



Pre-Season Nutrition & Hydration Plan

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Nutrition & Hydration Keys

- Eat 6 or more times each day and plan meal and snack times in advance
- Take in extra calories and carbohydrates throughout preseason
- Avoid high fat or fried snacks, alcohol, and excessive caffeine
- Hydrate regularly and replace fluids lost in each training session (3 cups of fluid for each pound lost)

WARNING Many athletes struggle with muscle cramping during hot, preseason workouts. In trying to prevent muscle cramps, some athletes eat bananas to increase potassium intake. However, the most likely nutritional cause of muscle cramping is NOT potassium deficiency, but DEHYDRATION. If increasing fluids doesn't help, a probable culprit is inadequate salt or sodium intake. Athletes should consume sports drinks instead of water, eat heavily salted foods, snack on high sodium foods and beverages, and talk to their sports medicine team about the potential use of other electrolyte supplements or beverages. Cramping sometimes results from inadequate intake of electrolytes other than sodium (chloride, magnesium, potassium, calcium), but this is uncommon. Note that chronically low carbohydrate stores can lead to muscle cramping as well. Be sure to eat plenty of high-energy carbohydrate foods.

What you need to know

As you prepare for 2-a-day workouts, extra sessions, or your team's specific workout regimen, remember that a well-coordinated nutrition and hydration plan can help you perform optimally, improve daily, recover quickly, and stay safe and healthy.

Eating the right amount

Since you are working harder and longer than at any other time of year, it's important to focus on getting in enough calories (energy). Consistently eating too little during pre-season can lead to fatigue, poor performance, and even increased injury risk. Most athletes need an extra 1,000–2,000 calories during pre-season workouts. If you don't want to count calories, simply **be sure you are fueling at least 6 times/day**. Use a combination of foods and fluids to meet your needs.

MEALS... Do not skip meals!

Hard training, especially in the heat, often suppresses appetite. Shower, cool off, and lower your body temperature before sitting down to a meal. Then, get in as much as you can, focusing first on carbohydrate foods (breads, cereals, rice, pasta, fruits & veggies). If you are actually meeting your goal of 6 or more meals/snacks each day, no meal needs to be huge. If you really can't handle solid foods, get your calories from liquids such as smoothies, fruit juices, sports drinks, high carbohydrate recovery beverages, or milkshakes. Cold or room temperature foods may also be easier to tolerate than hot meals. It's always a great idea to have sandwiches, fresh fruit, pretzels, and cereal/milk available.

SNACKS

Take a look at your training schedule for the day, and be sure to carefully plan 3 or more snacks. These snacks can be eaten during team meetings, on the way to/from practice, or in the training room. Without pre-planning, it's easy to trade in snack time for a nap! Don't miss these critical fueling opportunities.

Snacks should be high in quality carbohydrates and salt. Good examples:

- Trail mix
- Granola bars, cereal bars, or sports bars
- Raisins or other dried fruit
- Fruit popsicles
- Cheese (for ease, use pre-cut cheese cubes or string cheese) and salted crackers
- Fresh fruit like apples, bananas, grapes, plums, peaches, or best yet, melon with salt
- Pretzels, goldfish, crackers, or baked chips
- Peanut butter and jelly sandwiches
- Pudding, gelatin, canned fruit, or applesauce cups
- Pickles

The Infamous NIGHT SNACK

Since the NCAA began allowing a provided "fourth meal" during preseason workouts, many teams have developed a NIGHT SNACK ritual. The timing of this snack can be extremely beneficial for athletes. However, some teams offer very high fat snack choices. While these snacks often contain a high number of calories, they are not the quality carbohydrates needed for energy replenishment and the proteins needed for muscle growth and repair. High fat snacks can make athletes feel sluggish and even contribute to dehydration.

-  **High Fat Night Snacks:** chicken wings or fried chicken, French fries, burgers, pizza with pepperoni or sausage, greasy tacos or burritos, mac & cheese, mashed potatoes & gravy, biscuits, potato chips, ice cream, candy bars, desserts
-  **Energizing Night Snacks:** cold cut subs or sandwiches (skip the mayo/bacon), peanut butter and jelly sandwiches, canned soup or ravioli, cereal and lowfat or skim milk, pasta with tomato sauce (even meatballs), cheese pizza or pizza with cheese and veggies, chicken soft tacos or quesadillas (without sour cream), beans and rice, corn bread or rolls, fruit popsicles or fudge bars, frozen yogurt, oatmeal raisin cookies, sports bars, and meal replacement shakes

Hydration

Proper and consistent hydration habits are important for top performance during rigorous workouts. More importantly, hydration is a critical component in preventing muscle cramping and other more serious episodes of heat illness (such as heat exhaustion and heat stroke).

Important Steps:

- Drink water, sports drinks, and fruit juices ALL DAY. Monitor hydration status through urine color (should be pale yellow) and frequency (you should urinate every hour or two during the day).
- Limit caffeine (energy drinks, coffee, tea, soda) and avoid alcohol since these can contribute to dehydration.
- Drink at least 2 cups (16 ounces) of water or sports drink 1 hour before practice and generously during all fluid breaks. Pour cool fluids IN you rather than just ON you!
- Do not use thirst as an indicator of how much you should drink. If you feel thirsty, you are likely already in the beginning stages of dehydration.
- Weigh yourself before and after training sessions (make sure you wear exactly the same clothing, which should be as little as possible). If you lose weight during practice, it is primarily due to fluids you lost through sweat. If possible, lose less than 2 pounds per training session. Drink 3 cups (24 ounces) of water or sports drink for every pound you lose during practice.
- If you are training twice a day, make sure your weight prior to the second session is very close to what it was at the start of the first session. Gradually losing weight over the course of a week or two during hard training in the heat can be a sign of chronic dehydration.
- Electrolytes are also lost through sweat. In some athletes, the amount can be quite high. The major electrolyte to focus on is sodium. To meet your sodium needs during preseason, drink sports drinks instead of water (especially before/during/after training) and increase the salt in your diet. Talk to your sports medicine team if you continue to have problems related to dehydration, fluid loss, or muscle cramping.

 **FINAL TIP** Remember that your appetite and thirst mechanism may be drastically reduced during hot, intense training. Fuel and hydrate ON A SCHEDULE. Consistent small bites and sips here and there can go a long way in maximizing your training.

This handout was designed by Sports Dietitians Michelle Rockwell, MS, RD, CSSD and Susan Kundrat, MS, RD, CSSD to provide general education. For specific concerns, refer to your sports medicine team.