

Nutrition and Exercise: Fueling your next workout



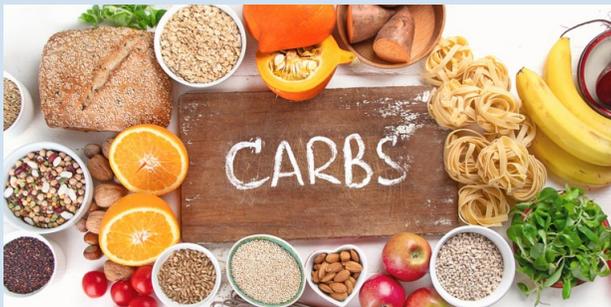
**Healthy Eating Tip of the Month
October 2020**

Nutrition is critical for fueling and recovering from physical activity.

Optimal nutrition is a key component to maximize your performance in the gym, your annual 5k, and your weekly flag football games.

Your nutrition plan should be **individualized** and based on your health status, fitness goals, and types of exercise and physical activities.

Whether you are exercising for **weight loss, general health, or looking to build muscle** and improve performance, having a basic understanding of nutrition is important.



What is a carbohydrate?

Carbohydrates (carbs) are a macronutrient found in foods such as grains, fruits, vegetables, and dairy products.

Why do I need to eat carbohydrates?

Carbs are the primary fuel for your “engine” (your muscles) during exercise.

The harder your engine, or muscles, are working, the more fuel (carbs) you need to keep going.

When you eat foods containing carbs, they are broken down into glucose. Glucose is stored in the muscles and liver as glycogen and is quickly released during exercise.



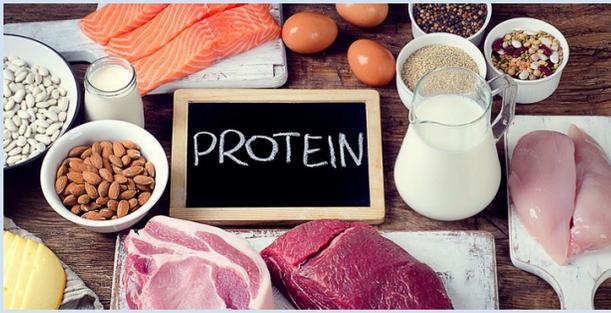
Mini bagel: ~22g carbs



1 cup cooked oatmeal:
~27g carbs

Medium banana:
~27g carbs





What is a protein?

Protein is a macronutrient found in meats, fish, eggs, tofu, beans/legumes, and dairy products.

Why do I need to eat protein?

Protein builds, maintains, and repairs your muscles and other body tissues.

After exercise, it is important to consume both protein and carbohydrates to help repair and rebuild your muscles and replenish glycogen stores.

Consume a combination of protein and carbs within 60 minutes post-workout.



**Plain Greek yogurt: ~17g
per container**

Egg: 6g



When and what should I eat before and after a workout?

When it comes to eating and exercise, **everyone is different** and will require a different plan to help fuel their workouts and recover.

Use **trial and error**, and pay attention to how you feel during and after your workout. Recognizing how your body reacts will allow you to adjust your pre- and post-exercise eating habits to ones that **work best for you**.

As a general rule: Consume combination of protein and carbs 1-4 hours pre-workout and within about 60 minutes post-workout.

- ♦ **Large meals:** 3-4 hours before exercising.
- ♦ **Small meals or snacks:** 1-2 hours before exercising.

How much protein should I eat?

Depending on the type, duration, and intensity of your workout, the recommendation for protein intake is:

- ♦ **0.8 g/kg/day for maintenance**
- ♦ **1.2-1.7 g/kg/day to increase muscle mass**

Consuming excessive protein may result in dehydration or weight gain. Do not overdo it!

Eating a balanced diet based on protein recommendations **does not require additional protein supplementation.**

How many carbohydrates should I eat?

Again, this depends on the type and in particular, the duration of exercise.

During **endurance exercise (>2 hours)**, your glycogen stores are used up.

You may experience **declines in performance and fatigue.**

Pay attention to these signs! If you are exercising for long durations, consider consuming a source of carbohydrates during your workout.

Why do I need to drink water?

During exercise, your body loses water as sweat to stay cool. If this fluid is not replaced, you may become dehydrated.

Dehydration can result in decreased performance. Sever dehydration can be dangerous.

Signs of dehydration include:

- Dark urine, decreased urine volume
- Muscle cramps
- Nausea/vomiting
- Chills
- Dizziness, light-headedness
- Clammy skin, flushed face

If you are thirsty, you are already dehydrated!

Pre-workout snack ideas:

- 1) PB&J
- 2) Fruit (bananas, apples, grapes)
- 3) 100 calorie granola bar
- 4) Oatmeal
- 5) Mini bagel

Post-workout snack ideas:

- 1) Greek yogurt
- 2) 6-8 oz fat-free chocolate milk
- 3) Pita with hummus
- 4) Pretzels with peanut butter
- 5) Cheese stick and crackers

Exercise burns **fewer calories** than you may think.

Avoid “overdoing it.”

Rewarding your workout with less optimal food and drink choices **may undo your efforts.**

Consuming adequate calories is crucial for muscle growth and exercise performance.

Consult a doctor before starting a new exercise regimen.

Be mindful and intentional with what you are consuming before, during, and after your workout so that you can help, rather than hinder, your fitness and health goals.

Use **trial and error** to figure out what works best for you, your body, and your goals.

Consider working with a **Registered Dietitian Nutritionist** to help you fine tune your own nutrition plan and health goals!

References:

Mohr CR. Timing Your Pre- and Post-Workout Nutrition. EatRight.org. <https://www.eatright.org/fitness/exercise/exercise-nutrition/timing-your-pre-and-post-workout-nutrition>. Published September 10, 2019. Accessed May 21, 2020.

Rosenbloom C. 3 Easy Tips for Fueling Your Workout without Overdoing It. Eat-Right.org. <https://www.eatright.org/fitness/sports-and-performance/fueling-your-workout/3-easy-tips-for-fueling-your-workout-without-overdoing-it>. Published June 19, 2019. Accessed May 21, 2020.

Ryan M. Top Snacks for Runners. EatRight.org. <https://www.eatright.org/fitness/sports-and-performance/fueling-your-workout/top-snacks-for-runners>. Published April 9, 2019. Accessed May 21, 2020.

Thomas DT, Erdman KA, Burke LM. Position of the Academy of Nutrition and Dietetics, Dietitians of Canada, and the American College of Sports Medicine: Nutrition and Athletic Performance. *J Acad Nutr Diet*. 2016;116: 501-528.

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