Food is critical to having a strong, healthy body. Depriving yourself of food before or after a workout will actually cause your body more harm. Good nutrition can help your body perform better during the workout AND recover faster after you finish. Eating right before you work out can also minimize muscle damage.

Fueling Your Movement What to Eat **BEFORE** a Workout

Your muscles use the **glucose** (monosaccharide and sugar) from carbs for fuel. **Glycogen** (complex carbohydrate and starch) is the way the body processes and stores glucose, mainly in the liver and muscles. For **short- and high-intensity exercise**, your glycogen stores are your muscles' main source of energy.

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But for **longer exercises**, the degree to which carbs are used depends on several factors as your muscles' glycogen stores are limited. As these stores become depleted, your output and intensity diminish.

Unused glucose from carbs can be converted to glycogen. If more glucose is consumed than can be stored as glycogen, it's **converted to fat for long-term energy storage**. Starchy carbohydrates that are high in fiber release glucose into the blood slower than sugary foods and drinks.

Fat is the source of fuel for longer and moderate-to-low-intensity exercise.

Fats provide a number of benefits for your body in addition to serving as an energy source: regulating hormones and genes, maintaining brain health and making food more tasty and satisfying.

Fats are a complex subject, but we have you covered! You can learn all about the various fats in our **Resource Guide**, click here to download it!

FATS

CARBS

Eating protein (alone or with carbs) prior to exercise has been shown to **increase muscle protein**

Protein is a **structural molecule** assembled out of amino acids, many of which your body can't produce on its own. Animal foods are usually high in protein, providing all essential amino acids.

Other benefits of eating protein before exercise include:

- > A better anabolic response, or **muscle growth**
- > Improved muscle recovery
- > Increased strength and lean body mass
- > Increased muscle performance

When you're working out, your muscles use up their glycogen stores for fuel. This results in your muscles being partially depleted of glycogen. Some of the proteins in your muscles also get broken down and damaged. After your workout, your body tries to rebuild its glycogen stores and repair and regrow those muscle proteins.

Fueling Your Movement What to Eat AFTER a Workout



Eating the right nutrients soon after you exercise can help your body repair and regrow faster.

It is particularly important to **eat carbs and protein after your workout.** Doing this helps your body:

- > Decrease muscle protein breakdown.
- > Increase muscle protein synthesis (growth).
- > Restore glycogen stores.
- > Enhance recovery.

Carbs Help With Recovery

Your body's glycogen stores are used as fuel during exercise, and consuming carbs after your workout helps replenish them.

The rate at which your glycogen stores are used depends on the activity. For example, endurance sports cause your body to use more glycogen than resistance training.

For this reason, if you participate in endurance sports (running, swimming, etc.), you might need to consume more carbs than a bodybuilder.

Consuming 0.5–0.7 grams of carbs per pound of body weight within 30 minutes after training results in proper glycogen resynthesis.

Furthermore, insulin secretion, which promotes glycogen synthesis (replenishing your glycogen for storage), is better stimulated when carbs and protein are consumed at the same time.

Try consuming the two in a ratio of 3:1 (carbs to protein). For example, 40 grams of protein and 120 grams of carbs.

Eating plenty of carbs to rebuild glycogen stores is most important for people who exercise often, such as twice in the same day.

Protein Helps Repair and Build Muscle

Exercise triggers the breakdown of muscle protein.

The rate at which this happens depends on the exercise and your level of training, but even well-trained athletes experience muscle protein breakdown.

Consuming an adequate amount of protein after a workout gives your body the amino acids it needs to repair and rebuild these proteins. It also gives you the building blocks required to build new muscle tissue.

It's recommended that you consume 0.14–0.23 grams of protein per pound of body weight very soon after a workout. The general rule is you should wait no longer than 30 minutes before eating post-workout.

Fat Is Not That Bad

Many people think that eating fat after a workout slows down digestion and inhibits the absorption of nutrients.

While fat might slow down the absorption of your post-workout meal, it will not reduce its benefits.