

SPORTS MEDICINE CENTER



Children's Hospital Colorado



Food to Fuel

Nutrition Tips for Young Athletes

PREPARE\\PERFORM\\RECOVER\\REPEAT

Nutrition advice for young athletes can be downright confusing. Luckily, with the right information, it's pretty simple.

The key is to balance your calories from carbohydrates, protein and fats to support growth and give you the best fuel for your sport.

Carbohydrates

Because low-carbohydrate diets are popular, many people think that eating carbs causes unwanted weight gain. In reality, consuming more calories than the body uses will cause weight gain, not carbs alone. Young athletes need carbs — and the vitamins and minerals that come from carb-rich foods — to perform at their best. In fact, nutrient-rich sources of complex carbohydrates like fruit, vegetables and whole grains should constitute at least 50 percent of a well-balanced diet. Because high-fiber and high-fat carbohydrates are slower to digest (and sometimes produce an urge to poop), it's a good idea to consume them a few hours before a practice or event.

Great foods for carbs

- fruit
- vegetables
- whole grains
- dairy products
- low-sugar cereals
- popcorn

Protein

Athlete nutrition advice tends to emphasize protein, but the truth is, unless an athlete is vegan or has some other reason for avoiding protein-rich foods, most kids don't need protein bars or powders. They typically get enough from regular foods. If low muscle mass or low weight is an issue, kids probably need more calories total — from protein, but also from carbs and fats. When young athletes don't consume more total calories, the protein they consume will fuel their activities, not muscle growth and repair.

Great foods for protein

- peanut butter and other nut butters
- eggs
- yogurt, milk and cheese
- lean meat, like poultry and pork
- tofu
- beans, nuts and seeds
- fish
- whole grains, like brown rice, quinoa and whole wheat

Fats

Fats offer a compact source of calories for growth and energy for sport. Keep them healthy by eating mostly fat from plants. Healthy sources of fat include nuts, seeds, avocado, fatty fish, olive oil and canola oil. Keep food choices that contain saturated fats (mostly from animal sources like butter and marbled meat) and trans fat (mostly from stick margarine and snacks with partially hydrogenated fats) to a minimum. Omega-3 fats can help decrease inflammation in the body.

Great foods for omega-3 fats

- walnuts and walnut oil
- fish, like salmon, rainbow trout and canned white tuna
- flaxseed and flaxseed oil
- firm tofu
- canola oil

Do I really need this stuff?

With so many products on the market claiming to boost performance it's hard to know what actually works. Here are a few tips guaranteed to produce maximum results.

Eat snacks between meals

Most young athletes need three balanced meals with snacks in between, emphasizing a variety of fruits, vegetables, whole grains and lean proteins. For older athletes who burn a lot of calories on the field during practices, all-natural granola bars (like ours found on the following pages) can be a convenient and even necessary way to fill gaps between meals. For athletes who practice or compete for less than an hour at a time, a piece of fruit is a better way to go.

Stay hydrated and get electrolytes

Drinking water throughout the day is key to an athlete's performance in practice and competition. When the body sweats, it loses more than water. It also loses the electrolytes (a fancy word for "salts") it needs to move nutrients into cells. Athletes practicing or competing for more than an hour at a time may need electrolytes and carbs to recharge. Sports drinks offer a quick boost of both, and most athletes can drink them before and during exercise without feeling sick (as you might if you ate food at these times). For some athletes, water works just fine, especially those working out for an hour or less. Drinking chocolate milk after a longer workout will not only provide fluid for hydration, but protein for muscle recovery and repair and carbohydrate to refuel muscles for the next workout.

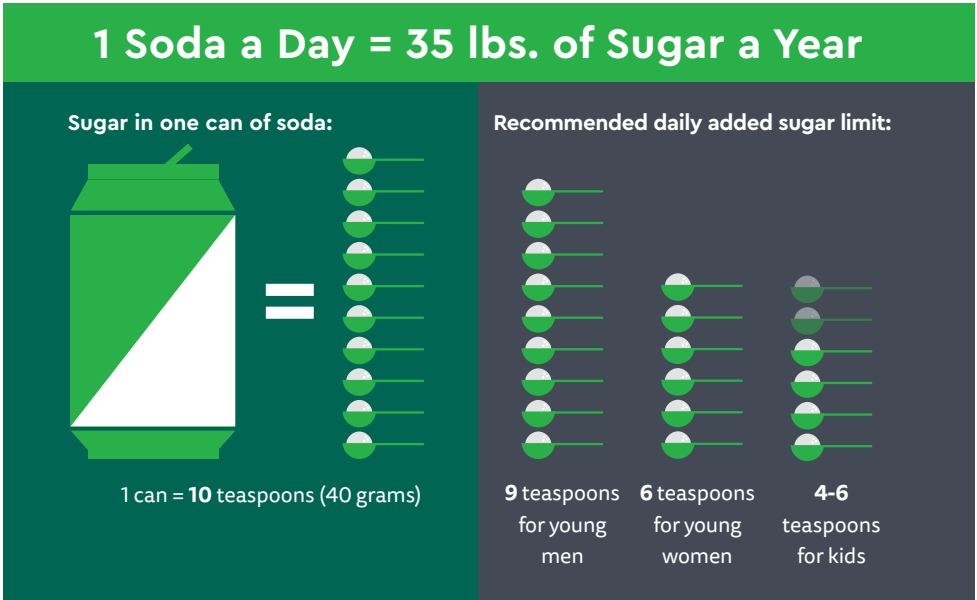


Sample hydration plan for an average-sized 15-year-old soccer player:

4 hours Before game 10 oz of water	1-2 hours Before game 10-16 oz of water	1-3 hours During game 20 oz of water or sports drink in four 5 oz servings	After game 8 oz of water or low-fat chocolate milk
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Limit simple sugars

Foods like cookies, ice cream, cake and other high sugar foods should be on the athlete's 'sometimes' list, not the every day list. The goal is to keep foods in balance, and favor vitamin and mineral rich complex carbs over simple sugars.



Forget the supplements

Flashy packaging can make products like protein powders, creatine, amino acid supplements and energy boosters look like must-haves. In the real world, though, supplements are not regulated by the Food and Drug Administration — meaning the claims a supplement product makes don't even have to be true as there is no mandatory testing of these products. Some may even do more harm than good, especially to the liver and kidneys. Products could contain contaminants that are harmful to a young athlete's body. In the long run, a balanced diet with carbohydrate, protein and fat will give you the fuel, vitamins and minerals you need to perform.

Watch out for fancy diets

Low-fat, low-carb and low-calorie foods are a popular way to lose weight. They might work for some adults, but young, active athletes need carbs, fats and proteins in amounts that can fuel not only their performance, but also their growing bodies and brains. Unless a kid or teen needs to avoid certain foods for a medical condition, leave a full range of foods on the menu.

No-bake energy bars

Eating healthy snacks between meals is important for active, growing kids. To help your child stay energized throughout the day, try this easy recipe for portable, nutrient-rich energy bars.

Ingredients

- 1 cup dried dates, dried apricots, raisins or a mix of your favorite dried fruit
- 1 ½ cups rolled oats
- ¼ cup honey
- Optional additions: vanilla, flax seeds, dried coconut
- ¼ cup nut butter

Prep time: 10 minutes | **Cook time:** 5 minutes | **Total time:** 35 minutes

Serving size 1 bar; makes 10 bars

1. Process the dried fruit in a food processor until it becomes almost a smooth puree (about 1 minute). The mixture will look like dough.
2. Place fruit puree in a large mixing bowl; add oats and set aside.
3. Warm the honey in a small saucepan over low heat and stir in the sunflower seed butter. Heat gently, being careful not to burn the mixture.
4. When completely combined, pour over the oat and fruit mixture. Stir well.
5. Once thoroughly mixed, transfer to a flat baking dish or cookie sheet lined with plastic wrap or parchment paper.
6. Using a rolling pin (or a spatula, drinking glass, bottom of a bowl) press down firmly on the mixture until flattened and packed tightly.
7. Cover with parchment paper or plastic wrap and let it rest in the refrigerator until set — about 20 minutes.
8. Remove the mixture from the pan and cut into evenly portioned bars.
9. Store bars in an airtight container for up to five days, or in the freezer for one month (thaw before eating). You can also package them individually by wrapping them in parchment paper, plastic wrap or sandwich bags for eating on the go.

Want to learn more?

Our Sports Medicine Center's registered sports dietitians help young athletes calibrate the right diet for any sport, schedule or body type.

childrenscolorado.org/sports



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