



## BEFORE TRAINING

**The Goal** It is important to eat prior to exercise so your body has adequate energy, and your blood sugar remains stable.

**The Fuel** The size of the meal depends on how much time you have for digestion prior to exercise. The meal should be rich in carbohydrates, moderate in protein, and low in fat (as fat slows digestion). An example could be a peanut butter and jelly sandwich 30-60 minutes prior to activity.

## AFTER TRAINING

**The Goal** For optimal recovery, carbohydrates are required to replenish glycogen stores and protein is required to aid in muscle protein repair.

**The Fuel** A protein and carbohydrate rich meal is beneficial 30-60 minutes after exercise. Example: large protein shake blended with milk and fruit. This should include 30-45 grams of carbohydrates and 20-25 grams of protein.

## PRE-EVENT

**The Goal** Eating before the event will ensure the body has energy and can perform optimally.

**The Fuel** The pregame meal is rich in carbohydrates. The meal should be familiar and easily digestible to avoid unwanted GI issues. The timing and size of the meal matter, because larger meals require more digestion time. *Example: spaghetti with marinara sauce and shredded chicken 2 hours prior.*

## POST-EVENT

**The Goal** A high calorie meal after an event can help promote energy balance. The event likely required a lot of energy, so it is important to replace that energy through food. For optimal recovery, carbohydrates are required to replenish glycogen stores and protein is important for muscle recovery.

**The Fuel** A balanced, calorie and nutrient dense meal with adequate protein and carbohydrates is beneficial within the first couple of hours after an event. Example: Grilled chicken breast, baked potato, asparagus, grapes, tart cherry juice. The meal should include 0.25 grams of protein per kg body weight (~23 grams for a 200 lb. athlete) and 1.0-1.2 grams of carbohydrates per kg of body weight (~90-109 grams for a 200 lb. athlete).

## DURING TRAINING AND EVENTS

**The Goal** Intense exercise lasting longer than one hour may require carbohydrates during exercise to maintain energy levels.

**The Fuel** This could mean 5-10 grams of carbohydrates every 15-20 minutes during exercise. Consume easily digestible carbohydrates to avoid stomach upset, e.g., a sports drink.

## PRE-BEDTIME

**The Goal** Protein consumption before bedtime has been shown to inhibit muscle protein breakdown and stimulate muscle protein synthesis in athletes.

**The Fuel** Ingestion of 20-25 grams of protein before bed may be optimal. A snack of Greek yogurt with granola and fruit may help meet protein needs.

## REFERENCES

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