

Features

March 30, 2008

The link between obesity and inflammation

What does inflammation have to do with being overweight? Researchers now believe that being overweight promotes inflammation and inflammation promotes obesity in a terrible, vicious cycle. Most people don't know they are living with inflammation, but it is now known that reducing the problem is one of the major keys to reducing the obesity epidemic.

What is inflammation? Most of us know that when we get a cut and it becomes inflamed, the result is pain, swelling, redness and heat. This is a good thing because the process fights foreign invaders of all types. Inflammation is part of the body's natural defense system against infection, irritation, toxins and other foreign molecules. But sometimes the natural balance of the immune system, which produces just enough inflammation to keep everything under control, is disrupted. The immune system shifts into a chronic state of alarm, spreading the inflammation throughout the body. The inflammation can then cause disease and other problems throughout the body: heart disease, blindness, dementia, Alzheimer's disease and cancer, as well as obesity when the inflammation is in the fat cells.

While inflammation is sometimes obvious, science teaches us that inflammation can occur slowly and very quietly, without symptoms. Inflammation is emerging as a major cause of many diseases and of the problems of aging in general. It is a silent killer, and unless it is adequately dealt with, it can have disastrous effects on your weight and your health.

The process of inflammation is protective, but it can also go crazy in individuals with inflammatory diseases such as arthritis and in healthy individuals whose lifestyles and/or environments expose them to substances that the body sees as irritants. The most common causes of inflammation in the body are our modern diet of sugar, animal fats and processed food, and the lack of exercise. Other things that can trigger inflammation include environmental allergens (e.g., mold in damp basements or moldy bathrooms), certain medications, infections, stress, toxins, gluten in food and low-grade infections from gum disease.

In terms of obesity, your own fat cells, the ones around your middle, are often the biggest source of inflammation. This is because the fat cells do more than just hold up your pants or provide stored energy for some future date when you may be starving. They produce several different kinds of hormones, all of which control your appetite, hormonal balances (including how your body responds to stress and insulin) and inflammation. The bottom line? Fat cells promote inflammation, which leads to more fat cells (i.e., more weight), which promotes more inflammation until you are very inflamed and very overweight.

What lifestyle changes can help you reduce inflammation?

1. Diet changes to reduce inflammation:

- a. Increase intake of fiber, olive oil, omega-3 fats, whole-grain products, and fruits and vegetables (especially dark-colored fruits and vegetables);
- b. Reduce intake of saturated fat, trans fats and cholesterol;
- c. Include in your diet: almonds, plant sterols (found in some margarine spreads, fruits, vegetables and nuts) and dark chocolate that is at least 70 percent cocoa;
- d. Reduce intake of sugar and refined carbohydrates (white flour products);
- e. Avoid any foods that make you feel bad after eating them, whether it's an upset stomach, a feeling of tiredness, headache or other symptoms of allergy;

f. Drink green tea;

g. Eat wild-caught, cold-water fish at least two to three times per week;

h. Decrease your intake of processed and junk foods, high-fructose corn syrup, artificial sweeteners, hydrogenated or partially hydrogenated oils, caffeine and red meats.

2. Reduce stress levels. Incorporate relaxation techniques into every day.

3. **Get moving:** Sitting around doing nothing can promote inflammation. Regular exercise is one of the best-known anti-inflammatories on the planet.

4. **If you are concerned about your level of inflammation, talk to your doctor** about your concerns and possibly get a blood test to see if you have any of the markers for inflammation.

The most important thing you can do for yourself to reduce inflammation is to lose weight if you are overweight. This is especially vital if all of your weight is around your middle section. You may not see the effects of inflammation occurring in your body right now, but they occur nonetheless. A key to healing yourself is to reduce calorie intake, create a healthy environment to live in, learn to cope with stress in a healthy manner, eat a healthy diet and avoid excesses of foods that promote inflammation.