



Harriton Sports Nutrition: How to Improve Performance

February 22, 2010

Make sure adequate energy is consumed: Estimated Needs

Age of athlete in years	Calories (Cal/day)	CHO (gm/day)	Protein (gm/day)	Fat (gm/day)
Female 9-13	1323-2790	130-540	20-100	44-93
14-18	1597-3110	130-640	34-120	53-104

Drink enough fluid every day: Estimated Fluid Needs in Ounces by Weight

Weight in pounds (weight in Kilograms)	*Daily fluid needs in ounces	Weight in pounds (weight in Kilograms)	*Daily fluid needs in ounces
90 (41)	48	180 (82)	96
100 (45)	53	190 (86)	100
110 (50)	58	200 (91)	106
120 (55)	64	210 (95)	110
130 (59)	69	220 (100)	117
140 (64)	75	230 (105)	123
150 (68)	79	240 (109)	127
160 (73)	85	250 (114)	133
170 (77)	89	260 (118)	137

**This does not include fluid that is lost during activity. Numbers will vary according to individual needs.*

Tips for the athlete trying to lose weight include:

1. Drink adequate non-caloric fluids like water
2. Eat 8-10 servings of fruit and vegetables per day, include with every meal and snack
3. If possible, increase activity (especially aerobic activity) ensuring 1-2 rest days per week
4. Consume 26-38 gm of fiber each day
5. Cut down on nonessential or extra foods, limit to two per day
6. Follow package directions to gauge appropriate portion sizes
7. Identify troublesome behaviors and modify (i.e., during off-season study after school with a group of friends instead of going home and engaging in bored eating)
8. Watch excessive caloric fluids such as soda, excessive milk (over 16-32 ounces of nonfat milk per day) or juice drinks (maximum quantity of 6-12 ounces of only 100 % juice each day)
9. Minimize weight loss during season and try not to exceed 1.5 % of body weight or ½-2 pounds per week during off-season

Tips for the athlete trying to gain weight include:

1. Decrease overall exercise or activity, ensure rest days are taken for recovery and growth
2. Drink high calorie drinks such as milk, juice and sports drinks versus water and diet sodas
3. Eat small frequent meals every 2-3 hours through the day
4. Drink extra high-calorie drinks (i.e., Carnation Instant Breakfast, Ensure or Boost Plus)
5. Make hot cereal, such as oatmeal or cream of wheat, with milk





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6. Increase the fat in milk as needed, from skim to 1 %, 2 % or whole
7. Include higher calorie substitutes for favorites such as regular granola for frosted flakes cereal
8. Make a trail mix using chocolate or yogurt covered nuts and a handful of favorite candy

Plan for success!

1. Take a couple of minutes each night to focus on the meals and snacks required for the next day.
2. Develop a routine for similar days or schedules throughout the week. Make a peanut butter and jelly sandwich and grab an extra granola bar the night before an especially busy day. Pack them into a back pack and place beside the door for a quick escape the next morning. Try to eat the sandwich before practice and the granola bar with chocolate milk immediately following practice the following school day.
3. Prepare a trail mix and place into school bag to nibble on throughout the day.
4. If additional snacks are required for optimal growth, a doctor's permission note can be obtained to snack throughout the day for schools lacking adequate fueling time.
5. To optimize performance, focus on preparation and recovery. Meals shouldn't be skipped! Follow these guidelines when planning for the event.
 - a. For **morning** events: eat a nutrient-packed, high-carbohydrate dinner with a bedtime snack the night before. That morning try to consume a light meal as tolerated to stabilize blood sugar and soak up gastric juices. Breakfast might include chocolate milk, a yogurt smoothie, 1-2 slices of toast and or cereal.
 - b. For **afternoon** events: eat a nutrient-packed breakfast and a lighter carbohydrate-based lunch such as a bagel with fruit.
 - c. For **evening** events: eat a nutrient-packed breakfast and lunch. Try to consume a light meal as tolerated 1-2 hours before the event.

Ideas for post-event fuel: Muscles are especially hungry just after physical activity. Try to eat or drink 200-400 carbohydrate Calories within the first ½ hour after exercise and then again two hours later after stretching, showering and exercise recovery. Examples of good food choices would include: 1 bagel and a medium orange; 1 cup pasta topped with ¼ cup steamed vegetables; 1 baked potato with 8 oz fruit juice; ½ cup cereal, ½ sliced banana and 8 oz skim milk; 1 cup nonfat frozen or regular yogurt with 1 cup blueberries or raspberries; 1 pita pocket and 1 cup vegetable soup; and 1 bran muffin with 1 cup vegetable juice.

Helpful websites are available.

1. The USDA 2005 Dietary Guidelines and MyPyramid program serve as a platform for sound eating habits and the foundation for a basic meal plan. Both are accessible at www.usda.gov. www.MyPyramid.gov provides protein ideas and a menu planner.
2. An athlete can move on to discover sports related concepts to maximize potential. Three useful websites to inquire about specific sports nutrition related topics are the Gatorade Sports Science Institute at www.gssiweb.com, the American College of Sports Medicine at www.acsm.org/publications/positionStands.htm and the American Dietetic Association at www.eatright.org.

