



Fueling Basketball Players

Fueling Your Sport

- The number of calories you need to eat will depend on your body size, intensity of training, cross training, and playing time. A small high school female player training for an hour a day may need only 2,000 calories per day, but a 7-foot professional player may need 6,000 to 7,000 calories per day.
- Male athletes who train for more than 90 minutes per day may need more than 23 calories per pound of body weight per day.
- Female athletes who train more than 90 minutes per day may need 20 to 23 calories per pound per day.
- Be sure to get enough calories to meet the demands of basketball. Basketball has eight different changes in movement, and players average 997 changes in movement during a 48-minute game—that equals a change every 2 seconds! Only 15% of playing time in a basketball game is of high intensity, but the high-intensity play is likely to determine whether you win or lose the game.
- Basketball players need more than 2.7 grams of carbohydrate per pound of body weight per day ($> 6 \text{ g/kg/day}$). During heavy training and competition, carbohydrate needs increase to 3.6 to 4.5 grams per pound of body weight per day (8 to 10 g/kg/day). Good sources of carbohydrate include whole grain breads and cereals, fruits, and vegetables.
- Basketball players need 0.6 to 0.8 grams of protein per pound of body weight per day (1.4 to 1.7 g/kg/day). Good sources of protein are fish, chicken, turkey, beef, low-fat milk, cheese, yogurt, eggs, nuts, and soy.
- Basketball players need at least 0.45 grams of fat per pound of body weight per day (1 g/kg/day). Choose heart-healthy fats like canola oil, olive oil, and nuts.

Fluid Needs

- Being dehydrated can lead to early fatigue. Dehydration is completely preventable.
- Train yourself to drink before, during, and after exercise and to drink before you feel thirsty.
- Two to three hours before practice or tip-off, drink 2 to 3 cups of fluid.
- Thirty minutes before practice or tip-off, drink $\frac{1}{2}$ to 1 cup of fluid.
- During practice, drink about $\frac{1}{2}$ to 1 cup at every break.
- During the game, drink about $\frac{1}{2}$ to 1 cup of fluid at every timeout and during half-time.
- After practice or a game, drink about 3 cups for every pound you lost while you were active. Weigh yourself before and after practice or the game to find out how much fluid you lose through sweating.
- Learn how much fluid your sport bottle holds, and use the bottle as a visual reminder to drink enough.
- Train yourself to drink fluids during the preseason. Many athletes think they cannot drink when they play basketball, but it is more risky to train without fluids. Cramping and heat illness can be caused by dehydration.
- Sport drinks can help to replace sodium lost in sweat. Sport drinks provide fluids, electrolytes, and carbohydrates.

Supplements Commonly Used in Basketball

- Creatine is a supplement that can improve training ability and increase muscle power. One study showed that creatine improved jumping height.
- Creatine should not be used by athletes younger than 18 years because it is not known whether creatine is safe for people in this age group.
- If you use creatine, take 3 to 5 grams per day. More than this is not needed..

Top Three Nutrition Tips for Improving Performance

- 1. Adopt a training diet that will fuel your workouts.** Basketball seasons are long and intense. A good nutrition plan can maximize your speed, agility, and power, and it can keep you from getting stale as the season wears on. The end of the season usually means tournaments or playoffs, so it's important to stay physically strong and mentally sharp by eating wisely. Be sure to get enough calories, carbohydrate, protein, and vitamins and minerals.
- 2. Eat carbohydrate-rich foods or fluids right after practice or games.** A high-carbohydrate beverage or an energy bar is an easy way to refuel your muscles. Your muscles are most able to replace glycogen right after exercise. If you sweat a lot and are a "salty" sweater (when your t-shirt or shorts dry after a workout, can you see a white salt ring?) replace sodium by drinking sport drinks, including salty foods in your meals (pickles, soup, tomato juice), and salting your food.

3. Eat before you train. Drink a liquid meal that has both carbohydrate and protein or grab a fruit smoothie if you don't want to eat solid food before a morning practice. If you train in the afternoon, take a carbohydrate-rich snack to eat before practice. Good choices include cereal bars, bananas, 100% juice boxes, fig or fruit cookie bars, fruit cups, pudding cups, and sport drinks.

Nutrition Prescription:

- calories per day
 grams of carbohydrate per day
 grams of protein per day
 grams of fat per day
 cups of fluid per day

Special concerns: