

Reducing Inflammation with Nutrition

Inflammation is defined as a localized reaction of tissue to irritation, injury, or infection. It is part of a healthy immune system response, but a low level constant and excess inflammatory response has been linked to a wide range of serious illnesses, including heart disease, stroke, diabetes, asthma, Alzheimer's, depression, mood disorders and cancer. Inflammation can also be the result of an injury and can become chronic if the injury is not treated properly. The inflammatory process creates free radicals, which then act as an irritant that creates cell injury and in turn, cause inflammation.

Chronic inflammation may be due to lack of exercise, stress, genetics and other lifestyle factors such as smoking. These factors promote inflammation in the body; but a poor diet is usually the biggest factor.

There are many ways to decrease inflammation in the body, one of the **easiest** to control is your diet. Pro-inflammatory foods will increase inflammation, increase your pain from the inflammation and may also raise your risk for chronic disease. Loading up on junk foods, high-fat meats, sugar and fast foods will increase inflammation in your body. This is partially due to the unhealthy fats used in preparing and processing these foods, especially trans fats and saturated fats. Processed meats such as lunch meats, hot dogs and sausages contain chemicals such as nitrites that are associated with increased inflammation and chronic disease.

Saturated fats are also found in meats, dairy products and eggs. While all of these foods are important source of minerals and vitamins, you don't need the extra saturated fat. These foods also contain fatty acids called arachidonic acid. While some arachidonic acid is essential for your health, too much arachidonic acid in the diet may make your inflammation worse. Be sure to choose low fat milk and cheese and lean cuts of meat, which will not promote inflammation.

Diets high in sugar have also been associated with inflammation, obesity and chronic disease such as diabetes. Eliminate high sugar foods such as sodas, soft drinks, pastries, presweetened cereals and candy.



Angela Pifer, MSN
Certified Nutritionist

Tips to Reduce Inflammation & Create a Healthy Diet

1. **Protein:** Too much protein in your diet can cause dehydration, kidney and heart disease, and can cause unnecessary stress on your body. Your body needs only 15-20% of your total diet to be from protein. Choose lean protein options: chicken, fish, beans and nuts.
2. **Consume foods high in Vitamins C and E:** These vitamins contain high amounts of antioxidants which suppress inflammation. Foods high in Vitamin C include: oranges, strawberries, broccoli, green/red/yellow bell peppers, kiwis and tomatoes. Foods high in Vitamin E include: canola, sunflower and safflower oil, nuts and seeds and wheat germ.
3. **Omega-3 fatty acids:** Omega-3's suppress inflammation that can be unleashed in the body by over-consumption of the "bad" omega-6 fats found in corn, safflower, and soybean oils. Eat fish such as wild salmon, tuna, herring and mackerel 2-3 times a week. Additional sources are walnuts, flaxseed oil and meal.
4. **Drink alcohol in moderation.** Alcohol reduces inflammation, which may be one reason moderate drinkers have less heart disease. But be careful. Only **one** serving (3 oz) per day of red wine has been deemed 'heart healthy.' Drink in excess and you will harm your liver.
5. **Prevent weight gain or lose weight.** As individuals gain more weight, fat cells enlarge and increase production of C-reactive proteins that promote inflammation. As pounds disappear, inflammation subsides. A University of Vermont study found that obese women who lost an average of 39 pounds dropped their inflammation levels by 32%.
6. **Reduce your blood sugar.** Consistently high blood sugars encourage inflammation; this can be caused by diabetes, medications or a poor diet. Foods such as high fructose corn syrup, sugars and highly processed cereals, breads and baked goods promote increased blood sugars. Choose whole grains, fruits and vegetables for their fiber.
7. **Decrease consumption of animal proteins (except fish) and avoid cooking meats at high temperatures.** Barbequing, broiling and frying meats create damaged proteins called AGE's (advanced glycosylation end products) that trigger inflammation. To reduce AGE's, turn meat or poultry frequently to prevent blackening, or try methods such as poaching. Meat, poultry and eggs are all high in arachidonic acid, a compound that contributes to inflammation. Try using soy, beans, nuts or low-fat dairy products as protein sources. When choosing to eat animal proteins, choose fish and non-fat dairy products to lower arachidonic acid consumption.
8. **Reduce exposure to chemicals:** Eat a wide variety of fresh foods and try using organic foods to avoid exposure to multiple inflammatory agents such as fertilizers, preservatives, etc. Increasing your fiber intake to 25-30 grams per day is also beneficial.
9. **Spices:** Flavor foods with antioxidant spices such as fresh ginger, turmeric, curry powder, garlic and cinnamon
10. **Chocolate:** Consume small amounts of dark chocolate with a minimum of 72% cocoa. An easy way to do this is to find dark chocolate chips used for baking and portion out a small serving. Make sure the label indicates at least 72% cocoa or you will not reap the benefits.