

Highlands Performance Volleyball Nutrition: Jennifer Egeland, MS, RND, LD

Post Workout Nutrition

Your body uses stored energy (glycogen) in your muscles to power through your workout or game, but after that workout, you need to replenish the nutrients lost. What to do?

As soon as possible post workout, get carbs and protein immediately into your body. This gives your muscles the ability to replenish the glycogen they just lost through training and helps your tired muscles rebuild and repair with the available protein and amino acids.

Academy of Nutrition and Dietetics Spokesperson Christine Gerbstadt, MD, MPH, RD, CSSD suggests fueling within 15 to 20 minutes post training with a 3:1 ratio of carbohydrate and protein for optimal muscle repair and recovery, eating a regular mixed meal 3 to 4 hours after.

Your Post-Exercise Fluid Needs: Most moderate exercisers will lose about one quart (4 cups) of fluid per hour of exercise, so try to drink about 16-20 ounces of water shortly after your workout to aid the recovery process. If you sweat a lot or the weather is hot and/or humid, consider weighing yourself before and after exercise, and drinking an ounce of water for every ounce of weight you've lost. Because heavy sweating also causes loss of minerals and electrolytes, consider using a sports drink with electrolytes if you need to replace more than 2-3 cups of fluid.

Your Post-Exercise Meal or Snack: Many people are very hungry after a workout, making it easy to eat more than you really need, or choose foods that won't really help your body. Eating too much of the wrong thing can do the opposite of what you want—cause your body to store that food as fat instead of using your post-workout food to refuel and repair your muscles.

Caffeine: The Journal of the American College of Cardiology reports that the amount of caffeine in just two cups of coffee limits the body's ability to increase blood flow to the heart during exercise. This is problematic since blood flow to the heart must increase during exercise in order to meet the body's higher demand for oxygen and nutrients.

While caffeine is a stimulant, and previous studies suggest that it may enhance athletic performance, this study suggests the opposite. Caffeine does stimulate the brain, increasing awareness and concentration. Athletes who ingest caffeine before performing may feel that they are enhancing performance, but these researchers suggest that the athletes are simply more alert, awake and focused.

Instead of hitting the coffee shop or grabbing an energy drink on your way to the gym, try filling up your water bottle before you head out the door. Kids should not be building habits to rely on caffeine at a young age.

Here are some good choices for pre and post exercise meals and snacks:

Oatmeal with fruit or peanut butter

Pancakes and eggs

Veggie omelet with toast or roll

Brown rice bowl with black beans and veggies

Apple, spinach and nut salad

Cereals (with more than 3 grams of fiber) and milk

Trail mix with nuts and dried fruit

Hummus and raw veggies or pita chips

Hard boiled eggs (or egg whites)

Cottage cheese and fruit

Whole grain crackers with nut butter or cheese

Whole grain fig (or fruit) Newton cookies

Lowfat Milk (especially chocolate milk)

100% vegetable juice

Bread, a bagel, or an English muffin with cheese or peanut butter

Fruit or 100% fruit juice with cheese

Low Fat Yogurt with fruit and low fat granola (Greek yogurt is a higher protein source than regular yogurt)

Turkey, ham, chicken, tuna or roast beef sandwich (whole grain bread)

Rice or popcorn cakes with nut butter

Smoothie (with milk, yogurt, or added protein powder)

Raw fruit or veggies with yogurt based dip

A protein or energy bar

A protein or energy shake

- Try to avoid high fat foods such as fried chicken, greasy hamburgers and french fries.

Take Home Points

- Your body needs carbs to fuel your working muscles.
- Protein is there to help build and repair muscle.
- Get a combination of the two in your body within 20 minutes or so post workout.
- Never try ANYTHING new on race or game day—it's always best to experiment during training to learn what works best for your body