

Nutrition Basics for Athletes

All the information on this page is supplied by Lori S. Brizee MS, RD, LD, CSP, author of the book Healthy Choices, Healthy Children: A Guide to Raising Fit, Happy Kids. If you would like to learn more about Lori or schedule a consultation, you can visit her website at www.centraloregonnutrition.com. We are incredibly grateful to Lori for providing us with the content for this section.

Good nutrition is important for all of us, especially our growing kids. We need a varied diet that includes all the food groups: protein, fruits and vegetables, whole grains, and milk/dairy products (or some other good source of calcium). Kids need enough nourishment to allow for growth and development, and physical activity. The more active a kid is, the more fluid, calories, vitamins, and electrolytes she needs (protein and mineral needs are not affected as much by activity). Calories (“energy”) come from protein, carbohydrate and fat. Vitamins, minerals and electrolytes are supportive players that keep our metabolisms humming; enable us to use the energy we eat, help build bone and muscle, and keep our blood and immune systems healthy among other things. In most cases a child’s appetite and thirst is the best guide for meeting needs. Unless a person (adult or child) is doing endurance activities or sports that last for more than 1 or 2 hours a day, nothing other than a basic healthy diet is necessary. If a child is not taking in enough calories over time, her weight gain and growth will be affected, athletic performance will definitely be subpar and she may develop deficiencies in vitamins and minerals (it is hard to meet vitamin and mineral needs if you aren’t meeting basic calorie needs!). This is a major concern for distance runners, gymnasts, dancers, and wrestlers. Most kids get plenty of calories—many kids, even some athletes, eat far more than they need resulting in excess weight gain.

How do we make sure our kids eat enough but not too many calories?

Aim for 3 balanced meals and 2 or 3 snacks/day and limit those foods that provide calories without other nutrients (e.g., candy, cookies, potato chips, Cheetos, pop, fruit juice, fruit snacks, most snack crackers, and French fries to name a few); even kids with high calorie needs do not have a lot of room for “empty calories”. If you make sure those meals AND SNACKS are consumed at an “eating place” (e.g., kitchen table) without distractions of TV, books, computer, video games...your kids will be far more apt to eat just what they need and meet all their nutritional needs than if they mindlessly munch or “graze” throughout the day.

What are some specific concerns for our kids in sports?

Fluid and electrolytes: Drinking enough fluid to keep hydrated and getting enough electrolytes to replace sweat losses are essential. Needs vary with body size, intensity and duration of activity, as well as the weather and humidity. Kids should always have access to plain water (“Cascade kool-ade”), especially when playing hard or during a sporting event. A sports drink that contains electrolytes is only occasionally needed.

What are the benefits of “sports drinks” (e.g. Gatorade)?

Sports drinks are overused! Commercial sports drinks are water with sugar, sodium and potassium in concentrations similar to those in our blood. They are a great way to keep a person hydrated, replace electrolytes lost in sweat and sugar used by muscles during a long event (e.g. running more than a 10K race, summer football practice, or doing any continuous activity for an hour or more in hot weather >80°F or 2 hours in cooler weather). They are absolutely unnecessary in the vast majority of activities kids are engaged in. We need to teach our kids to drink water. For a refreshing and tasty drink, add some lemon or lime and ice to their water bottles.

How do we make sure our kids are well fueled for a big athletic event?

Breakfast: Start with a good breakfast that contains complex carbohydrate (a whole grain like oatmeal, 100% whole grain toast, or pancakes made with whole wheat flour), protein (dairy, meat, eggs, nuts or legumes), fruit and/or vegetable. A healthy breakfast is a good start to any day—game day or not! Ideas:

- Oatmeal with added nuts and raisins and/or chopped apple, topped with milk and a little sugar + a cup of hot cocoa (milk and chocolate powder heated in microwave)
- Eggs (any style) and toast + a piece of fruit and a glass of milk
- Omelet filled with sautéed spinach and cheese + left over potatoes sautéed in olive oil and a piece of fruit.
- Plain yogurt blended with frozen berries and/or banana, nuts and raw oats.
- 100% whole grain ready to eat cereal (e.g. bran flakes, spoon sized shredded wheat) topped with a banana, slivered almonds, 1 teaspoon sugar or honey and milk +milk to drink.
- Peanut or almond butter and jam or honey on toast + a piece of fruit + a glass of milk or cup of cocoa.
- Pancakes made with whole wheat flour (there are whole grain pancake mixes available) or French toast made with whole wheat bread topped with peanut or almond butter, berries and a little syrup + a glass of milk.

- Leftovers from last night's dinner + a piece of fruit and a glass of milk.

Hydration before and event

Make sure your child is well-hydrated prior to the event. Drink extra water or milk up until about 2 hours before the event. If it is a hot day, or if the event will be longer than 2 hours, make sure they are getting extra salt early in the day—have a little ham with those eggs or pancakes, drink a salty beverage like chicken or beef bouillon, V-8 or tomato juice, or have a snack like pretzels.

Pre-game meal and snack

Three to four hours before the event, eat a high carbohydrate, moderate fat pre-game meal (any of the breakfasts above would suffice). Additional ideas:

- Lean turkey, ham, or roast beef sandwich with mayonnaise, mustard, lettuce and tomato or peanut butter and jam or banana sandwich + 1 large piece of fruit + whole wheat pretzels.
- Soup (chicken noodle, chicken with rice vegetable beef, minestrone) + bread and butter + carrot sticks + grapes + a glass of non-fat or 1% chocolate milk.
- Pasta with meat sauce + green salad + fruit + milk.

Half an hour to an hour before event eat or drink a high carbohydrate snack:

- Large piece of fruit
- Fruit smoothie (combo of fresh and frozen fruit, or frozen fruit and fruit juice blended in blender)
- 100% fruit juice and crackers.

Game or Event Nutrition

During any activity lasting more than 1 hour, such as a long run, cross country or alpine skiing, long bike ride or hike, sports practice:

- Drink frequently, about 1/5 ounce liquid per pound of body weight per hour (for a 100 pound adolescent this is 20 ounces per hour).
- *If the event is more than 2 hours:* drink a sports drink (commercial or home-made: 2 cups water with 2 cups orange juice and 1/4 to 1/3 teaspoon salt per quart). Your child will be losing both fluid and electrolytes in sweat, and using up her carbohydrate stores to fuel muscles.

Post-event Nutrition

- *Assuming your child has been drinking throughout the activity, she will need to replace fluid losses with about 2/3 ounces for every 10 lbs body weight (that 100 pound adolescent will need about 7 ounces of water)*
- *If eating a meal within an hour of an event, no special post event snack is necessary!!*

- *If more than an hour before a meal, goal is 1:4 ratio of protein to carbohydrate in 150 to 200 calories. Good choices:*
 - chocolate milk
 - flavored yogurt
 - yogurt and fruit smoothie
 - String cheese and an apple
 - ½ peanut butter and jam sandwich
 - ½ meat sandwich
 - quesadilla (corn or small flour tortilla topped with ¼ cup refried beans and 2 tbsp cheese and heated in oven or microwave)
 - *(NOTE: granola bars, fruit snacks, and other highly processed foods are NOT on this list)*