

NUTRITION

FOR THE COMPETITIVE VOLLEYBALL ATHLETE

What to eat, when, and why

Kaili Keller, MA, ATC

Why is nutrition important?

Remember, food is fuel. It gives us the energy our bodies need to perform. We cannot create our own energy so it must be consumed. Our bodies turn carbohydrates into a quick energy source, fats into a long term energy source, and protein is used to build up muscle. But not all foods (and drinks) are created equal. Water and food from nature provide us with the vitamins and minerals our bodies need to be healthy. Many processed foods provide us with calories, but lack the nutritional components we need to stay healthy.

How is nutrition different for athletes?

Healthy eating IS healthy eating. However, for athletes, you need **more** energy to play your sport. When we exercise our bodies use more energy than when we are just sitting in class or taking a nice walk around Central Park. So you must eat more food on days you will be exercising to give you that fuel. Have you ever been at a practice or a game and about half way through you just start to feel tired, not as quick, or start making more mistakes? Many times that is because your body is running low on fuel and you should have eaten more beforehand or are in need of a snack. Athletes also have a greater demand for eating protein since they are using muscles at a higher intensity level. After stressing your muscles with exercise, your body needs protein to help build them up stronger for the next time you work out.

So how often do I need to eat?

Listen to your body. If you are hungry, eat. Normally I suggest eating every 3-5 hours on a non-active day, and every 2-3 hours on an active day. Most athletes have an increased metabolism due to all the exercise. So you burn your fuel a little faster than others. You may need food more often than those not participating in a sport or regular exercise routine.

When and what should I eat BEFORE a match?

It's best to make sure you **have a meal about 4 hours before a competition** or hard practice. Make sure you get a healthy protein in there like Tuna, turkey, tofu. Healthy fats like avocado and nuts are also a good idea. Don't forget about your veggies and fruit too. A good meal ahead of time is a great way to allow your body to store up some energy for use later during the competition.

About 30 minutes to 1 ½ hours before the match, make sure to have a snack.

This way you can top off your fuel tank, and have a quick source of energy for when the competition begins. You do NOT want something heavy in your stomach at this point. Remember the longer it takes you to actually eat the food, the longer it takes your body to digest it and break it down for energy. For example, yogurt will give me energy faster than a piece of steak. It's best to combine a carbohydrate with a protein that is easily digestible.

Snack Examples:

- Mixed nuts and dried fruit trail mix
- Nut butter and jelly sandwich on whole wheat bread
- Cut up veggies and hummus
- Turkey/tomato tortilla wrap
- Greek yogurt and berries
- Chocolate Milk
- Hard boiled egg and grapes
- String cheese and crackers
- Vanilla protein powder and orange juice
- Piece of fruit with packet of nut butter

When and what should I eat AFTER a match/practice?

So you have just worked hard at practice or a match. You prepared your body ahead of exercise by fueling up, but now you have used up a lot of that energy. After exercise our bodies go into recovery mode. They work on repairing the muscles that were used to build them up stronger for next time, including our heart and lungs. To do this well they need protein from our diet. So the rule is this: have **carbs within 30 minutes** of a workout to replenish your energy stores, and **protein within an hour** for our muscles to rebuild. If you are going straight home to have dinner, great! Eat a nice meal when you get home. But if your commute is long or you have other things happening before you can eat a full meal, grab another combo carb/protein snack as soon as you can. This might mean just eating a protein bar you like as you leave the gym.

I'm in school all day and then have practice later at night. There is no time for a true meal in between. What do I do then?

If you are going to be at school all afternoon and have a practice starting later at night, you **HAVE** to pack food for in between or allow yourself time to pick something up. I am a big fan of packing multiple nut butter and jelly sandwiches or several turkey roll ups. If you have time to get food I prefer a sandwich shop or a health food store that has several healthy prepared foods available for purchase. Something like sweet potatoes and tuna/chicken is a good option. Just remember to give yourself time to digest these foods before practice begins. No one wants to feel like they have a rock in their stomach while running around the court.

What about for long tournaments? How does my nutrition need to change?

Tournaments can be tricky to get in an actual big meal. You are playing matches with sometimes less than an hour break in between. Yet you might be at the tournament for 6+ hours in a row. Make sure you eat a medium sized meal in the morning. Think an egg and turkey bacon bagel sandwich. Not just a piece of fruit and oatmeal or you will be hungry before the tournament even begins.

Pack enough snacks to have one thing after every possible match. This might mean a gallon size ziploc bag full of several pieces of fruit, granola bars or protein bars that you enjoy, a nut butter and jelly sandwich, two turkey roll ups, etc. You want to keep your energy level up but also have enough time to digest your food before playing again.

It's a great idea to assign each member of the team to bring enough of one type of snack for the whole team. Then you can divide it all up at the tournament. Just make sure there is a mixture of carbs and proteins. (Fruit and many veggies ARE carbs!!!!)

How much water should I be drinking?

We have all heard the saying that we need 8 glasses of water a day. When we exercise we lose water and salt in the sweat that our bodies produce. Not only do athletes need the 8 glasses a day, but also another couple of glasses based on how much you were sweating during volleyball. ALWAYS make sure you have water at practices and matches. Every time you come off the court or have a break in an activity at practice, have a few sips of water. If you feel thirsty, your body is already dehydrated. Dehydration (not enough water in the body) can have a negative effect on your performance, give you a headache, or even cause you to crave sweets. My advice is to go to the store and buy a reusable water bottle that you like. Something around 24 ounces is usually good. Keep it easily accessible all throughout the day, attempt to refill it at least 2 times, and make sure you have it at practices/matches, and after exercise. Staying hydrated all day is great for your health and extra important for athletes. Try your best to stay away from soda, concentrated juices, and other artificial beverages.

Is it safe to have energy drinks?

The answer is always NO! Energy drinks may advertise that they are low in caffeine content or sugar. They do NOT tell you that most of the other ingredients (like Taurine, L-Carnitine, Guarana, Ginseng) are also stimulants. Add all of these stimulants to the caffeine and you are asking for trouble. Energy drinks (even the low sugar ones) elevate your heart rate to sometimes dangerous levels. You may feel more awake just because your heart is pumping faster but it can mimic the same physiological effects as a panic attack. The crash after these can be very detrimental to your performance as well. If you feel like you need a little bit of a boost before a practice/match opt for green or black tea. You get a ton of healthy antioxidants as well as a little caffeine, with no calories.

What about supplements?

At your age your bodies are still growing and developing. If you have a deficiency such as Iron, then it is recommended to take a supplement. However, if you are eating healthy foods and many different food groups, you should NOT need to take any supplements. Many things you would find in a GNC or Vitamin Shoppe are not regulated by the FDA and therefore not checked for quality or product claims verified. Say you have a hard time getting enough protein. Maybe you do not eat meat or do not like some the traditional sources of protein. In this case protein shakes that you make at home may be a great supplement. Please make sure you are choosing a protein powder wisely. Look at the ingredients list and pick one with as FEW ingredients as possible. Opt for something that you would find in nature such as 100% rice, soy, hemp, or whey protein. Mix with a milk of your choice, water, or orange juice. Stay away from any of the containers with bright colors and huge jacked men on the front. They are full of chemicals and artificial ingredients.

What about allergies or food dislikes?

This one is simple. If a food gives you a stomach ache, makes your lips swell, you get itchy, or any other bodily discomfort, DO NOT eat it. Find an alternative. For instance, whole wheat pasta gives me a stomach ache every time I eat it. So the health benefits of the whole wheat are not outweighed by the discomfort I feel. Hate eating broccoli, find another green vegetable that you might enjoy. Do not just ignore all types of one food because you are allergic or do not like one particular kind.

If you had to break it down to the basics of healthy eating what would you say?

- ☐ **Eat as close to nature as possible** (stay away from canned and boxed food)
- ☐ **Have 3 different colors on your plate at every meal** (beige doesn't count)
- ☐ **Eat every 3-5 hours** (every 2-3 hours on days you are exercising)
- ☐ **Break the fast with breakfast** (eat within an hour of waking up to kickstart your metabolism. It IS the most important meal of the day)
- ☐ **Change it up** (eating the same thing all the time is boring and can cause nutrient deficiencies and health problems)
- ☐ **Eat foods you enjoy** (if you hate it, don't eat it. Find an alternative)
- ☐ **Don't eat anything you can't pronounce** (except quinoa and acai)

Tips and tricks:

- Prepare your snacks in little baggies ahead of time. Make it part of your Sunday to prepare for the following week
- Buy granola bar/protein bar that you like in bulk and keep some in your locker/gym bag
- Keep a refillable water bottle on you as often as possible
- Keep healthy food easily available so you are not reaching for unhealthy options