



## Carbohydrate

In order to adopt healthy eating habits, it helps to have a good understanding of the foods that we eat. Carbohydrate, protein, and fat are macronutrients. These foods deliver calories to the body and calories represent energy that our body transforms into the capacity to think, play, move, work, focus, and exercise. This handout provides a basic understanding of carbohydrate - food sources, functions, and tips on what to choose.

### Food Sources:

1. **Grains:** bread, rice, cereal, pasta, crackers, rolls, baked goods
2. **Fruit & Veggies:** All fruit is a great source of carbohydrate & starchy vegetables like potatoes, winter squash, peas, corn, and beans can be classified as carbohydrate too.
3. **Dairy:** Dairy products are a nice combination food containing carbohydrate, protein, and fat. Milk and yogurt contain a significant amount of carbohydrate
4. **Sport Foods & Drinks**

### Carbohydrate Function:

- ✓ Stored in liver & skeletal muscle as glycogen
- ✓ Primary fuel source for brain
- ✓ Fuels the body during exercise, especially high intensity exercise
- ✓ Think of muscle stores of carbohydrate as the body's "gas tanks." Levels are frequently used up and must be replenished to maintain energy levels and exercise intensity.

### Tips & Tactics:

#### ✓ GENERAL HEALTH:



- Always choose whole grains over processed grains. The body processes whole grains more slowly resulting in longer satiety and an improved insulin response.
- Look for products with SHORT ingredient lists containing recognizable words
- Make every meal COLORFUL - focus on fruits and vegetables which are very high in essential vitamins, minerals, and polyphenols.
- Limit foods with added sugar (soda, highly processed foods, candy, baked goods)
- Choose foods high in FIBER (fruits, vegetables, whole grains)
- Favor carbohydrate with high NUTRIENT DENSITY (foods that pack a lot of nutrients per gram)

#### ✓ SPORT SPECIFIC TIPS:



- Be sure to have a carb-rich meal 2-4 hours before training or competition. If you have a sensitive stomach, consume your last meal 4 hours before and sip on a sport drink or easily digestible carbohydrate-filled snack in the hour prior.
- Refuel after training. Have a carbohydrate-rich snack as soon as possible after an intense training session or competition and continue to refuel frequently over 4 hours.
- Choose easily digestible carbs before, during, & after training
- Consider a sport drink for workouts over 45 minutes or workouts in the heat
- Cramping issues are often fuel related. Be sure to start off each workout session well-fueled and hydrated.