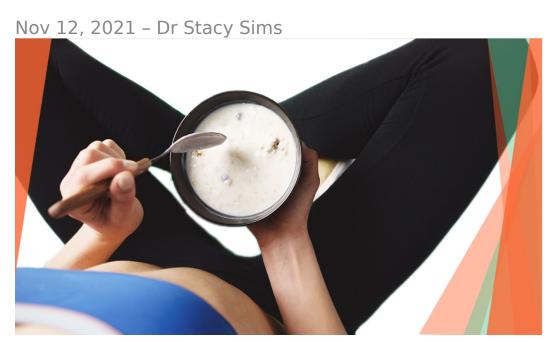
## Nail Your Golden Recovery Window for Optimum Health and Performance



## Post-workout fueling matters even more for women than men.

Low energy availability is extremely common in women athletes. A 2019 survey of 1,000 female athletes across more than 40 sports published in the *British Journal of Sports*Medicine estimated the risk of low energy availability in women athletes at more than 47 percent.

That means nearly half of active, performance-minded women may not be eating enough for their body to perform basic functions like making muscle, regulating metabolism, and maintaining homeostasis after accounting for the energy they use for training.

That's bad for your health and performance. Exercise doesn't work without the nutrition to support it. Fueling directly around your training can help you avoid going into low energy availability. While I've seen women become more in tune to their

pre and during exercise fueling needs, one area that still falls short is recovery. I see too many women who admit to skipping their post-workout snack because they're trying to lose weight. This is the wrong way to go about it—especially as a woman.

I know the logic seems sound on the surface. It's easy to think if you delay food postworkout, you will prolong your fat burning (since the body has nothing else left to burn) and thereby you will lose weight more effectively. In fact, the opposite happens. You may end up gaining weight. By withholding recovery fuel, you put your body in a catabolic state that stalls your recovery, dims your metabolism, and increases your fat storage because the body is afraid it is in a state of famine. Also, kiss lean mass gains goodbye; without adequate energy intake, you might get stronger, but you cannot build muscle.

The better strategy is taking advantage of your recovery window—the time right after exercise when your insulin levels peak, opening multiple metabolic pathways to expedite your glycogen storage and muscle repair process. During this "golden window" you're not only primed to transport the carbs you eat straight into your muscle stores, but also to shuttle amino acids into your muscles, where they can repair the damage and build you back stronger.

It's important to note that as a woman, your recovery window to take advantage of all these benefits is short—about 30 to 45 minutes (whereas men may have up to 3 hours). After that point, your insulin sensitivity declines, so it takes your muscles longer to absorb the glucose from your bloodstream, and as a result, your overall glycogen storage is lower. In fact, just 2 to 2 1/2 hours later, your glycogen storage rate drops by 50 percent. Eating immediately after hard exercise delays this decline in insulin sensitivity. That's especially important for women in the menopausal transition, who may already be more insulin resistant because of the hormonal changes.

Be sure to prioritize protein in that recovery snack. Women even more so than men need protein post workout, and we need it fast. The sex hormone progesterone exacerbates muscle breakdown in women. It makes us more catabolic, especially during the luteal phase of our menstrual cycle. So, you need more protein to protect your muscles and come back stronger. Women recover faster with 25 to 30 grams of protein (with 5 to 7 grams of BCAAs) within 30 minutes of a hard workout.

Pair some carbohydrates with that protein. The two work in harmony to increase your glycogen storage rates. Research also shows that taking in carbohydrate and protein together postexercise helps to reduce inflammation and can boost immunity.

If you delay calorie intake, you stay in a breakdown state. Your body won't start repairing until you take in some food. Even if you eat enough in the rest of your day to meet what your body needs, not eating post-workout acts the same as not eating enough. And on days when maybe you're running around and not meeting your total energy needs, properly fueling before and after working out can help you prevent going into a state of low energy availability.

Finally, if you're planning to make diet adjustments, especially if you're doing any sort of calorie reduction, consider implementing them outside of your workout fueling - your body will thank you!