



FULLCHARGE

ALL-IN-ONE WELLNESS TRACKER

NUTRITION GUIDE



Nutrition is the one component of athletic programs that is most misunderstood, primarily due to misinformation. Everywhere you turn, you hear or read about someone who has gained or lost 20 pounds in one week. This idea that people should gain or lose this weight quickly is **misleading** and **dangerous**.

As an athlete, you must know the science behind your diet and dietary habits to perform at your optimum level. You cannot run a high-performance race car on kerosene or cross the finish line without enough gas. Excess weight reduces the speed and endurance of any athlete, just as a lack of efficient fuel reduces long-term success and ability.



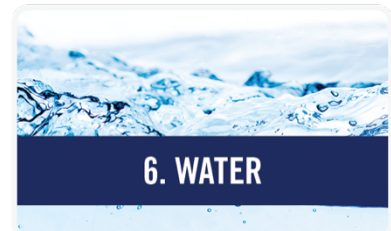
FUELING FOR SPORTS

All sports can be affected by what, when, and how much an athlete eats and drinks. Athletes **must** apply the same effort they give during practices and competitions to properly fueling their bodies. Players sometimes neglect nutrition, which can result in poor performance.

Proper nutrition is essential for all athletes. Because sports require short bursts of energy, eating enough carbohydrates is critical. As an athlete, you are constantly looking for an edge over your opponent; nutrition **is** that edge. Nutrition impacts strength, speed, stamina, and recovery. You, as athletes, are responsible for taking control and accountability for your well-being. You must provide your body with optimal food and fuel. A player who comes to practice without having eaten breakfast or lunch, or skimps on fluid intake during hot summer practices, will not reach their full potential – which ultimately affects the team's performance.

THE BASIC SIX

The six most important foundations of nutrition for reaching your sport and strength goals are:





CARBS ARE KEY!

Many sports are stop-and-go: they require short bursts of intense effort followed by rest. Therefore, the primary fuel for them is carbohydrates.

Carbohydrates are the best healthy food you can eat and are often called the "jet fuel" of nutrition for athletes. Simply put, your diet should be 2/3 carbohydrates and 1/3 protein, with an emphasis on moderate fat. Examples of lower-fat foods containing carbohydrates are:

- Bagels over doughnuts.
- Mashed potatoes over fries.
- Grilled chicken over fried chicken.
- Frozen yogurt over ice cream.

Upping the amount of carbohydrates in your diet will provide you with more available energy during practice and games. Eating less fried foods often decreases the chance of an upset stomach, boosting performance.

During "two-a-days" or "pre-season," carbohydrates must be the primary fuel source. Players **will not** recover in time for the next practice without adequate carbohydrate intake. Be sure to watch your protein intake: while protein is needed in an athlete's diet to build and maintain muscle mass, excess protein consumption will be stored as fat and may dehydrate the body. Some healthy food choices include turkey and cheese roll-ups, hummus and carrots, bulky smoothies, and cut-up fruit and vegetables.

PROTEIN

Protein is primarily used to rebuild and repair muscle. Once you eat protein, it is broken down into amino acids for muscles and other tissues to use. While it's an essential part of a healthy diet, protein alone is a poor energy source. Most people consume far more protein than they need. Excess protein is converted to fat, stored in the body, or excreted in waste products.

Good animal protein sources include beef, pork, seafood, turkey, chicken, dairy products (milk, cheese, yogurt), and egg products (eggs, eggbeaters, egg whites). Good plant protein sources include beans, cereal, bread, crackers, rice, pasta, tofu, soy, almonds, rice or hemp milk, nuts, seeds, nut butters, hummus, bean dips, refried beans, vegetables, almond-based powders, and bars.



FATS

Fat is a poor energy source, and it takes the body a long time to break it down into usable fuel. If the body cannot break it down into a valuable energy source, it stores it as fat in the body. There are four types of fat: saturated, monounsaturated, polyunsaturated, and trans fats.

- **Saturated fats:** include animal fats, butter, margarine, cream, salad dressing, cheese, shortening, whole milk, and fried foods.
- **Monounsaturated fats:** include olive oil, peanuts and their oils, avocados, cashews, sunflower oil, and poultry.
- **Polyunsaturated fats:** include fish, fish oil, corn oil, pecans/walnuts, almonds, mayonnaise, and sesame oil.
- **Trans fats:** include cookies, crackers, pastries, microwave popcorn, muffins, processed meats, fast foods, some cereals/cereal bars, and chips.

VITAMINS

Vitamins are chemicals that sustain life. They serve as metabolic catalysts that regulate all chemical reactions in the body. People often take vitamins to give them more energy. However, **vitamins do not provide energy**.

Food provides you with energy, not vitamins. A balanced diet will provide more than the minimum daily requirements. If you are concerned, take no more than a multivitamin. Mega dosing any vitamin is **unnecessary** and potentially harmful.

MINERALS

Minerals are described as inorganic compounds, usually salts and oxides (Dr. Charles Marshall). The Food and Nutrition Board considers 16 minerals essential for humans because they help form structures in the body. Bones, for example, are developed with the help of calcium. Minerals also regulate body processes. A balanced diet should provide you with all the minerals you need.



PRE-GAME MEALS

The primary goal for providing athletes with a pre-game meal is to fuel the body for competition. The best strategy is to choose lower-fat foods. As mentioned above, fats take longer to digest, so high-fat meals can leave you with a full, heavy stomach and insufficient energy to perform at your best.

Avoid foods like fried meats, fried potatoes, bacon, and sausage when planning a pre-game meal early in the day. Instead, choose foods that favor leaner protein and carbohydrates, such as bread, cereal, and toast. For afternoon/evening games, choose grilled, baked, or broiled meats, tomato instead of cream sauce, low-fat milk, and baked or broiled (instead of fried) potatoes.

Additional food options for pre-game meals include:

- Turkey or ham subs, fruit salad, and frozen yogurt
- Eggs, waffles, ham, fruit
- Pasta with red meat sauce, grilled chicken, salad, and fruit
- Smoothie, cereal, fruit
- 8-ounce cuts of steak with carbohydrates on the side
- Beverages: sports drinks, juices, and water

POST-GAME MEALS

Before eating, you should replenish your fluids and carbohydrates **immediately** after your game. The best way to do this is to drink sports drinks with electrolytes or eat fruit, pretzels, and/or balanced sports bars.

Post-activity is usually the hungriest time for athletes, and decision-making can occasionally lapse when you're hungry. Some good choices include:

- Steak kebabs, rice, salad
- Salmon, green beans, and corn
- Roast beef, mashed potatoes, and salad
- Hamburgers, grilled chicken sandwiches, baked potato, and juice
- Vegan hamburgers, baked potato, vegetables
- Vegetable stir-fry with tofu or egg, rice



POST-GAME/LIFT SNACK

The food and beverages an athlete consumes before and after competition and practice are as important as what they consume during an event. Consume a protein-carbohydrate mixed snack for optimal recovery within 30 minutes after a competition, practice, or heavy lifting. The snack should contain 6 grams of protein and 35 grams of carbohydrates. Snacks that meet these criteria are peanut butter crackers, trail mix, yogurt with cereal, a bagel with cream cheese or peanut butter, or a sports bar containing the right proportion.

Appropriate Snacks (pre-game and post-game):

Some examples are:

- Pretzels
- Fig Newton's
- Graham crackers
- Rice cakes
- Cut-up fruit (oranges, apples, bananas)
- Crackers
- Bagels
- Granola bars
- Clif Bars/PowerBars
- Raisins, dried fruit

Items **NOT APPROPRIATE** before, during, or after athletic activities:

- Soda pop or carbonated drinks of any kind
- Candy
- Cakes or cupcakes
- Donuts or muffins
- Chips
- Cookies



WEIGHT LOSS/GAIN

Healthy weight loss or weight gain only happens in small increments. You must combine a proper nutritional plan and strength training program to add lean muscle mass and discard fat mass.

TIPS FOR WEIGHT LOSS

Talk to your coach about a nutrition plan for you to lose weight. Some general guidelines are:

- Eat more fruits and vegetables.
- Limit fast food intake or make healthy fast-food choices.
- Drink more water.
- Avoid soda, candies, desserts, and other simple sugars.
- Lessen the fried foods you eat.
- Do not restrict carbs.
- Do not skip meals.
- Trim calories by cutting down on condiments and snacks.
- Decrease calories from beverages by diluting juices or iced tea.
- Include filling foods such as protein sources and foods that require chewing: salads, vegetables, baked potatoes, meat, and fruits.
- When eating fast food, choose regular instead of super-size meals.
- Put snacks into a bowl instead of sitting down with the whole bag.

Common Nutrition Mistakes:

- Not eating breakfast; it's the most important meal of the day!
- Not drinking enough fluids.
- Not eating at regular intervals.
- Eating too much protein and simple carbs (i.e., processed carbs like white bread).

TIPS FOR WEIGHT GAIN

Talk to your coach about a nutrition plan for you to gain weight. Some general guidelines are:

- Eat 4 to 5 meals daily, including 2 to 3 snacks daily.
- Start a meal with food, not liquids. Ex: have a sandwich first, and then a shake.
- Replace low-or no-calorie beverages with juice, lemonade, milk, and sports drinks instead of water.
- Try to eat one-quarter more at every meal and snack.
- Keep snack food around to nibble on.
- Add higher calorie foods to every meal: granola instead of sugared cereal.
- Add nuts to cereal or snacks.
- Eat bagels instead of bread.
- Add 4 oz of protein daily from cheese, low-fat lunchmeats, and an extra piece of chicken, milk, and yogurt.



MEAL IDEAS

Breakfast:

- Pancakes, waffles, or French toast with syrup – no butter
- Egg sandwich – no cheese
- Unbuttered English muffin, bran muffin, bagels or toast w/preserves, jelly or apple butter
- Low-fat milk or yogurt with fresh fruit and a bagel
- Low-fat granola bars
- Dry or cooked cereals with milk and fresh/dried fruit
- Pita bread stuffed with peanut butter and raisins
- Pita bread stuffed with cottage cheese and veggies

Lunch:

- Vegetables or chili-stuffed potatoes
- Salad bars: use low-fat dressings, veggies, dried beans, beets, carrots, and pasta, and add crackers, rolls, or bread
- Pack lunches: sandwiches with whole grain bread, fruit, fig bars, and vegetables or soup
- Pastas with meat or meatless sauce
- Tacos without sour cream
- Baked or broiled meats instead of fried
- Fast Food restaurant tips:
 - Grilled chicken sandwiches
 - Grilled hamburgers
 - Roast beef sandwiches, baked potatoes, or salad bars (no mayonnaise, special sauce, butter, sour cream, etc.)
 - Thick crust pizzas with veggies – no extra cheese

Dinner:

- Baked, broiled, or grilled protein with vegetables and rice
- Pasta with clam sauce or marinara sauce
- Chicken breast without the skin with potatoes and vegetables
- Stir fry dishes with tofu and lots of vegetables
- Grilled salmon, tuna, swordfish, or mackerel



Snacks:

- Whole grain crackers
- Graham crackers
- String cheese
- Low-fat yogurt
- Dry-roasted nuts
- Breadsticks
- Pretzels
- Dry cereal
- Fresh fruits
- Dried fruits
- Fruit juices
- Bagels

Coach Tip:

Unlike professional athletes who practice during the day, younger athletes only take the field or hit the gym after school. Since bodies do not run well on empty, eating every 3 to 4 hours is necessary to fuel the body and mind properly. Encourage your athletes to:

- *Eat within 1 hour of waking up*
- *Eat something at lunch*
- *Snack before practice*
- *Bring a post-exercise snack to eat before leaving the locker room*

Athlete Tip:

Watch the caffeine – it lowers blood sugar and can make you hungrier. It is also a diuretic and can dehydrate you!

Athletes can make changes that will be felt on and off the field. The team should set nutrition goals together, such as:

- *Drinking on a schedule*
- *Refueling at half-time*
- *Eating immediately after practices or games*



HYDRATION

Drink Up! All athletes need optimal hydration to perform their best. Hydration is not just a game-day issue but a **daily** priority. You must drink enough liquids to prevent dehydration, especially in hot, humid environments.

You **MUST** rehydrate your body by drinking **80%** of your body weight daily. For example: If you weigh 200 pounds, you must drink 160 fluid ounces each day of non-caffeinated, non-carbonated, and non-alcoholic fluids. Remember, caffeine and alcohol are diuretics, which will cause the recovery process to take 3x longer.

While water is always an excellent go-to beverage, sports drinks and coconut water contain electrolytes like sodium and may help prevent cramping. Athletes sweat profusely and lose additional water by simply breathing - this water **must** be replaced.

Coach Tip:

- *Weigh players before and after practices to determine individual fluid losses and monitor them to replace every pound lost by drinking at least 20 ounces.*
- *Ask athletes to bring their own sports bottles and drinks so their favorite fluid is readily available.*
- *Remind athletes that spitting out fluids does not hydrate the body! Athletes must monitor their urine color: the goal is light-colored urine and lots of it!*

Athlete Tip:

To remain hydrated, you should consume at least two extra quarts (eight 8-ounce glasses) of water every day above and beyond what you sweat.

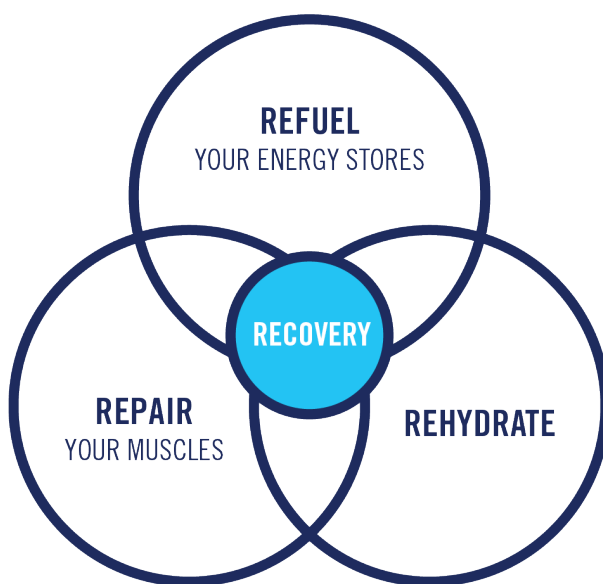
- *Timing matters:*
 - *Before you exercise: Drink 10-20 oz of fluid 1-2 hours before you lift, practice, or compete. Drink 8-16 oz of fluid fifteen minutes before a competition.*
 - *During exercise: Drink 4-8 ounces of **cool** fluid every 10-20 minutes.*
 - *After exercise: Keep drinking fluids to ensure proper hydration, even when you're not feeling "thirsty" anymore. Sports drinks or coconut water will help to replenish energy stores quickly after exercise.*
- *Always drink cool fluids if available.*
- *Make sure your urine is clear **before** practice.*
- *If you feel or see any of the following symptoms, locate a coach or athletic trainer **immediately**:*
 - *Sudden dizziness, weakness, faintness, and headache.*
 - *Warm, blotchy skin and NO SWEATING!*
 - *Rapid heartbeat and/or a sudden stomachache (vomiting).*
 - *Uncontrollable muscle cramps.*



REST AND RECOVERY

THE 3 R'S OF RECOVERY

How to optimize recovery nutrition for athletes



- Get plenty of rest during your waking hours.
- Stretch regularly to help repair your muscles and maintain flexibility.
- Sleep is the most crucial factor in recovery and performance: you should get 7-9 hours of sleep every night. Keeping your room dark and cold/cool helps with optimal rest.



ATHLETE TEST: GENERAL HEALTH SCREENING

Before taking any supplement, ask yourself the following questions:

1. Do you eat something for breakfast seven days a week?
2. Do you eat at least three meals a day?
3. Do you monitor the number of calories you consume?
4. Do you restrict your intake of fat calories to 25% of your total diet?
5. Do 60% of your calories come from carbohydrates?
6. Do you eat from all food groups?
7. Do you eat at least three to five servings of fruit a day?
8. Do you eat at least two servings of vegetables a day?
9. Do you consume well-balanced pre-game and post-game meals?
10. Do you drink 80% of your body weight per day?

If you cannot answer yes to each of the questions listed above, why take a supplement?

Do not expect supplements to replace the need for a daily balanced diet. Some athletes eat poorly, do not get enough rest, and assume taking a supplement will compensate for their poor habits. The definition of the word supplement is "in addition to." The description does not state "instead of," which is how many people view and use supplements. If you are not taking care of your health and answering yes to the above questions, a supplement will not help you.

If you have additional questions about nutrition and sports wellness, speak with your coaching team.



REFERENCES

Clark, N. (2008). *Nancy Clark's SPORTS NUTRITION Guidebook: The #1 nutrition resource for active people*. 4th Edition. Champaign, IL: Human Kinetics.

Dorfman, L. (2010). *Performance Nutrition for Football: How diet can improve the competitive edge*. Ithaca, NY: Momentum Media Sports Publishing, Inc.

Riley, D. & Arapoff, J. (2000). *Washington Redskins Strength and Conditioning Guide*. Baltimore, MD: Simone Enterprises, Inc.