

UNDERSTANDING THE INFLAMMATORY RESPONSE

By Dr. John A. Papa, DC, FCCP(OR)(C)

The inflammatory response is a natural phenomenon that enables our bodies to fend off various disease-causing organisms, harmful toxins, and physical injury. It is a protective and restorative process that helps keep us healthy - most of the time. Unfortunately, when inflammation becomes excessive or uncontrolled, we begin to see chronic inflammation which can lead to poor physical health. Learn more about how the inflammatory response can affect your health.

When you catch a cold, sprain your ankle, or are exposed to an environmental pollutant such as cigarette smoke, a chain of events are triggered in your body known as the “inflammatory cascade”. The familiar signs of normal inflammation - *local redness, swelling, heat, pain, and loss of function* - are the first signals that your immune system is being called into action. Pro-inflammatory hormones are released at the injury site, which stimulates the release of white blood cells, antibodies, and other chemical compounds that help initiate the healing and repair process. Inflammation that starts and ends as intended signifies the proper and essential inflammatory response.



Chronic inflammation occurs when there is an inflammatory response of prolonged duration (weeks, months, indefinite). It is accompanied by simultaneous attempts at healing and repair and inevitably causes tissue damage. Over time, it may become more difficult for the body to heal and repair tissue in areas of chronic inflammation.

Symptoms of chronic inflammation can include persistent pain, fever, fatigue, weakness, and irritability. Chronic inflammation has also been linked to undesirable health conditions such as heart disease, diabetes, symptomatic osteoarthritis, and irritable bowel syndrome. Listed below are some natural ways to manage and avoid chronic inflammation:

- **Use the right fuel:** Avoid foods that can be a source of chronic inflammation in the body such as refined sugars, trans fats, and allergens. In contrast, omega-3 fats which are found in fish oils have an inflammation suppressing effect. Antioxidants, found in most fruits and vegetables are natural compounds that help protect the body from harmful free radicals and inflammation.
- **Exercise works like medicine:** Endorphins released by the body during exercise can have anti-inflammatory properties. Exercise also regulates insulin levels and body weight. Being overweight increases inflammation in the body. Fat cells are efficient factories for producing key inflammatory elements, and burning calories through exercise shrinks those cells.
- **Sleep and stress management:** Poor sleep quality increases body inflammation. Regular restful sleep allows for important biological systems to recover and recharge. Prolonged stress, whether it is emotional or physical, can be a source of chronic inflammation. Finding an effective outlet for dealing with stress is important for managing this source of inflammation.
- **Be mindful of your habits and environment:** Avoiding exposure to pollution and toxic fumes such as cigarette smoke will help minimize inflammation in the body.
- **Treat muscle and joint injuries:** These injuries can be a major source of inflammation. Many individuals experience the benefits of therapies such as acupuncture, massage therapy, and chiropractic care for these structural causes of pain and inflammation.



For additional information on natural inflammation management and improving your health, visit www.nhwc.ca.

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