

All-Navy Sports: Cross-Country

Diet significantly influences athletic performance. All athletes should adopt specific nutritional strategies before, during and after training and competition to maximize their mental and physical performance. (1) An athlete should practice and document their nutrition program as diligently as their running program. The below information provides science-based guidance on how to best prepare for a cross country event.

PRE-SEASON

Pre-season can be viewed as the time between your last competition of a season until the beginning of training camp the following season. All too often this period of time is neglected by athletes, but it is imperative to use this time wisely and the best athletes do! At the conclusion of your last competition, priority number one is to take a few weeks off to allow for full mental and physical recovery and/or to heal from a high volume training season. Mental recovery is often overlooked, but it is important to allow yourself time to get away from the grind and repetitive motion of your sport. Choose to rest, catch-up on some reading and TV or spend time with the family. After adequate rest time, gradually get back into activity. Try low-impact activities such as swimming, cycling or just shooting some hoops- low impact activities that will allow for maintenance of your cardiovascular system. This is also an ideal time to nurture nagging injuries. All injuries should be addressed by a medical professional such as a medical doctor, physical therapist or athletic trainer and treated appropriately.

"The gun goes off and everything changes... the world changes... and nothing else really matters."

- Patti Sue Plummer

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When you are mentally recovered from the season and you've been given a clean bill of health, it's a good time to create a long-term plan for your off-season. This is when you can look back at your season and see what you could improve upon and map out when and how to improve in that area. Speak to your coach or trainer about how to best attain these goals.

Nutritionally speaking, the off-season is the ideal time to make changes to your body composition, if necessary. That doesn't always mean fat loss, but could mean an increase in muscle or maintaining muscle while decreasing fat stores. This is the ideal time to decrease fat stores because you can reduce your energy (calories) intake at a time when there is no competition, thus not harming your performance when it matters most. Ideally, you can reach your fat loss goals before training camp begins, allowing for optimal energy intake during your competitive season. Speak to a sports dietitian to ensure a safe and effective fat loss program.

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PRE-RACE

Pre-race nutrition for a cross country event is different from a marathon race. While marathoners should carbohydrate load for several days prior to their event, cross country races of 8K or

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12K for women and men, respectively, lasts less than 40 minutes. The nutritional focus for this timeframe should be to get small amounts of carbohydrate, protein and fat into each meal as well as a carbohydrate-rich pre-race snack. An ideal menu for days leading into a race is shown in the box below. In addition to getting small amounts of carbohydrate into each meal and a snack leading up to a race, it's also important to decrease physical activity. Reducing activity

Breakfast:

- 1 Egg
- 1 Cup cooked Oatmeal
- 1 Banana
- 1 Cup of low-fat Milk

Snack:

- 2 ounces almonds

Lunch:

- 2 ounces turkey
- 2 slices whole wheat bread
- Lettuce/Tomato
- 1 tsp Mustard
- 1 Apple
- 2 Cups Water
- 1 Cup low-fat Milk

Snack:

- 6 whole wheat crackers
- 1 low-fat string cheese

Dinner:

- 4 ounces chicken breast
- 1 medium Bake Potato
- 1 Cup string beans
- 1 Cup Corn
- 2 teaspoons olive oil or butter
- 2 Cups Water

Snack:

- 1 Cup dry cereal
- 1 Cup low-fat Milk

in training will allow for the muscles to completely recover from micro-trauma, replenish stored carbohydrate and allow for adequate fluid absorption. Ideal carbohydrates include whole grain cereals, grains (oats, bran, wheat, barley) potato, popcorn, bread, crackers, pasta, fruit, sports drinks, and beans. While focusing on carbohydrate with each meal, it may be wise for some athletes to limit fiber consumption in the final days leading up to an event. Although fiber is important for regularity and a healthy digestive tract, it can cause unwanted gastro-intestinal issues come race day. Aim for 1/3 of your plate to be covered in carbohydrate and the rest with a lean source of protein. Protein is still very important for muscle recovery, but carbohydrate will be most important for performance on race day. In addition to increasing carbohydrate consumption and reducing training, a diligent hydration plan should also be followed. You should consume about 1/2 of your body weight in fluid ounces per day to ensure adequate hydration. An increased amount may be necessary in hot or humid climates. An easy way to measure hydration is to observe your urine color. It should resemble a light yellow to almost clear color. It's important to stress that it's just as important to practice your nutrition plan in training as it is your running.

Although your nutrition training will dictate what you should eat before a big race, there is an ideal pre-race meal. For optimal performance and a limited chance of side effects such as an upset stomach, it is prudent to choose low-fiber carbohydrate and lean protein as a pre-race meal. Some examples are cereal with low-fat milk, rice and chicken, toasted white bread or bagel lightly covered with peanut butter and jelly, a turkey sandwich on a roll, or crackers lightly covered



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with almond butter to name a few. If solid food is out of the question, beverages are often tolerated more easily because of how quickly they are absorbed. Try chocolate milk, soy milk or just plain sports drink to hydrate and add carbohydrate. Avoid juices the day of a race. Juice increases the risk of stomach distress in many runners.

DURING THE RACE

Your meals leading up to race day and your pre-race meal will cover your energy needs during the race or training, but entering the run well-hydrated and staying hydrated will still be important in a 30-40 minute race. Aim to drink a couple of mouthfuls of fluid every couple of miles.

For more on hydration, check out “All-Navy Sports: Hydration”.

POST RACE

After your race or training session, it is a must to refuel within the next 20 minutes– this is your “window of opportunity”. During this time, your body’s hormones are geared to absorb nutrients and use them to restore fuel and repair broken down tissue. Although many supplements are touted as being “the best”, food is still ideal. Consume two to three cups of low-fat chocolate milk or soy milk, a bowl of cereal, pasta with meatballs or simply a turkey sandwich. Granola bars and trail mix are also great choices!



1. IOC Consensus Statement on Sports Nutrition 2010