Sports Nutrition: Recovery nutrition

Eating after your workout is just as important as eating before. Exercise stresses the body, and proper recovery nutrition helps the body adapt and recover, improving your performance. Recovery nutrition helps the body:

- **Refuel.** Playing sports requires a lot of energy. The body gets this energy from foods that are high in carbohydrates. Carbohydrates are stored in the muscles and liver as glycogen, and following intense activity, these stores are used and must be refilled – similar to a gas tank. The longer you work out or the higher the intensity, the more energy you need to replace.
- **Rehydrate.** The body can lose as much as 2 liters of water every hour during exercise. As the body loses fluids, it also loses electrolytes (chemicals, such as sodium, calcium and potassium, which help muscles function). If you lose too much water, you can become dehydrated, which slows recovery. Dehydration can also cause serious health problems.
- **Repair.** During exercise, muscles tear and are damaged. The body uses protein to repair and rebuild damaged muscle as well as build new muscle. This makes you stronger and more prepared for your next activity.

When to use recovery nutrition

Refueling after workouts is **always** important. However, certain types of training and competition require greater attention to recovery, for example:

- 2 or more training sessions per day
- Less than 8 hours between training sessions
- Endurance training sessions that last longer than 90 minutes
- Participating in tournaments or multi-day competitions

When and what to eat

The body is primed to replenish nutrients soon after exercise. Plan your recovery in 3 stages:

- **Stage 1 (15-60 minutes after activity):** Eat a snack with 10-20 grams of protein plus carbohydrates.
- **Stage 2 (2-3 hours after activity):** Eat a balanced meal with carbohydrates, lean proteins, and low fat.
- **Stage 3 (3-4 hours after activity):** Eat a snack with 10-20 grams of protein plus carbohydrates.

During each stage, drink fluids. As a general rule, you will need:

- Approximately 700 mL (about 24 ounces) of fluids for every 1 lbs. lost in sweat. (Weigh yourself just before and after a workout to determine how much weight you lost in sweat. Ask for information on hydration.)
- 500-700 mg of sodium (electrolyte) with every 1000 mL of fluid.

Be sure to work with your sports nutritionist to customize a recovery plan to your individual needs. They will help you learn how many carbohydrates and how much fluid you should consume during each stage of recovery.

Signs of poor recovery

Signs that you may not be recovering properly include:

- Feeling fatigued early in workouts
- “Heavy” legs
- Thirst
- Dry mouth
- Dry skin
- Decreased concentration
- Lack of motivation
- Frequent injury or illness

Recovery nutrition examples

Stage 1: Snack

- Peanut butter and jelly sandwich
- Fruit yogurt
- Sport bar
- Chocolate milk*
- Sport nutrition recovery drink*
- Smoothie with fruit and yogurt*
- Meal replacement drinks*

**If you don’t have an appetite, choose drinks containing both carbohydrate and protein.*

Stage 2: Meal

- Pasta with tomato sauce, veggies & chicken
- Turkey and veggie sandwich, whole wheat crackers & fruit
- Stir-fry with rice, veggies, and lean meat

Stage 3: Snack

- Whole grain crackers & hummus
- Graham crackers with peanut butter
- Cereal with low-fat milk

Recovery Fluids

- Sport drink (carbohydrate and electrolytes)
- Sport recovery drink
- Milk or chocolate milk
- Smoothies
- Water

This handout is intended for use during an appointment with a registered dietitian only, and is not meant for use by other clinicians.