

NUTRITION FOR CROSS COUNTRY RUNNERS

“No one plans to fail, they merely fail to plan.”

Dear Runners and Parents:

As a young runner, you will need to “fuel the furnace” and keep your body both fueled and refueled at all times for workouts and races. The importance of proper nutrition consistently is paramount to personal progress and health throughout the season and year-round. Learning healthy nutritional habits will be an essential ingredient for lifelong success and wellbeing.

Overall, the nutritional composition proportions for an endurance athlete should be in the range of 20 percent fats, 20-25 percent proteins and 55-60 percent carbohydrates.

Total calories should not be restricted in any way—you will need to eat

The amount of total daily calories will be according to your size, level of training and individual metabolic differences.

When in doubt, eat! This is not about calorie counting!!

Nutrition habits will greatly affect daily training, race performances and, more importantly, overall health. A solid place to start is with the carbohydrates rule. Because runners burn between 100 calories and 150 calories per mile run, shoot for a diet that is about 60 percent carbohydrates.

Carbohydrates, are the body's primary source of energy. A typical runner's engine runs hot enough to burn fats and protein as well, but the working body prefers to stoke with carbs.

Nutritionists divide carbohydrates into two camps — simple carbohydrates and complex carbohydrates.

All Carbs are Not Alike

Simple carbohydrates

Simple carbohydrates are found in soft drinks, candy bars, and pastries. As a rule, simple carbohydrates aren't the best source of energy.

Simple carbohydrates contain a lot of sugar. If a food has large amounts of fat and sugar calories, then that particular source is unlikely to hold any significant amount of vitamins, minerals, or fiber. Nutritionists say that these kinds of foods hold "empty calories."

However, some foods with high sugar content do have plenty to offer in the way of minerals or vitamins. Certain fruits — such as bananas, oranges, apples, and raisins — break down into fructose (a natural fruit sugar) but are good carbohydrate sources. These kinds of fruits are better snack choices than empty calorie foods such as most candies.

Complex carbohydrates

Good sources of complex carbohydrates include grains, breads, vegetables, and beans. These foods take longer to convert to glucose (sugars) and are then stored as glycogen (stored dietary sugars) in the muscles or liver, to be used for energy when called upon during physical activity.

To keep up with the calories burned, a runner who weighs 150 pounds needs to take in somewhere between 2,500 and 5,000 calories per day. Keeping in mind that a runner burns about 100 calories per mile, obviously a professional marathoner training 100 miles per week has bigger needs than a young runner logging 20-30 miles per week.

Basic Plan of Attack

Basically, you want to think of what you **need to eat, not what you can't eat.**

Look at your eating one day at a time, keeping that Food Pyramid in the back of your mind as a goal. Here are some ideas that might help:

* Think ahead. If you already know you're having barbecue for dinner, choose non-meat foods for lunch. If you're going to a party later, where there will probably be lots of junk food and sweets, skip that cookie you're eyeing as an afternoon snack.

* Think back. Dinner is often your last chance of the day to pack in some needed nutrition. If you're deciding what to eat, reflect on what you've already eaten that day. Did you get enough veggies? Protein? Grains? If so, and you crave that ice cream sundae.. enjoy it, and heck, have another!

* Think about **eating the rainbow**. Getting those five daily servings of fruits and veggies can be hard. But these foods come in all sorts of colors, and the more colors you eat, the better nutrition you're getting! Aim to "eat the rainbow" every day:

- Blue/purple: blueberries, plums, raisins, purple grapes
- Green: broccoli, lettuce, celery, cucumbers, green grapes, green apples, green beans, green peas, spinach
- White, tan, and brown: potatoes, bananas, mushrooms, brown pears
- Orange/yellow: carrots, grapefruit, oranges, peaches, sweet corn, yellow apples
- Red: cherries, cranberries, red apples, tomatoes, strawberries, red/pink grapefruit, watermelon
- Remember, you can get some of your fruit and veggie servings from 100% fruit juice and dried fruits, too!

Maybe your meals are always very healthy, but when it comes to snack time, you find it hard to eat smart. See Snack List*

Stock up on bundles of energy prior to your workout by including a nutritious snack. Eating before exercise, as opposed to exercising in the fasting state, has been shown to improve performance and is a great way to boost stamina and endurance. **The purpose of a pre-workout snack is to:**

- Help prevent a low blood sugar which can wreck havoc on your energy level resulting in light-headedness and loss of concentration.
- Top up your muscle and liver carbohydrate stores to provide lasting energy for the duration of your workout, and
- Prevent hunger during your workout

Pre-workout Snack Guidelines

Food preferences for pre-workout snacks will vary depending on the individual, type of exercise and level of intensity. For example, endurance athletes can often eat more during a long slow cycle when their heart rate is lower, than while running or training at a higher heart rate. Experiment with the following guidelines to help determine an appropriate snack for you.

Choose a snack that:

- Contains a sufficient amount of fluid to maintain hydration.
- Is low in fat and fiber to facilitate gastric emptying and minimize GI distress.
- Is high in carbohydrates such as fruits, vegetables, whole-grain bread, rice, pasta, and cereals to maintain blood glucose levels, and maximize carbohydrate stores.
- Contains some protein for staying power throughout your workout.
- Is low in simple sugars such as candy.
 - They can send your blood sugar level shooting down, leading to a severe drop in energy.

Your muscles require more blood during intense exercise, and therefore less blood will be available to your stomach to help with digestion. If you have a finicky stomach, try a liquid snack prior to your workout. Liquid snacks such as smoothies or sports drinks tend to leave the stomach faster than solid foods do and will be easier to digest. Choosing the appropriate snacks will be dependant on the individual. Some people have a tough time digesting anything solid prior to a workout while and others can munch on an energy bar during intense activity such as running.

Cross Country Nutrition “Fridge Page”

Keep on or near your refrigerator for a simple reminder

SNACKS

Some suggested snacks to keep on hand for before workouts (1-2 hours) and in general -

- Apples Crackers (low-fat) Graham Crackers Raisins
- Applesauce Dates Grapes Tangerines/nectarines
- Apricots Dried Fruit Melon Slices Vanilla Wafers
- Animal Crackers Fig Bars Nutri-grain bar/cereal bars Yougurt (lowfat)
- Bagels Figs Peaches Energy Bars
- Bananas Fruit Roll-Ups Pears
- Bread Gingersnaps Pretzels

HYDRATION

Staying hydrated

- As a runner, you will need approximately 12-14 cups (96- 112 oz) or more water a day, and more on hot days.
- If urination is clear, you are hydrated, perhaps overly-so. A lightly yellow color is typically ideal.
- Keep a water bottle with you through the day at school during the season and use it.
- Drink water throughout the day.. a cup or so every hour is fine. Sports drinks are okay, but are best saved for the hour or so before and the two hours after a workout.. otherwise the sugars can catch up to you. One idea (if water just doesn't taste good) is to water-down the sports drink or use Propel.
- Have 20-32 ounces of a sports drink (or at least water) available when you are finished with any workout. It is very important to get the fluids, carbos and electrolytes replaced as soon as possible as it is critical to get it in during your critical 0-60 minute “post-workout window.”

Breakfast

Before a regular school day or after a morning workout or race--never skip this meal! You should be consuming at least 600 calories and up to 1000 calories at breakfast (depending on your size and training level).

- Hot or Cold Whole Grain cereals Eggs Fruit
- Milk/Soy Milk Yogurt Fruit Juices
- Breads/ (toast) Waffles Pancakes

Lunch

Suggestions for dealing with the limited school cafeteria food choices---

At the cafeteria:

- Sub sandwiches (build your own...gets some veggies on there!)
- Chicken/pasta
- Pizza in moderation.. except you “E” lunchers.. that’s probably not enough time to digest all the dairy and greece

Bring your own lunch* (suggestions below)

- Avoid fried foods (any type of non-baked chips included)
- Avoid candy
- Avoid sodas

*Bag lunch suggestions

- Just to note, the toughest part of bag lunching it is that you are limited to the choices you have at home so--- go out go out and buy what you need for the week over the weekend and “stock up” on what you need for the week for lunches.
- Sandwiches—include a lean meats/meat cuts and cheese of your choice or nut butter and preserves, whole grain bread or tortillas/wraps, veggies and condiments/dressings
- Sides— pasta salads, rice, potatoes, breads, other carbohydrate choices of fruits and veggies
- Drinks—Water, milk, soy milk, fruit juices, sports drinks
- Dessert—see all choices in snack list

Dinner

Have a fulfilling dinner, enjoy a full meal with a variety of meats, grains and vegetables. It is essential to emphasize the carbohydrates (whole grains, pastas and vegetables and being certain to get proteins (lean red meats at least twice weekly for iron content purposes). Sit down and take the time to enjoy your evening meal with your family (this can be the biggest challenge!)

Suggested Foods List for Athletes

This shopping list is may help you when determining what foods to pick up when you go shopping.

Proteins

- Boneless, Skinless Chicken Breast (Lunch, Dinner)
- Tuna (water packed) (Lunch)
- Fish (salmon, sea bass, halibut) (Lunch, Dinner)
- Shrimp (Dinner)
- Extra Lean Ground Beef or Ground Round (92-96%) (Lunch, Dinner)
- Egg Whites or Eggs (Breakfast)
- Ribeye Steaks or Roast (Dinner)
- Top Round Steaks or Roast (aka Stew Meat, London Broil, Stir Fry) (Dinner)
- Top Sirloin (aka Sirloin Top Butt) (Dinner)
- Beef Tenderloin (aka Filet, Filet Mignon) (Dinner)
- Top Loin (NY Strip Steak) (Dinner)
- Flank Steak (Stir Fry, Fajita) (Dinner)
- Eye of Round (Cube Meat, Bottom Round , 96% Lean Ground Round) (Dinner)
- Ground turkey, Turkey Breast Slices or cutlets (Lunch, Dinner)
- Deli cuts (Lunch)
- Dry beans and peas (Lunch, Dinner)
- Frozen burritos (Lunch)

Complex Carbohydrates

- Oatmeal (Old Fashioned or Quick Oats) (Breakfast)
- Sweet Potatoes (Yams) (Dinner)
- Beans (pinto, black, kidney) (Lunch, Dinner)
- Oat Bran Cereal (Lunch)
- Brown Rice (Lunch, Dinner)
- Multigrain Hot Cereal (Breakfast)
- Whole grain cereals (Shredded Wheat, Special K, Smart Start) (Breakfast, Snack)
- Pasta (Lunch, Dinner)
- Rice (white, jasmine, basmati, Arborio, wild) (Lunch, Dinner)
- Potatoes (red, baking, new) (Lunch, Dinner)
- Sandwich breads, bagels, pita bread, English muffins (Breakfast, Lunch, Dinner)
- Soft corn tortillas, low fat flour tortillas (Breakfast, Lunch, Dinner)
- Low fat, low sodium crackers (Snack)
- Plain cereal, dry or cooked (Breakfast)
- Rice, pasta (Lunch, Dinner)
- Lowfat/Non-fat crackers (Saltines, Wheat Thins, Ritz, or Triskets) (Snack, Lunch)
- Tostitos chips (oven-baked) (Snack, Lunch)

- Pretzels (Snack, Lunch)
- Fiber-filled Produce
- Green Leafy Lettuce (Green Leaf, Red Leaf, Romaine, Spinach) (Lunch, Dinner)
- Broccoli (Lunch, Dinner)
- Asparagus (Lunch, Dinner)
- String Beans (Lunch, Dinner)
- Bell Peppers (Lunch, Dinner)
- Brussels Sprouts (Lunch, Dinner)
- Cauliflower (Lunch, Dinner)
- Celery (Lunch, Dinner)
- Other Produce & Fruits (Fresh and or Frozen)
- Cucumber (Lunch, Dinner)
- Green or Red Pepper (Lunch, Dinner)
- Onions (Lunch, Dinner)
- Garlic (Lunch, Dinner)
- Tomatoes (Lunch, Dinner)
- Zucchini (Lunch, Dinner)
- Fruit (if acceptable on diet): bananas, apples, grapefruit, peaches, strawberries, blueberries, raspberries
- (Breakfast, Lunch, Dinner)
- Lemons or Limes (Lunch, Dinner)
- Fresh juices (orange, pineapple, grapefruit, apple) (Breakfast, Lunch, Dinner)
- Fresh fruit (oranges, apples, bananas, grapes) (Breakfast, Lunch, Dinner)
- Tomato and V-8 juices (Breakfast, Lunch, Dinner)
- Frozen vegetables (corn, peas) (Lunch, Dinner)
- Healthy Fats
- Pure/Natural Style Peanut Butter (Breakfast, Lunch, Dinner)
- Olive Oil, Safflower Oil, Canola Oil, Virgin olive oil (Lunch, Dinner)
- Nuts (peanuts, almonds) (Snack, Lunch, Dinner)
- Flaxseed Oil (Lunch, Dinner)

Dairy & Eggs

- Low-fat cottage cheese (Breakfast, Lunch, Snack)
- Eggs/Egg Substitutes (Breakfast, Lunch)
- Non-Fat Milk (Breakfast, Lunch, Dinner)
- Smart Balance (Margarine) (Breakfast, Lunch, Dinner)
- Non-fat yogurts (Breakfast, Lunch, Snack)
- Non-fat cheeses (cream, cheddar, mozzarella) (Breakfast, Lunch, Dinner)

Beverages

- Water
- Gatorade, PowerAde, Propel