

Nutrition & Hydration for Runners

1. **Stay away from fast food, junk foods, and sugary foods:**
 1. Obesity and Insulin Resistance-When compared with young adults who eat fast food less than once weekly, young adults who eat at fast food restaurants more than twice weekly gain more weight and are more likely to see a great increase in their diabetes and heart disease risk
 2. Depression-Researchers discovered a link between depression and junk food. People who regularly eat fast food were more likely to report symptoms of depression when they had a diet high in desserts, fried foods, refined cereals, fatty dairy products, processed meat and chocolate.
2. **Sugar hurts the body:**
 1. Sugar causes blood glucose to spike and plummet. Unstable blood sugar often leads to mood swings, fatigue, headaches and cravings for more sugar. Cravings set the stage for a cycle of addiction in which every new hit of sugar makes you feel better temporarily but, a few hours later, results in more cravings and hunger. On the flip side, those who avoid sugar often report having little or no cravings for sugary things and feeling emotionally balanced and energized.
 2. Sugar increases the risk of obesity, diabetes and heart disease. Large-scale studies have shown that the more high-glycemic foods (those that quickly affect blood sugar), including foods containing sugar, a person consumes, the higher his risk for becoming obese and for developing diabetes and heart disease. Emerging research is also suggesting connections between high-glycemic diets and many different forms of cancer
 3. Sugar interferes with immune function. Research shows that sugar suppresses immune response. Bacteria and yeast feed on sugar and that, when these organisms get out of balance in the body, infections and illness are more likely.
 4. Sugar accelerates aging on the body
 5. Sugar increases stress
 6. Sugar affects concentration
3. **Avoid the processed foods that come in boxes.** They're packed with sodium, sugar, empty calories, chemicals, and are a drain on your digestive system. Anything in a box has preservatives in them to preserve the food which isn't natural, and these aren't very good for you. Overly processed foods may give you a quick pick-me-up but not sustained energy.
4. **Try to eat whole foods** that look as close to how they are grown as possible. Eating more whole foods is our best bet for improving health and preventing disease. Whole foods – like vegetables, fruits, whole grains, nuts, etc. – retain their fiber as well as the whole portfolio of beneficial nutrients that are often removed in processed foods. Whole foods:
 1. What are whole foods?
 - Whole foods are plant foods that are unprocessed and unrefined, or processed and refined as little as possible, before being consumed
 2. Ideas for whole food substitutes:
 - Whole grains instead of refined grains whenever possible.
 - Fruits, vegetables, and beans instead of supplements to provide the fiber and vitamins they contain.
 - A skinless chicken breast cooked with healthy ingredients instead of chicken nuggets processed with added fats, flavorings, and preservatives.
 - A baked potato with chopped green onions and light sour cream instead of a bag of sour cream and onion potato chips.
 - Fresh berries with breakfast instead of raspberry pop tarts or breakfast bars.
 - A blueberry smoothie made with blueberries, yogurt, and a frozen banana instead of a blue-colored slushy or icee.

5. **Eat as many vegetables as you want!** Especially lots of leafy greens which are a great source of iron
 1. Eating vegetables provides health benefits – people who eat more vegetables are likely to have a reduced risk of some chronic diseases. Vegetables provide nutrients vital for health.
 2. Low in calories, but rich in vitamins and nutrients
 3. Great for snacks

6. **Iron deficiency**-Low iron & ferritin is a common problem in young female runners. Ferritin is a protein containing iron. The primary role of ferritin is to store iron in the bone marrow, liver and other organs. Ferritin is like a support system, helping to form hemoglobin in the red blood cells, which carry crucial oxygen to the working muscles. Low ferritin levels can have profound consequences on your running. Are you unusually tired? Having trouble keeping up in workouts? Seeing your performances plateau? Getting hurt a lot? All these and more can result from lack of ferritin in your system.
 1. What causes iron loss?
 - Poor diet is a primary culprit.
 - Another is inadequate absorption of iron.
 - Still another is blood loss through menstruation.
 - Hard training in and of itself reduces iron reserves.
 - Sleep deprivation, a factor in a number of teen-age health issues, causes an increase in a liver hormone that decreases iron absorption.
 2. How to increase iron intake:
 - Red meat, pork and poultry
 - Seafood
 - Beans
 - Dark green leafy vegetables, such as spinach
 - Dried fruit, such as raisins and apricots
 - Tomatos
 - Peas

7. **Eat more proteins**
 1. With every foot strike, a runner carries two to seven times their body weight. Protein is what keeps your body healthy under all that strain of the weight on your muscles. Adequate protein intake accelerates muscle growth and speeds recovery by helping rebuild muscle fibers stressed during a run. Since protein helps muscles heal faster, runners who consume the right amount are less likely to get injured. The reverse is also true-athletes who get insufficient amounts of protein are at a higher risk of injury.
 2. High-protein intake has been shown to help maintain a strong immune system
 3. Eating a little protein before workouts and races can give an energy boost-find out what works for your stomach though
 4. Try and eat some protein within 30 minutes after a workout to help rebuild damaged muscles and recover
 5. Protein rich foods-meat, chicken, eggs, fish, almonds and other nuts, vegetables like broccoli and brussell sprouts

8. **Consume healthy fats**

1. Not all fat is the same. While bad fats can wreck your diet and increase your risk of certain diseases, good fats protect your brain and heart. In fact, healthy fats—such as omega-3s—are vital to your physical and emotional health.
 2. When it comes to dietary fat, what matters most is the type of fat you eat. Contrary to past dietary advice promoting low-fat diets, newer research shows that healthy fats are necessary and beneficial for health
 3. When food manufacturers reduce fat, they often replace it with carbohydrates from sugar, refined grains, or other starches. Our bodies digest these refined carbohydrates and starches very quickly, affecting blood sugar and insulin levels and possibly resulting in weight gain and disease.
 4. Rather than adopting a low-fat diet, it's more important to focus on eating beneficial "good" fats and avoiding harmful "bad" fats. Fat is an important part of a healthy diet. Choose foods with "good" unsaturated fats, limit foods high in saturated fat, and avoid "bad" trans fat.
 - "Good" unsaturated fats—Monounsaturated and polyunsaturated fats — lower disease risk. Foods high in good fats include vegetable oils (such as olive, canola, sunflower, soy, and corn), nuts, seeds, and fish.
 - "Bad" fats—Trans fats — increase disease risk, even when eaten in small quantities. Foods containing trans fats are primarily in processed foods made with trans fat from partially hydrogenated oil. Fortunately, trans fats have been eliminated from many of these foods.
 - Saturated fats, while not as harmful as trans fats, by comparison with unsaturated fats negatively impact health and are best consumed in moderation. Foods containing large amounts of saturated fat include red meat, butter, cheese, and ice cream.
 5. Foods high in healthy fats: Avocados, walnuts, almonds, pistachios, olives and olive oil, fish like salmon, tuna, and trout, and dark chocolate!
9. **Don't be afraid to eat more salt in your food**-when you are running you are sweating it out and your body needs that sodium.
10. **Make sure you are consuming enough calories each day** so that you are putting energy into your body. You are an athlete-you need to fuel your body! You aren't the average person! If you are eating healthy foods you can consume plenty of calories. If you eat a lot of junk-then the calories will add up and you will put weight on.
11. **Stay away from soda** as it's full of sugar and chemicals. The sugar in soda can increase your risk of type 2 diabetes and diet sodas are linked to increased risk of kidney decline. Soda dehydrates the body and increases the risk of obesity and obesity-related disease. It can also lead to reduced bone strength in women especially. The chemicals found in sodas have been linked to cancer, memory loss, nerve disorders, migraines, tooth decay, and skin conditions and the chemicals found in sodas are also used in flame retardants.
12. **So called "energy" drinks can be dangerous** and contain way too much caffeine and other ingredients that your body can't process
13. **Hydration**
1. Stick with water-sports drinks are full of sugar and other stuff that your body can't process very well.
 2. Hydrating is something you do 24/7-not just before or after a race; Don't chug water-drink regular amounts over time
 3. If you are thirsty it's your body's way of telling you that you are dehydrated, be drinking before you are thirsty.
 4. If you are hydrated properly then you won't need water during runs
 5. You should carry a water bottle with you at school and at practice, although try to avoid bottles that are see through as they heat up easier.
 6. Don't drink too much water before races and workouts as it will sit in your stomach and cause cramping
 7. You can get hydrated when it's not hot out-don't let cooler weather fool you. Obviously when it's hot and humid, step up your intake of water since you are sweating more fluids out