Nutrition for Runners

• Why is nutrition important?
  ✓ Diet & nutrition effect performance
  ✓ Calories are energy!!
  ✓ Food is fuel!!

• What you get from food (nutrients)
  ✓ Carbohydrates
    ▶ #1 fuel source for your body
    ▶ Fruits, vegetables, breads, rice, pasta, etc.
    ▶ Should make up 50-60% of your diet

  ✓ Protein
    ▶ Used to repair & rebuild muscles damaged by training & racing
    ▶ Lean meat, fish, chicken, beans, milk, yogurt, cheese, etc.
    ▶ Red meat has high iron content needed to repair red blood cells to carry oxygen
    ▶ Should make up 25% of your diet

  ✓ Fats
    ▶ Main form of stored energy in the body
    ▶ You need fat for your body to function properly!
    ▶ Good fat v. Bad fat
      ▶ Good: olive oil, canola oil, omega 3 & 6 fatty acids (fish) = “unsaturated”
      ▶ Bad: butter, margarine, Crisco (lard), trans-fats (deep fried) = “saturated”
    ▶ Should make up 25% of your diet

  ✓ Vitamins & Minerals
    ▶ Body regulators: needed for your body to function properly
    ▶ Zinc (immune system), iron (carry O₂), calcium (strong bones), etc.
    ▶ Found in fruits, vegetables, & dairy (zinc & iron in red meat)
    ▶ Multivitamin ok, don’t overdose! More is not better!!

  ✓ Water
    ▶ Vital to athletic performance!
    ▶ Even minor dehydration can negatively effect performance
      ▶ According to a study by the University of Capetown, the average runner will lose 40oz of fluid per hour at 77% F, with relative humidity of 55%.

    ▶ Drink throughout the day.
    ▶ Carry water on your run if you are running for longer then an hour.
    ▶ Drink when you are thirsty but don’t over drink!
      ▶ Five days before the Boston Marathon, the New England Journal of Medicine published a major article showing that 13 percent of runners in the 2002 Boston Marathon might have suffered from hyponatremia, a dangerous condition caused by drinking too much fluid.
      ▶ Hyponatremia, or low sodium, is caused when over hydration during exercising dilutes the sodium level in your body and can be dangerous.
• **Why all foods aren’t equal**
  ✓ All foods have different amounts of the above nutrients
  ✓ Ex. Baked v. Deep fried

• **Specific needs of a runner**
  ✓ Need more protein for muscle repair & building
  ✓ Need more carbohydrates for fuel
  ✓ Need more iron to carry oxygen
  ✓ Need more calcium for bones and muscles

• **Pre race / workout meal & snacks**
  ✓ Eat breakfast- fuels your muscles and kick starts your metabolism. At least have something light if you are running first thing in the morning (Gatorade, a banana, etc).
  ✓ Eat a lunch that doesn’t sit heavy in your stomach if you are running later in the day
  ✓ Practice eating different things at lunch to see how you feel at practice
  ✓ Eat a light, carbohydrate rich snack before afternoon or evening workouts.
  ✓ Stick with water before you race / workout- Gatorade right before a workout / race causes a blood sugar crash. Better to be consumed an hour before or during the workout.

• **Post race / workout meal & snacks**
  ✓ Eat a snack within 15-30 min of your last race / workout
  ✓ Best snacks have a 4:1 carbohydrate to protein ratio- refuels muscles best
  ✓ Chocolate milk, English muffin w/ peanut butter, sandwich with meat & cheese, etc.
  ✓ Eat a balanced meal within 1-2 hours of your last workout.
  ✓ This prepares you for your next workout.
  ✓ Food is fuel! Don’t run on an empty tank!!

• **Things to avoid**
  ✓ Energy drinks: mix of caffeine and sugar leads to poor performance
  ✓ Fried foods: leads to stomach upset
  ✓ Supplements: unregulated so you don’t know what your getting, most not proven to work

For additional information go to [www.HBRoadRunners.com](http://www.HBRoadRunners.com)