

October, 2017

**WHAT SHOULD I
EAT BEFORE,
DURING, AND
AFTER I
EXERCISE?**

**HOW MUCH
FLUID DO I
NEED?**

**SHOULD I TAKE
SPORTS
SUPPLEMENTS OR
SPORT PRODUCTS?**



WHAT DO I EAT?

For optimal performance, it is best to consume protein and carbohydrates before and after exercise. What you should eat 3-4 hours before/after an exercise is very different from what you should eat within 30 minutes! Your body has time to digest foods 3-4 hours around exercise, so you can consume whole foods; 30 minutes around exercise, however, you want fast-releasing energy to quickly fill or replenish energy stores. Every person is different and you should experiment with food combinations to know your body and what you can tolerate.

SPORTS BEVERAGES

LEMONADE

PBJ + BANANA

YOGURT + BERRIES

CARBOHYDRATES + PROTEIN

3-4 Hours Before/After:

- PBJ sandwich with whole wheat bread
- Greek yogurt with granola and fruit
- Apple with peanut butter
- Trail mix with dried fruit and nuts
- Cottage cheese.

30 Minutes Before/After:

- Sports beverages
- Chocolate milk
- Lemonade made with lemon juice (to taste), 4-5 Tbsp of sugar, 3-4 cups of water and a pinch of salt

You need ~1 g of carbohydrate for every kg of your body weight after a workout. 1 Tbsp of sugar has 12 g of carbohydrate. 1 kg of body weight is equal to 2.2 lbs.

HOW TO CHOOSE SPORT FOODS



FOR WORKOUTS LONGER THAN 1 HOUR



Categories of Sport Products You Can Buy

Sport Drinks

What: Contains carbohydrates and electrolytes to help prevent dehydration.

Breakdown: 9-18 grams of carbohydrate in every 8 ounces.



Sport Bars

What: Contains carbohydrates and protein that are easily transported.

Breakdown: 40-60 grams of carbohydrate, 6-20 grams of protein.



Sport Beans, Gels, Gummies

What: Contains carbohydrates, may or may not contain caffeine, electrolytes, or vitamins.

Breakdown: 20-25 grams of carbohydrates per serving, caffeine/vitamins/electrolytes vary depending on product.



HOW MUCH/WHEN?

	Sport Drinks	Sport Bars	Sport Gels, Beans, Gummies
Before Exercise	15-20 oz 30 mins before	Choose a bar high in carbs, moderate in protein & low in fat 1-2 hours before	1-2 servings per hour in addition to normal diet within 30 minutes before
During Exercise	6-12 oz every 15-20 mins	(optional) Choose a bar high in carbs, low in fat and protein	(optional) 1-2 servings per hour along with 4-8 oz of fluid
After Exercise	24 oz for every pound of body fluid lost (see fluid info below)	Choose a bar high in carbs, high in protein asap after exercise	1-2 servings in addition to normal recovery foods within 30 mins after

HOW MUCH FLUID DO I NEED?



WHY?

Fluid is needed for temperature regulation and muscle contractions. Sometimes we sweat out more fluid than we take in, causing a fluid deficit. This can lead to an increase in body temperature and heart rate, making the work feel harder than it actually is. You are at higher risk of dehydration when it is hot outside or when you are sweating a lot. It is also possible to drink *too much*! Drinking too much could cause your body to dilute its fluid and result in an imbalance of electrolytes. Knowing how much your body needs is important for meeting your health and nutrition goals!



How Much is Right for Me?

Weigh yourself, without clothing on, before and after exercise. Weight loss experienced after exercise is how much fluid your body lost, not fat. Once you weigh yourself over time, you can get an idea of how much body fluid you lose during different exercises. 1 lb = 16 ounces.

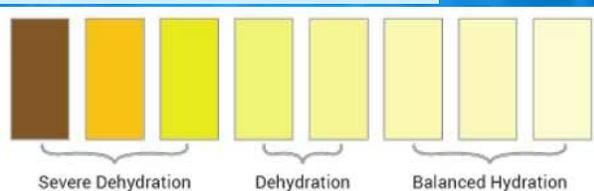
When Should I Drink?

The amount to consume during exercise depends on the individual and activity. Start the exercise well-hydrated and plan to take drink breaks throughout the exercise, gauging your own sweat rate. Consume enough water after the exercise to replenish losses.

What Should I Drink?

If the exercise duration is short and low in intensity, plain water is fine. If the exercise is longer in duration and high-intensity, sports beverages are a good idea for added electrolytes and carbohydrate

Don't have a scale? You can track your hydration status by observing the color of your urine. Use this helpful chart to gauge your hydration!



Navigating the World of Sports Supplements

The Problem

- The Food and Drug Administration (FDA) is the governing body over dietary supplements. This includes: vitamins, minerals, herbs, botanicals, amino acids, other dietary supplements, concentrates, metabolites, constituents, extracts, weight loss and body building products.

- The FDA does not require a dietary supplement to be tested for safety, accuracy, precision, or effectiveness before being released into the market.

- There is a risk that any dietary supplement you consume could be contaminated or may not actually contain the listed ingredients.

- A supplement must be proven harmful in order to be pulled from the market, by the FDA.

A Solution

There are agencies out there that will help you conduct your own research on your supplements.

- Check if your supplement is safe and effective by visiting Office of Dietary supplements at:

<https://ods.od.nih.gov/> OR

Medline Plus at: <https://medlineplus.gov/>

- Check to see if your supplement contains the ingredients that it claims to contain by visiting

Consumer Labs at: <http://www.consumerlab.com/>

Created by: Marisa Brothwell
Dietetic Intern
Patient Food and Nutrition Services
300 N. Ingalls Street
NIB N18E20
Ann Arbor, MI 48109-5407
(734) 936-5197



RESOURCES

1. COMPREHENSIVE REVIEW OF CONSUMPTION AND TIMING AROUND EXERCISE:

[HTTPS://JISSN.BIOMEDCENTRAL.COM/ARTICLES/10.1186/1550-2783-5-17](https://jissn.biomedcentral.com/articles/10.1186/1550-2783-5-17)

2. PRE AND POST WORKOUT NUTRITION:

[HTTP://WWW.EATRIGHT.ORG/RESOURCE/FITNESS/EXERCISE/EXERCISE-NUTRITION/TIMING-YOUR-NUTRITION](http://www.eatright.org/resource/fitness/exercise/exercise-nutrition/timing-your-nutrition)

3. FLUID AND HYDRATION NEEDS:

[HTTPS://WWW.SPORTSDIETITIANS.COM.AU-WPCONTENT/UPLOADS/2015/04/FLUIDS-IN-SPORT.PDF](https://www.sportsdietitians.com.au/wpcontent/uploads/2015/04/fluids-in-sport.pdf)

4. ADVANCED SPORTS NUTRITION:

[HTTP://WWW.HUMANKINETICS.COM/PRODUCTS/ALLPRODUCTS/ADVANCED-SPORTS-NUTRITION-2ND-EDITION](http://www.humankinetics.com/products/allproducts/advanced-sports-nutrition-2nd-edition)

5. SPORT FOODS AND SPORT SUPPLEMENTS:

[HTTPS://WWW.SCANDPG.ORG/](https://www.scandpg.org/)