

# Ask Leyla: Does it matter whether I consume protein before or after exercise?



**Q:** I'm a 70-year-old man and I eat well and exercise. I'm curious about protein supplements. I drink a protein mix about an hour before I work out.

Is it better to use whey powder or a plant-based powder as my protein source to build and maintain muscle as I age? And should I drink my protein shake before or after exercise? Or maybe take some before and some after?

**A:** First of all, making sure you're getting adequate protein with your meals is of primary importance to maintaining lean body mass as you age. 1.0 to 1.6 grams of protein per kilogram of body weight (1 kg is 2.2 pounds) per day is generally the range. This is a vast difference from the Recommended Daily Allowance (RDA) for protein which is 0.8 grams per kg. This exists as a minimum amount to prevent muscle mass loss.

High Biological Value (HBV) protein—which for the most part is animal protein—is critical to ensure you're getting essential amino acids including the Branch Chain Amino Acids (BCAA) leucine, isoleucine and valine. Whey protein also contains the

BCAAs necessary to generate muscle growth and repair.

The timing of protein is important so that it's readily available to repair the micro tears in muscle caused by exercise—especially vigorous exercise. That window of opportunity is 45 to 60 minutes post exercise for the best benefit in terms up uptake of amino acids for repair. However, a review of this evidence was recently brought to light along with a compelling review that asserts if there is any effect of protein timing, it's relatively small. That indeed, if protein intake occurs anytime around exercise, there is still a benefit.

Bottom line: Get adequate protein daily to ensure retention of lean body mass.

To your health!

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