



# Pre-Exercise Fueling

Fueling before exercise provides your body with much-needed fuel so you can perform your best!

## Benefits of pre-exercise fueling:

- Improved performance
- Improved decision making
- Provides energy for the mind and muscles
- Prevents hunger
- Spares muscle protein breakdown
- Delays fatigue



Meals should be primarily carbohydrates. Remember, carbs are the primary source of fuel for the muscles.

The closer the meal/snack is to your event, the lower in fat, protein, and fiber it should be to make the food easier to digest.

## What?

**4 hours before** – Fruit smoothie, peanut butter banana sandwich, greek yogurt and granola

**2 hours before** – Instant oatmeal with a handful of berries and a glass of milk

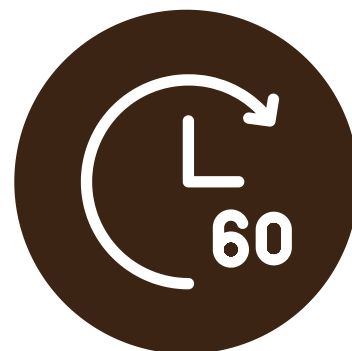
**0.5 hours before** – stick to liquid carbs (sports drink or juice) or a high-carb sports bar

Stick to foods that are familiar! Remember, to avoid trying new foods on a competition day.

# Fueling During Exercise

## Exercise lasting less than an hour

Carbs are not necessary for exercise under an hour, assuming you fueled well before! However, swishing a sports drink in your mouth for 5-10 seconds (and then spitting) may improve performance. This may also be useful for athletes who experience stomach discomfort when eating during exercise.



## Exercise lasting 1-2.5 hours

Consume 30-60 grams of carbohydrates per hour. Practice fueling techniques during training to see what best works for you on race day!



## Exercise lasting > 2.5 hours

Consume 90 grams of carbs per hour. When eating more than 60 grams of carbs, consume more than one carb source. Think of carbs being absorbed like cars going through a toll booth. The toll booths get maxed out when you only eat one source of carbs, but by combining different carb sources, you can absorb more carbs and avoid stomach distress. Look for sports drinks that have both glucose and fructose!

