

# Anti-Inflammatory Eating Pattern

Inflammation is an important part of the body's immune response. However, when inflammation continues to the point of chronic inflammation, the risk for several major health issues arises.

There is clear evidence for a link between pro-inflammatory diets and nearly 30 chronic diseases, including dementia, cancer, heart disease and even depression. Your dietary habits can either help reduce systemic inflammation or promote systemic inflammation.



## The following foods have been shown in research to reduce systemic inflammation:

### 1. Fruits and vegetables

- These super foods contain natural components called **antioxidants** and **phytonutrients** that have been shown in research to help protect against inflammation.
- Vitamin C doubles as an antioxidant, which has been proven to be effective in minimizing inflammation and maintaining healthy joints. Sources include oranges, strawberries, bell peppers, chili peppers broccoli and Brussel sprouts.
- Green leafy veggies are high in vitamin K and have been shown to dramatically reduce inflammatory markers in the blood. These include broccoli, spinach, lettuce, kale and cabbage.

### 2. Healthy fats

- Monounsaturated fats and polyunsaturated fats help fight systemic inflammation and also provide brain and heart health benefits.
- Fish, nuts (walnuts, almonds and hazelnuts) and plant oils (flaxseed and canola oil) are among the highest sources of omega-3 fatty acids.
  - However, the most health benefits come from the eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) forms of omega 3s - which come mainly from fish.
- Choose salmon, tuna, snapper, cod, sardines, herring, halibut, and bass for the best sources of EPA and DHA omega 3 fats.
- Fish, avocado, nuts (almonds, cashews and Brazil nuts) and seeds are also good sources of magnesium. Low magnesium is linked to chronic inflammation and eating foods with high magnesium can help prevent a magnesium deficiency. Researchers state that magnesium should be considered a nutrient of significant concern for health and well-being. Other sources of magnesium include dark chocolate (70-85% cocoa), leafy greens, tofu, legumes and whole grains.

### 3. High-fiber foods

- High fibers diets are known to lower the inflammatory marker C-reactive protein (CRP), which is a substance produced by the liver in response to inflammation.
- The recommendation is to consume at least 25g to 35g of fiber per day. The majority of people in this country are not coming close to eating this amount. Dietary fiber is what bacteria ferments to in order to create short-chain fatty acids (SCFAs). These include acetate, propionate, and butyrate. SCFAs benefit your body by reducing inflammation.

Short-chain fatty acids provide numerous benefits by:

- Reducing the risk of developing colorectal cancer
  - Helping prevent bad bacteria from growing in your intestines
  - Helping the body's ability to absorb nutrients
  - Reducing inflammation in the intestines
  - Regulating immune function
- High fiber sources: beans (all types!) and legumes, whole grains, and fruits (especially berries and pears), and vegetables (including the skin).

### 4. Herbs and spices

- Curcumin (the active ingredient turmeric), cinnamon, garlic, cayenne and oregano have been linked with reducing inflammation in developing research.
- \*Avoid turmeric/curcumin if you take blood thinners such as warfarin (*Coumadin*), are about to have surgery, are pregnant or have gallbladder disease.

### 5. Green tea is well-known for cardiovascular benefits and cancer preventative characteristics due to its antioxidant properties.

- Developing research also suggests the use of green tea in the treatment of arthritic disease as an anti-inflammatory agent.
- \*Avoid green tea if you take warfarin (*Coudamin*) as there are other compounds in green tea that may influence blood clotting effects.

### **Foods that have been shown to promote inflammation:**

#### 1. Added sugar (which is not the same as natural sugar found in fruits and veggies)

- Sugar is added to soda, juice, sports drinks, pastries, sweet rolls, dairy desserts, grain-based desserts and sweets.
- Instead, choose Swap sodas, energy drinks, juices and sweetened teas for water, unsweetened seltzer or flavored sparkling water, or create-your-own fruit-infused water.
- Choose coffee with flavored coffee beans rather adding flavored creamer and added sugar.

- The American Heart Association recommends limiting added sugar to no more than 25g a day for women and no more than 36g a day for men.

## 2. Artificial *trans* fats

- Added to processed foods in order to extend shelf life or influence the texture and taste of a product. Consuming artificial *trans* fats has been shown in research to increase the inflammatory markers in the blood.
- Common sources of *trans* fats include powdered coffee creamer, fast food, frozen pizza, sugary desserts such as cakes, cookies, and frozen pies, ready-to-use frostings, refrigerated dough products (such as biscuits and cinnamon rolls), snacks including crackers and microwave popcorn, vegetable shortening and stick margarine.
- Be sure to look at the ingredients list and look for “**partially hydrogenated oils**”. This indicates trans fats are in the product, even if the food label says 0g trans fats!

## 3. Refined grains and carbohydrates

- The main dietary sources of refined carbs are white flour, white bread, white rice, white pasta and processed snack foods. Many cereals, pastries and grain-based desserts like cake, cookies and pie desserts are made with refined grains that have sugar added.

## 4. Processed Meat

- There is a huge variety of processed meat products, although the common types include sausage, bacon, ham, hot-dogs, salami, bologna, canned meat and beef jerky.
- Processed meats are characteristically **cured and/or smoked**, which is thought to be the main reason for the potential health concerns.
- Consuming processed meat that is high in salt has been associated with an increased risk of heart disease, diabetes, stomach cancer and colon cancer.

## 5. Excessive alcohol

- If adults of legal drinking age decide to drink, moderation is considered to be 2 drinks or less in a day for men or 1 drink or less in a day for women, on days when alcohol is consumed.

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## This information was taken from the following evidence-based research sources:

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