

Inflammation

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Inflammation is the body's natural response to harmful stimuli, pathogens, tissue injury or irritants. It is the body's protective attempt to remove the irritant as well as initiate the healing process for the tissue.

In the absence of inflammation, wounds and infections would not heal which would lead to progressive destruction of the tissue. However, inflammation which runs unchecked can also lead to a host of diseases, such as hay fever, atherosclerosis, and rheumatoid arthritis. In the case of atherosclerosis, the inflammation process in blood vessels and the kidney can lead to a build-up of cells and damage to tissues that can constrict the passage of blood through vessels. This blockage can lead to heart attacks and affect the kidney, leading to end-stage renal (kidney) disease. In the case of rheumatoid arthritis, it affects the joints and can diffuse to some organs.

Cholesterol may go high during periods of inflammation or infection. While it's true that LDL can build on artery walls when too many bad fats are consumed, it has also been shown to bind and inactivate dangerous bacterial toxins and be a vigilant crusader against infections. For example, the bacterium Staphylococci produces a very toxic substance called Staphylococcus aureus a-toxin which can quickly destroy a wide variety of human cells. If you add even minute amounts of this toxin to a test tube of red blood cells, the cells hemolyze (meaning the red blood cells burst). However, if you add LDL to the mix, their destruction practically ceases. So...don't be so quick to try to lower your cholesterol. Find out "why" you're cholesterol is running high. That high cholesterol may be a protective factor! To read more about the protective roles of cholesterol, read our November 2009 issue.

There are bloods tests that help you monitor inflammation in the body.

C-Reactive Protein (CRP)

Clinical Range: 0.00-4.90 mg/L Healthy Range: 0.00 – 1.50 mg/L

High levels indicate nonspecific tissue injury & inflammation, begins in 4-6 hours, more intense increase rise than ESR.

Erythrocyte Sed Rate (ESR)

Clinical Range: 0.00-20.00 mm/HR Healthy Range: 0.00-6.00 mm/HR

Measures inflammatory process. Lower levels are desired.

High Platelets

In inflammatory states, platelets run high. These are blood cells that form clots. Vitamin E is very useful in reducing platelet counts.

In addition, keep an eye on your serum protein levels. Protein is very important for healing and repairing damaged tissue. If your protein levels are low, this will allow for continued inflammation due to impairment in the body's ability to heal. Other blood tests that may reveal the beginnings of protein malnutrition are low blood urea nitrogen, low white blood cells, low creatine kinase, low albumin, and low globulin.



Dale Kelly, DC

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*Balanced Health Solutions
1625 E. Prater Way
Suite 103
Sparks, NV 89434*

Foods That Cause Inflammation

Processed meats with MSG or Nitrates (hot dogs, sausage, etc)
Sugar (found in desserts, baked goods, fruit juice, pop, etc)
Grains
Dairy products
Deep fried foods
High sodium foods
Red meat (for some people)
Coffee

According to the National Institutes of Health, chronic high glucose levels increase your inflammatory response leading to chronic inflammation and the tissue damage that comes with it. This may be why diabetes and high cholesterol tend to run together. As explained earlier, cholesterol may be a protective factor against this inflammation caused by the high glucose levels. Get your glucose under control and many times the cholesterol levels come down too!

Anti-inflammatory foods

Whole fruits and vegetables!! The more color the better. Always eat more vegetables than fruits.

Food high in Omega 3's such as cold water oily fish, walnuts, flax seeds, and pumpkin seeds.

If you're protein deficient, good protein sources are poultry, eggs, fish, beans, seeds, nuts, and sprouts.

Stay hydrated! You need to drink half your body weight in ounces of water each day.

Natural anti-inflammatory supplements

Occasionally, you need a little extra help in reducing your inflammation. Try these products for acute and chronic inflammation. Dosages should depend on weight and severity of the condition. Spread dosage throughout the day and take with food.

The following recommendations are for 150lb adult.

Turmeric Rhizome (*Curcuma longa*) 1800-5400mg daily*

Ginger Rhizome (*Zingiber officinale*) 600-1800mg daily*

*We highly recommended a product called Inflammoid which contain both of these ingredients. Take 6-15 daily.

Vitamin E (mixed tocopherols and tocotrienols) 400-1200IU daily

Vitamin C** 6000-12,000mg daily

**We highly recommended a product called Vitality C. It is a buffered, non-acidic, neutral Ph powder which reduces/eliminates the chances of intestinal upset. Take 1-2 teaspoons daily.

Omega 3 Fish Oil 500-2000mg daily...read your labels carefully. Identify what your total Omega 3 intake would be from the supplement by adding the EPA and DHA content together. You do not want the total "fish oil". You want to take the total of "Omega 3" in the fish oil. Also, look at the "serving size". This will tell you how many pills you need to take to get that dosage.

When you want to stamp out inflammation

1. Get tested to get a baseline so you can monitor that your treatment choice is working for you.
2. Eliminate inflammatory foods.
3. Eat more anti-inflammatory foods.
4. Try anti-inflammatory supplements.

Most importantly, ask yourself, "Why isn't my body healing and repairing?" Your body is not going to waste nutrients on non-essential tissue like joints, muscle, and bone if it's got more important health issues to deal with! Your chronic joint pain or osteoporosis may be sign something more serious is occurring. If you think you need more direction, set up a consultation with one our nutrition experts.

**Don't Guess About Your
Health...**

**Schedule a Nutritional
Consultation Today!**

775-358-6824

Federal Law requires that we warn you of the following:

1. Your individual health status and any required health care treatments can only be properly addressed by a professional healthcare provider of your choice. Remember: There is no adequate substitution for a personal consultation with your chosen health care provider. Therefore, we encourage you to make your own health care decisions based upon your research and in partnership with a qualified health care professional.

2. The Constitution guarantees you the right to be your own physician and to prescribe for your own health.