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May 22, 2024

What in the World is Sarcopenia? And Why Should I Care?

Sarcopenia is the age-related progressive loss of muscle mass and strength. The main symptom is muscle weakness caused by atrophy, usually related to the natural aging process. Being physically active and eating a healthy diet can help prevent this muscle mass deterioration.

Why is this Important?

Our muscle mass peaks at age 30. After that point, you begin to lose as much as 3% to 5% per decade. We gradually continue to lose muscle mass and strength during our 40s and 50s, and at an even quicker rate past 60. Without strength training, people can lose up to 30% of their muscle mass between ages 50 and 70! Even if you have not been diagnosed with sarcopenia, it is important to understand the importance of maintaining our muscle mass, especially as we get older.

Losing muscle mass puts us at risk of:

- An increased chance of falling
- An impact on our balance and energy
- A loss of strength and mobility, which can eventually impact our ability to do things independently
- An increased risk of osteoporosis

When it comes to losing muscle mass, there are other risk factors aside from aging including:

- Physical inactivity
- Obesity

- Chronic disease such as COPD (chronic obstructive pulmonary disease), kidney disease, diabetes, cancer, and HIV
- Rheumatoid arthritis
- Insulin resistance
- Reduction in hormone levels (particularly testosterone, as men age)
- Malnutrition or inadequate protein intake
- Decrease in your ability to convert protein to energy
- Decline in the number of nerve cells sending messages from your brain to your muscles, telling them to move

The Importance of Protein

[Listen to this podcast](#) for a primer on protein and muscle mass.

Consuming the required amount of protein is a critical component of maintaining muscle mass. Did you know that 30% of men between 50 – 60 are protein deficient? For women, this figure rises to almost 50%!

While declining muscle mass is a part of aging, we are not helpless to stop it. The good news is we can build up our muscle mass at any age.

One of the core ways to build muscle mass is to eat the right amount of protein. The building blocks of protein are amino acids: there are 20 amino acids that combine to make proteins in the body. There are nine essential amino acids that your body *can't make on its own*, and therefore we need to eat foods that contain these critical components.

How Much Protein do we Need?

Research suggests that, on average, adults need 0.8 grams of protein per kilogram of body weight or, alternatively, 0.36 grams per pound. For example, someone weighing 150 pounds would need 54 grams of protein a day, and this is considered a minimum amount of protein. However, the more we exercise and the older we get (or both!) we need even more protein each day.

There are many different sources of protein. A main source of protein is meat, and it contains all nine of the essential amino acids. However, as we know, eating too much meat can elevate bad cholesterol and add fat to our diet.

Other protein sources include fish, eggs, dairy, Greek yogurt, beans, lentils, chickpeas, high protein grains such as farro and quinoa, nuts, seeds, spirulina (high protein algae in smoothies), and some vegetables. For vegetarians and vegans, getting enough protein, and getting all the essential aminos, requires careful planning.

Protein powders can come in handy; however, you need to check if all the essential amino acids are included. Whey powders are usually complete, but they may not be a preferred source for everyone. Double-check vegan protein alternatives.

Four Additional Ways to Maintain Muscle Mass

1. **Resistance training.** A consistent strength training routine builds muscle mass. Aim for two to three 30-minute sessions per week (always check with your physician first). There are many ways to perform strength training, including using dumbbells, resistance bands, weight machines, or your own body weight.
2. **Increase your Omega-3s:** Omega-3s are found in salmon, walnuts, and flaxseed and are anti-inflammatory. Inflammation causes muscles to break down, and consuming Omega-3s can improve the rate of muscle protein synthesis.
3. **Check your Vitamin D levels:** Vitamin D also helps with muscle protein synthesis, which helps build muscle strength. [Check out this ReFresh](#) to learn more about the importance of Vitamin D.
4. **Walk:** Walking increases your mobility and enhances blood flow. Aerobic exercise is also beneficial to your body's response to insulin, which helps with muscle repair. Even just taking a few 10-minute walking breaks during the day can help maintain muscle mass.

Wherever you are at, you can build up your muscle mass through enhancing both your protein intake and your activity, particularly through resistance training. Take care of your muscles so they can take care of you, and keep you strong, balanced, and energized well into your senior years.

Sources:

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A handwritten signature in black ink, appearing to read 'R. Morandini', with a stylized flourish at the end.

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If you would like to contribute or have ideas about what you would like to see in the ReFresh series, we would love to hear from you: contact rochelle@bcpvpa.bc.ca.