



Peak Performance: An Athletes Guide to Meal Timing

Fueling for performance requires knowing what foods to choose and when to have them. Dr. Sears has worked with elite athletes his entire professional career and his recommendations are based on years of seeing what has led to the greatest improvements in becoming faster, stronger, and leaner. You don't have to be an elite athlete to use this guide. No matter your fitness level, use these recommendations to reap the most from your workout and enhance how quickly you can get to your next one.

DR. SEARS' FUELING GUIDE



1. WARM UP 30-45 MINUTES

prior to exercise have a **100 calorie Zone snack** to get your hormones prepped for exercise.

2. RECOVER

Once exercise is complete, **IMMEDIATELY** have another 100 calorie Zone snack to ensure growth hormone release is not impeded. Having a snack with a combination of **protein** and **carbohydrate**, rather than carbohydrates alone, helps to replenish muscle glycogen depleted during the workout.



3. REPAIR

Within the **20-24 HOUR PERIOD** following exercise it's important to consume Zone Meals and supplement with omega-3 fatty acids and polyphenols. This 24-hour window is most critical for reducing exercise-induced inflammation, repairing any muscle damage, and recovering for the next bout of exercise.



Hormonal Timing and Performance: A More In-Depth Look

Performance can be considered to fall within 4 phases:

- Hormonal Warm-up*** –ensuring your body has the right fuels to perform
- The Demand Phase*** - when you are working out and putting stress on the body
- The Recovery Phase*** - Immediately following your work out
- The Repair Phase*** - The remainder of the time when you are not working out and repairing damaged muscle tissue

Hormonal Warm-up:

When: 30-45 Minutes Before and During Exercise.

What To Do: Eat a Zone snack 30-45 minutes prior to exercise. Half of a ZoneRx bar is an ideal choice.

Why: Consuming protein helps to minimize muscle damage and stimulate glucagon synthesis to elevate blood glucose levels that will fall during exercise. Carbohydrate consumption helps spare muscle glycogen that will be depleted and maintain blood glucose levels that will be lowered during exercise.

Demand Phase-

When: The workout or activity that is putting stress on the body



What is Happening Hormonally

- Pro-inflammatory eicosanoids increase
- Pro-inflammatory cytokines increase
- Insulin decreases
- Cortisol increases

What is Happening Metabolically

- ATP is depleted
- Protein degradation increases
- Muscle glycogen is partially depleted
- Muscle damage increases
- Fluid loss increases

Recovery Phase

When: Peaks 30 Minutes After Exercise and lasts a maximum of 120 minutes (Recovery Phase Is Short)

What To Do: Eat a Zone snack immediately following exercise. Half a ZoneRx bar would be an ideal choice.

Why: The combination of protein and carbohydrate helps to replenish muscle glycogen and initiate muscle repair. Growth hormone is released once exercise stops to initiate repair and this can be inhibited by high levels of insulin. Where carbohydrates alone could impede the release of growth hormone, the combination of both protein and carbohydrate helps to ensure this release happens quicker.



Repair Phase

When: The 20-24 hours following workout completion

What To Do: Consume a Zone meal or snack every 4 to 5 hours. Ensure each meal contains at least 25-30 grams of high quality protein. Aim for lean protein choices that contain leucine, an amino acid found in foods such as chicken, lean beef, pork, fish, seafood, and cheese. Consuming about 2.5 grams of leucine helps activate mTor, a gene transcription factor required for new protein synthesis. Balance your protein with non-starchy vegetables at each meal. This will help to control insulin levels between meals and when balanced with the right amount of protein will help stabilize blood sugar levels. Supplement with omega-3 fatty acids and polyphenols.

Why: The combination of the Zone Diet, omega-3 fatty acids and polyphenols helps maximize the anti-inflammatory response that results in tissue repair post-work.