

Sports Nutrition Report:



Daily Nutrition vs. Training Nutrition

Apex Nutrition
Kelli Jennings, RD

Like many athletes, you may have found yourself reading the ingredients of your favorite sports drink and wondering exactly how “healthy” the stuff is for you. “Aren’t dextrose, sucrose, and fructose just sugar? Shouldn’t you avoid sugar? And, what the heck is theobromine?”

When making food and drink choices, it is very important for the athlete to distinguish training nutrition from daily nutrition. In fact, these two aspects of nutrition require opposite strategies. Many times, athletes get caught up in healthy eating practices (which are great for daily eating!) and snub their bodies’ demands for refined, quick fuel immediately before, during, and after training or competing. While eating healthy foods throughout the day is imperative for a healthy body, you will do yourself a disservice by not consuming quick-acting fuel when you require it. So, what do you need when?

First, let’s start with “daily nutrition.” We’ll keep it simple...you need:

- 1) A healthy pattern of consistent meals and snacks – ie. breakfast, mid-morning snack, lunch, mid-afternoon snack, and dinner as opposed to eating nothing until 2pm, then overeating all afternoon and evening (believe it or not, I see this all the time!)
- 2) Adequate daily fluid. 64 oz. per day fluid is a great starting point for the metabolism of a 2000-calorie per day diet. However, many athletes need upwards of 3000-4000 calories per day, which requires more fluid. Remember, dehydration is cumulative and get worse day after day if it is not remedied. And, it has a DIRECT detrimental effect on performance.
- 3) Appropriate and adequate daily calories based on your weight goals (maintenance, loss, etc). This is best calculated by a professional and should take into account your weight, age, sex, height, body fat percentage, daily activities, weight history, dieting history, training schedule, and clinical judgment.
- 4) Whole food carbohydrates at every meal and snack. Carbohydrates are important to all athletes and should be included in meal planning. For daily nutrition, carb sources should be high in fiber. Truly, it is one key to wellness and healthy weight maintenance at any calorie level. Of course, you do not want a belly full of fiber while you’re training, so keep reading...
- 5) Protein at every meal. You have higher protein needs than a sedentary person as you are constantly building and rebuilding cells.
- 6) Essential fats, especially omega-3 and monounsaturated fats with minimal saturated and trans-fats. From an athletic and overall healthy standpoint, omega-3s help reduce the inflammatory response in our bodies which may help your body react with less inflammation anytime cells need to heal and recover.
- 7) Adequate vitamins and minerals – again, you have higher needs than a sedentary person (which is who the RDAs are based upon). Without individual blood testing, it suffices to say that you should include all the food groups (grains/starchy vegetables, fruits, vegetables, milk/yogurt, protein, and healthy fats) in your daily diet. If you exclude a group as a non-meat eating vegetarian, for example, make sure you are getting adequate protein, calcium, iron, zinc, etc from other sources as opposed to just avoiding meat. Then, for all athletes, I believe it is prudent to take a high-quality multivitamin that includes iron, an adequate B-complex, and extra anti-oxidants on a daily basis.

Next, you need specific fuel immediately before, during, and after training/competing. This is a great time to determine your goals as an athlete, as your goals should set the course for your training *and* training nutrition. If you are training in order to lose weight or just improve cardiovascular fitness, you don’t necessarily need extra calories and carbs during your workout and may do fine just using water water. If, however, you are training to improve as an athlete, with the goal of pushing yourself to new levels during training in order to get better and better, you should pay close attention to “Training Nutrition.” For you, this is where it can get confusing because the fuel you need for training requires fast digestion and is on the opposite end of the nutrition spectrum from the recommended daily nutrition food choices. For training, you need:

- 1) Pre-training fuel (time a meal 1-3 hours out or a snack 30-90 minutes out to accomplish the following) - Before any training session, it is a good idea to make sure you are hydrated so that you’re not starting in a deficit. I recommend drinking to fullness 1-2 hours out, and then sipping fluids the last hour before training. Also, aim to eat/drink 1-4 grams of carbs per kilogram body weight before training. Your carb choices should be low in fiber (<4 gm fiber total) and high glycemic index. You can include protein before training, but don’t overdo it and stick with lean sources. Lastly avoid fatty or fried food and anything you know causes stomach upset.
- 2) During-training fuel - During any session lasting more than 60 minutes, you will benefit from replenishing fluid, carbohydrates and electrolytes during the session. You should aim for 20-32 oz. fluid per hour, 40-60 gm carbohydrates per hour and electrolytes in a balanced solution – including sodium, potassium, calcium, and magnesium (sodium and potassium being most important). If you want to get more precise with your personal

rehydrating plan, weigh yourself before and after a training session, any weight lost is water loss and should be replenished. If you want to include protein in your during-training eating plan (for example, you may include solids during long training sessions – 3+ hours), keep it to a 4:1 carbohydrate:protein ratio so that the protein does not impede the emptying of your stomach too much.

- 3) After-training recovery – After all training sessions, I recommend eating/drinking a recovery snack or meal within 30 minutes of finishing the session. Include fluid, carbohydrates and protein. Aim to replenish the fluid lost, 0.5-1+ gm of carbs per kg weight, and 10-20 gm protein.

Each day, work to keep your body healthy with consistent meals and snacks made up of healthy food choices. Then, when training or competing, give your body the fuel it needs to run its best!

Fuel Your Body. Nourish Your Body.

Want to fine-tune your training, hydration, supplement, and daily eating plan? [Apex Nutrition, LLC](#) will help you optimize all of them! With Nutrition packets, meal plans, and expert coaching by Kelli Jennings, RD, sports nutritionist, and avid endurance athlete, you'll meet your goals for performance, weight, and health!

