

# Nutrition For Athletes

Presented by Erica Phelps, RD

July 24, 2013

---

- **How often should I be eating?**
  - Food is fuel-everybody typically needs to be refueled every 3-5 hours
  - As training increases, this time may become shorter
  
- **What should I be eating?**
  - **Carbohydrates**
    - Primary source of energy for the body
    - Athletes need 55-65% of calories to come from carbohydrates
    - Include them in all meals and snacks
    - Make quality choices
      - Whole grains, fruits, legumes, and low fat dairy provide the most value
      - The fiber and/or protein in them provide sustained energy
      - The vitamins and minerals in them boost immunity, prevent cramping, and aid recovery
      - Simple carbs, like refined grains, fruit juices, and sugar provide quick energy that doesn't last long
    - Common carbohydrate mistakes: inadequate intake, poor timing, lack of value in choices
      - Carbohydrate mistakes lead to poor performance, cravings, and bingeing
  - **Protein**
    - Essential for immunity, building and maintaining muscle, recovery/injury prevention
    - Endurance athletes benefit from 12-20% of calories from protein
      - This is typically met by food choices-most endurance athletes don't need supplements
    - Include at all meals and at snacks when going a longer time between meals
      - Example-lunch at noon, dinner at 7pm, your 4pm snack should have a protein along with the carb (crackers and cheese, PB and apple, etc)
    - Make lean choices and include plant based sources
      - Round or loin cuts of beef/pork, poultry, seafood, wild game, nuts, seeds, legumes, eggs, dairy products
      - Legumes are a great 'runner' food-they provide both complex carbs and protein plus they're quick and easy
    - Common Mistakes: intake too high-often in place of carbs; poor timing; believing you need more
  - **Fats**
    - Transport and store vitamins, maintain cell membranes, assist with metabolism, maintain healthy skin and hair, and cushion joints
    - up to 30% of calories may come from fats
      - make healthy choices: nuts, seeds, olives, avocado, olive/canola oils
      - they add up fast-spread small amounts throughout the day
    - Common Mistakes: too little fat in the diet; too much saturated or trans fats

- **What should I eat before and after workout**
  - Less than 1 hour before: carbohydrate-fruit, granola bar-something simple and easy to digest
  - 2-4 hours before: follow meal planning as above-carb, protein, small amount of fat, nothing extremely high in fiber
    - Cereal with fruit and milk; Powerbar; crackers and cheese
  - After: first focus is carbohydrate within the hour after long run
    - If you don't feel like eating, use sports drinks or chocolate milk
    - Back to regular meal schedule within 2 hours
  - Common mistake: running on empty
  
- **How do I fuel my long workouts?**
  - Whatever you ate should be enough for the first hour
  - 30-60g carbs in the second hour and every hour thereafter
  - Common mistake: not supplementing or doing so incorrectly; why put calories in when I'm trying to burn them off
  
- **What about fluids?**
  - Urine should be pale to clear in color; sip throughout the day
  - Per American College of Sports Medicine: 16-24oz 2-3 hours before, 6-12oz just before start; 2-4oz every 15-20 minutes during; 24oz for every kilogram (2.2#/kg) lost after OR drink enough so you have to urinate within the hour after completion
  - Sports drinks are important after the first hour of endurance or in high heat workouts-the electrolytes they provide replace what is lost in sweat
  - Be aware of symptoms of dehydration: throbbing headache, dizziness, severe fatigue, restlessness, confusion, nausea/vomiting, bloated stomach, seizure
  - Common Mistake: going too long; incorrect timing; refusing to carry it with you; not wanting to take time to stop; only using water for long runs

#### Possible Scenarios

	1 hr, 50 min ½ Marathon	3:30 Marathon	1 hr, 45 minute Sprint Triathlon	2 hr, 45 minute Olympic Triathlon
0-60min	Min 18 oz water	Min 18 oz water	Min 18 oz water	Min 18 oz water
60-120min	8 oz Gatorade (14g) + 1 Gu packet (25g) + 12oz water	8oz Gatorade (14g) 10 oz water + 6 Clif Shot Bloks (48g)	8 oz Gatorade (14g) + 1 Gu packet (25g)	Power Bar (~45g); 8oz Gatorade (14g)
120-180min	n/a	6 large orange slices (~30g) + 16oz Gatorade (28g) + 8 oz water	n/a	1 pkg Sport Beans (25g); 8oz Gatorade (14g)
180-210min	n/a	1 Gu packet (25g)	n/a	n/a

For More Information: Erica Phelps, RD, [integratedeating@gmail.com](mailto:integratedeating@gmail.com) or 616-283-5313.