

## **Triathletes' Diets: Reloading for Rapid Recovery**

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What do you crave when you cross the finish line? After a long training session are you completely turned off by food or do you make sure that the final mile lands you right in front of a fast food joint? (You were just training for 3 hours. You earned it, right?) Every triathlete is different in regard to what works for them. Finding out what proves to be best for you will require some trial and error but you can be certain that whatever you choose to consume after your workouts will affect the way your body recovers between training sessions. This is especially important when training sessions end up being less than 24 hours apart because you will want to maximize your rehydration and nutritional recovery to replace muscle fuel for the next workout.

Post training nutrition options varies from sports drinks and recovery mixes to energy bars, whole foods, fruit juices and perhaps the choice gaining the most attention these days, low-fat (1%) chocolate milk. Regardless of the triathlete's preferred way to reload, there are certain evidenced-based practices that should be considered when deciding what to choose for recovery nutrition. To reload, your nutrition plan should aim to replenish muscle glycogen, body water (hydration), and electrolytes (primarily sodium).

You may be familiar with the common recommendation to reload within 30 minutes immediately follow exercise. Ever wonder why this 30-minute window is so crucial? Studies have shown that this window of time is when the body's sensitivity to insulin is at its highest and this is when muscles are able to quickly absorb nutrients for maximum restoration and storage of muscle glycogen. A triathlete's body can be depleted of muscle glycogen rather quickly; therefore immediate consumption of carbohydrate is very important. Studies suggest anywhere from 0.5-0.7 grams per pound of body weight (1-1.2g/kg) is an optimal goal for rapidly absorbed carbohydrate intake. Thus, a 155-pound triathlete (70 kg) may require about 80 grams of carbohydrate immediately following a long training session.

There has been much debate regarding the value of protein intake as part of reloading. Generally accepted practice at this time is to consume a 3:1 or 4:1 ratio of carbohydrate to protein for your recovery nutrition. Choosing to include high-quality protein sources such as whey protein, dairy products and soy milk, lean meats or nuts may help to speed up the repair of muscle tissue. If the 155-pound athlete is consuming 80 grams of carbohydrate, about 20 to 26 grams of protein will satisfy the recommended 3:1 or 4:1 ratio for optimal recovery. Additionally, the amino acid glutamine (a building block for proteins) is found in many recovery products and may be beneficial for muscle repair.

The most effective way to figure out your individual fluid needs following your workouts is to weigh yourself before and after the session. Replace each pound lost with 24 ounces of fluid. You will also want to ingest sodium to enhance your rehydration efforts and replace that which has been lost through sweat. Similar to fluid needs, sodium requirements will vary among individuals based on how much sodium is lost during exercise. Salty snacks, salt packets and sports drinks are all good options for

repleting sodium losses. The recommendation is 110-200 mg of sodium per 8 ounces of fluid. The sodium content of most sports drinks per 8 ounces falls in this range.

Knowing how many grams of carbs and protein, ounces of fluid and milligrams of sodium your body needs is half the battle but figuring out which foods and fluids work best for you is the other half. Most likely your nutrition and hydration choices are going to depend on taste, tolerance, convenience and affordability. Some athletes simply have no tolerance for solid food immediately following exercise. This is where recovery mixes can come in handy. The commonly noted drawbacks to these are that often times they do not taste good and they can be costly. If you choose to purchase these products, don't waste your money on unnecessary ingredients. You now know that you are looking for a 3:1 or 4:1 carbohydrate to protein ratio, and adequate fluid and sodium to match your losses. Recoverite by Hammer Nutrition offers 332 calories, 65 g carbohydrate, 20 g protein, 148 mg sodium and 38 mg potassium in 4 scoops, mixed with 16-24 ounces of water. Sports drinks are commonly used for recovery nutrition as well. Relatively inexpensive, often well-tolerated, offered in a variety of different flavors and, as previously mentioned, these beverages are a good way to replete sodium and fluid losses at the same time. Newer to the market than traditional Gatorade, Gatorade Endurance offer 90 more mg sodium per 8 ounces, and Accelerade offers 4 grams of protein per 8 ounces.

With all of these sports drinks and recovery mixes out there you may find it hard to believe that if you choose to, you can actually practice proper post-training nutrition guidelines using real food! Believe it or not, low-fat chocolate milk has proven to be a very successful recovery beverage providing 84 grams of carbohydrate, 26 grams of protein, 2 grams of fat, and 345 mg of sodium in 24 ounces! This matches up with your recovery nutrition plan a little bit better than the Big Mac with 540 calories, 25 g protein, 75 mg cholesterol, 30 g fat (10 g saturated fat), 1040 mg sodium, and 45 g carbs! Other great real food choices include a turkey sandwich with pretzels, a bagel with peanut butter and jelly, a fruit/granola/yogurt parfait or even a smoothie made with fresh or frozen fruit, soy or low fat milk and yogurt. Just be sure to wash these foods down with an appropriate amount of water.

With the guidelines in place, take some time to experiment during your longer training sessions to see which choices fit into your budget, appeal to your taste buds, and sit well in your stomach. Once you find a successful strategy, stick with it for the race. Nothing new on race day!

Now you have jam-packed the 30-minute window of opportunity with all of your immediate needs for nutrition and hydration but the game isn't over just yet. Your body is still recovering. Within 2 hours after the session you are going to want to consume a balanced meal, packed with protein, vegetables and a large portion of starch. This is also a great time to get "healthy" fats (mono- and poly-unsaturated fats) into your diet. Sample healthy and balanced meals include salmon with sweet potato and steamed vegetables or pasta with chicken and vegetables mixed with olive oil and a little garlic salt and parmesan cheese for flavor. As a triathlete your body has unique demands. To optimize performance you know you need to keep your body strong, your energy high and your immune system healthy. Proper nutrition and hydration is essential before, during, and after you cross the finish line.

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[Trismarter.com](http://Trismarter.com) to learn more about their innovative sports nutrition services including Tri2Lose and Menu Planning for triathletes.

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