempo, focusing on proper movement patterns and maintaining dead form. This focuses on the smaller muscles of the exercise and ensures safety." To build muscle mass and strength over time, increase weight as you progress and perform fewer reps per set — or to perform a consistent weight, for example, or set to fewer reps with a heavier weight.

17. Choose your exercises wisely

For any muscle you want to work, there are many strength training exercises to choose from. Physical therapist and yoga instructor Lara Hartmann, founder and CEO of Yoga Therapy Rx, in Los Angeles, recommends yoga and Pilates exercises for the upper back and shoulders, glutes, pushups and planks and legs for the core and lungs, squats, lip bridges and deadlifts for the legs and glutes. Whatever you choose for your muscle, you should perform exercises that work the multiple muscle groups at the same time, advises Nash. For example, instead of doing a bicep curl, which only works the bicep muscle, you could do a standing bicep curl that works bicep muscle and arm muscles.

18. Pick between free weights, machines, bands or bodyweight

Whether you work out at home or at a fitness club, a well-equipped gym can provide a variety of options for muscle. The Mayo Clinic recommends, for example, a 2010 study in the journal Medicine & Science in Sports Exercise, Medicine and Rehabilitation compared the use of free weights the barbells and dumbbells and machines. The study found no significant difference in muscle mass or strength or muscle mass between the two and concluded that the choice comes down to "individual preference." A 2019 study in the journal JAGE Open Medicine Research and Practice found that strength training with elastic resistance bands produces "similar strength gains to conventional resistance training."

19. Rest and recover

For optimal strength gains, Rest-case you should spend at least 24 hours — and ideally, 48 hours — between workouts, according to Dean. "Muscle tissue is what we're stimulating through, and in creating small micro-tears in the muscle. That's how the muscle is stimulated to grow bigger and stronger," she says. "So, we want to give that time to heal." Dean says, "Muscle tissue is doing at one time again with your muscle."

Rest also helps prevent overuse injuries such as tendinitis or stress fractures, which may lead to injuries that can slow older adults to recover. Time and rest. Rylee, who adds that good recovery includes light activity — not zero activity. "Rest days are important, but it doesn't mean you should be sitting on the couch," she says. "Light activity such as walking or yoga can help increase blood flow to the muscles, aiding in the removal of waste products and speeding up the healing process."

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20. Embrace aerobics

Aerobic exercise and strength training are perfect bedfellows. In 2011, for example, a study in the journal Medicine & Science in Sports and Exercise demonstrated that muscle-strengthening exercises and aerobic physical activities — walking, swimming, water aerobics, cycling and dancing — lower the risk of cardiovascular disease and premature death individually, but even more better in combination.

Aerobic exercise plays a significant role in overall muscle health and strength, even though it's often associated more with cardiovascular benefits," Nash says. Rylee, Pilates instructor, aerobics which refuses muscle with the weight and resistance of your own body. Pilates is a low-impact, resistance-based exercise which allows muscles to perform for longer periods without fatigue. Finally, it helps with weight management, which reduces the strain on muscles and joints and lowers the risk of injury. Nash says. Aerobic exercise, for example, for older adults should do at least 150 minutes of moderate intensity aerobic activity per week.

21. Stretch for success

Stretching is "crucial" for maintaining muscle health and overall physical function, according to Rylee. "Stretching increases muscle flexibility, which is essential for maintaining full range of motion in joints. This can help prevent injuries and improve overall mobility and ease of movement," she says. Dean says, adding that regular stretching can also help relieve the tension and soreness that often follows strength training, reduce back pain and other discomfort associated with muscle tension, and improve blood circulation to muscles, which can facilitate recovery. Rylee, due to stretch your major muscle groups at least two to three times per week. Rylee says.

22. Find your balance

If you want stronger muscles, you need better balance, according to Rylee, who says balance helps maintain proper alignment and posture, which in turn enhances physical performance and reduces the risk of injury.

"Good balance ensures that muscles are used efficiently and correctly during movements, which maximizes the effectiveness of strength training exercises, incrementally improving your balance using simple exercises like standing on one leg. Start by holding onto something for support, if necessary, then progress to balancing without assistance. Eventually, incorporate unstable surfaces like a balance pad or foam pad," Rylee says.

23. Stand up for yourself

If you can't yet ready yourself to start resistance training, you can still improve your strength by making small and impactful adjustments to your lifestyle. Dr. Sacco said and notes. "Physical sitting can cause tight hip flexors, weak glutes and a forward head posture, which can contribute to muscle imbalances and other movement compensations, such as forward shoulders and a forward "head posture," says Rylee, who adds that standing engages more muscles — particularly in the legs, core and back — compared to sitting.

Standing also promotes better posture, which reduces the risk of musculoskeletal issues and enhances overall muscle engagement. Rylee, which reduces the risk of tightness and stiffness. "Set reminders to stand up and move around every 30 to 60 minutes. Even short breaks can make a big difference," Rylee says.

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WHAT TO EAT AND DRINK

24. Protein, protein, protein

When it comes to building and maintaining muscle, exercise is only part of the equation, but as important as the basics are our — especially protein. Protein is the building block of muscle, according to the Academy of Nutrition and Dietetics. "Protein supports the immune system and bone health, and maintains, repairs and helps build muscle mass. It also helps you feel satiated, which can be beneficial for weight management and muscle gain," says Rylee, who adds that "Protein is important for everyone, but it's even more critical for people who are aging."

According to the U.S. Department of Agriculture's "Dietary Guidelines for Americans," women and men aged 51 and older should consume at least 46 grams and 56 grams of protein, respectively, every day.

25. Pop protein-peak workout

Protein is important for muscle health, but it's most consequential that when you consume it. It's not to be thought that the best practice was to spread protein intake evenly throughout the day, but Dean research Dr. Kathryn Ritz," explains Dean, who says scientists recently found that muscle protein synthesis, or the body's ability to build muscle, is most efficient at one time. Many think that the best time to consume protein is after a workout, when muscle is most receptive to the nutrient. Dean says, "Protein that's loading up on protein during a single, protein-packed meal or a single snack does it throughout the day.

26. Load up on leucine

What makes protein so useful in an essential amino acid called leucine. Leucine is a building block of protein and is the most potent amino acid when it comes to muscle health. Look for sources that offer 2.5 to 3 grams of leucine per serving. An intake of at least 30 grams of protein can offer this," explains Nash. Leucine is found in all kinds of protein, including meat, fish, eggs, dairy, soy and legumes. Leucine — is, among the of these foods, is very rich in leucine. Dean says, "I'm a great source." It contains 2.5 cups of Greek yogurt topped with granola, 3 ounces of cooked salmon, and a cup of white beans, depending on the brand, is 1.5 cups of baked tofu, edamame or black beans.

27. Fill protein gaps with supplements

Because of reduced appetite, older adults often struggle to eat enough protein, Rylee says. "In such cases, protein supplements can be a convenient and beneficial tool to supplement," she says. Nash, who says whey protein generally provides a higher protein content and is more readily absorbed in the body, compared to plant-based options, such as pea protein. Protein supplements may also help manage muscle health, which is critical when it comes to strength and power, says," says Dean, who notes that creatine might also help enhance memory, improve balance and decrease the risk of falls in older adults. Consult with your doctor or dietitian to determine the right amount and type of creatine for your needs.

28. Consider creatine

Along with protein, bodybuilders who are trying to pack on muscle make sure they ingest creatine, an amino acid that their bodies produce on their own through supplements. But creatine isn't just for body builders. A 2019 study in the journal Nutrition Reviews found that creatine monohydrate supplementation may also benefit older adults by helping them maintain muscle vitality. "Creatine is well-researched when it comes to strength and power, says," says Dean, who notes that creatine might also help enhance memory, improve balance and decrease the risk of falls in older adults. Consult with your doctor or dietitian to determine the right amount and type of creatine for your needs.

29. Check your vitamin levels

Because nutrients like calcium, niacin, vitamin D and vitamin B12 also can impact your ability to build and maintain muscle, it's worth determining whether you're deficient in any of these nutrients. "Some of these nutrients might help," Dean's with your physician and registered dietitian nutritionist." Arnold says. "They can help you identify which micronutrients you may be deficient in and can help with testing and provide recommendations on foods and supplements."

30. Stay hydrated

Finally, if there's one simple thing you can do to optimize your muscle health at any age, it's drink water. "Water is essential for muscle contraction and within the body, supporting joints, preventing cramps and pulls and muscle tears," explains Arnold, who says dehydration can cause the body to cannibalize its own muscle for energy. Dehydration can also lead to muscle cramps, muscle tears and severe muscle soreness. Drink two and 2.5 liters of fluid every day. The Mayo Clinic recommends that healthy adult women, six or fluids throughout the day, including water, tea, coffee, milk, juice and other beverages. Water is the best choice, because it does not contribute calories. Tea and coffee are fine, but they can make you urinate more frequently, which can lead to dehydration if you don't drink enough water. Fruits and vegetables are also good sources of water.

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