

Sports Nutrition

Optimal Fueling for Marathon Training

Genetics, training and nutrition are the key factors that influence athletic performance. Without healthy food choices, adequate nutrient intake, and correct timing of meals athletic performance will suffer.

The key nutrients for endurance athletes include: carbohydrate, protein, fat, vitamins, minerals and the correct amount of fluids.

Carbohydrates

- **Optimal fuel for working muscles**
- **Plan to include carbohydrate rich foods in all of your meals and snacks**
- **Carbohydrate rich foods include:**
 - **Grains including bread, cereal, rice, pasta**
 - **Fruit**
 - **Milk and yogurt**
 - **Starchy vegetables (corn, peas, potatoes and beans)**

Protein

- **Needed for muscle growth and to repair muscle damage after exercise, to make red blood cells which carry oxygen to muscles, and white blood cells, which help fight infection.**
- **The body uses protein to make hormones and enzymes which help regulate metabolism**
- **Protein rich foods include:**
 - **Meat (fish, poultry, beef, pork)**
 - **Beans**
 - **Nuts and seeds**
 - **Dairy- milk, yogurt, cheese**
 - **Eggs**

Fat

- **Fat is used for energy.**
- **Fat helps the body use some vitamins and phytochemicals.**
- **Fat keeps your brain and nervous system healthy.**
- **Some heart healthy sources of fat include:**
 - **Nuts and seeds**
 - **Avocados**
 - **Olives and olive oil**
 - **Canola oil**

Vitamins and Minerals

- **Help to unlock the energy stored in food so your body and use it as fuel.**

Water

- **Most important nutrient. Be sure to replace the fluids lost through sweat when you are active.**

The best way to meet your nutrient needs for optimal performance and health is to eat a balanced diet that includes fruits, vegetables, whole grains, beans, nuts, meats and dairy.

Key fueling strategies for an endurance athlete:

- 1. Eat appropriately sized meals on a regular schedule to prevent getting overly hungry. Going too long without eating can reduce energy levels, make it difficult to concentrate, and lead to less healthy food choices.**
- 2. Choose a variety of wholesome foods at each meal and snack. Aim for at least 3 food groups at meals and 2 food groups at snacks.- See the “Athlete’s Plate” for a simple guide to building a healthy balanced meal.**
- 3. Keep well hydrated, by drinking fluids throughout the day as well as before during and after physical activity.**