

Chronic Systemic Inflammation

All of us have a sense of what inflammation is. We may fall and bruise ourselves. The area becomes red and hot as our bodies mobilize to bring cells that repair tissue and cells that remove debris from the area. We contract an infection and become feverish and achy. In this case, the same set of chemical messengers that mobilized help to repair damaged tissue recruits necessary resources to destroy bacteria or viruses and mop up the mess that is left behind. Sometimes blood vessels suffer insults from molecules like homocysteine. Again, messages travel from cell to cell until the damage to the vasculature is patched. Root canals ache and dental treatments are used to heal the area. There is swelling and pain and bleeding, and we can certainly feel the other aspects of inflammation.

What happens, however, when our bodies do not turn off the alarm after repair and clean up? What if infectious symptoms are reduced, but they still remain under the radar and unbeknownst to us? What if injured nerves are healed but surrounding areas remain injured? What if weight gain increases the production of inflammatory chemicals by the fat cells themselves month after month after month? What if allergies remain mild but untreated leading to small levels of histamine which promote small levels of chronic inflammation. What if? What if? What if?

Chronic systemic inflammation is an underlying cause of many seemingly unrelated, age-related diseases. As humans grow older, systemic inflammation can inflict devastating degenerative effects throughout the body. The pathological consequences of inflammation are well - documented in the medical literature.

Diseases Related To Chronic Inflammation

Disease	Mechanism
Allergy	Inflammatory cytokines induce autoimmune reactions
Alzheimer's	Chronic inflammation destroys brain cells
Anemia	Inflammatory cytokines attack erythropoietin production
Aortic valve stenosis	Chronic inflammation damages heart valves
Arthritis	Inflammatory cytokines destroy joint cartilage and synovial fluid
Cancer	Chronic inflammation causes many cancers
Congestive heart failure	Chronic inflammation contributes to heart muscle wasting
Fibromyalgia	Inflammatory cytokines are elevated
Fibrosis	Inflammatory cytokines attack traumatized tissue

Heart attack	Chronic inflammation contributes to coronary atherosclerosis
Kidney failure	Inflammatory cytokines restrict circulation and damage nephrons
Lupus	Inflammatory cytokines induce an autoimmune attack
Pancreatitis	Inflammatory cytokines induce pancreatic cell injury
Psoriasis	Inflammatory cytokines induce dermatitis
Stroke	Chronic inflammation promoted thromboembolic events
Surgical complications	Inflammatory cytokines prevent healing

Addendum: Recent research has now concluded the chronic systemic inflammation also contributes to anxiety, depression, mood swings, chronic, unrelenting pain and discomfort, fatigue, cognitive decline, insulin resistance and adult-onset diabetes, and obesity. It most certainly is present in Parkinson's and Alzheimer's. As research continues, more complaints, diseases, and medical conditions will be added to this list.

There are blood markers that indicate general inflammation, though they may not specifically indicate what is causing that inflammation. It may not surprise you that as we age the resources our younger bodies used to hold inflammation at bay are diminished yearly. However, no matter how old we are, there are still resources at our disposal that enable us to win the battle over inflammation and reduce the risk of disease or diminish the chronicity and impact.

Diet, stress management, therapy to reduce anxiety and depression, proper medical testing with comprehensive, yet conventional blood tests, sufficient and deep sleep, laughter, joy, healthy challenges to brain and body, healthy and happy relationships, a variety of safe, effective and tested supplements, hobbies, recreation, appropriate exercise, and a satisfying spiritual life are among ways we can reduce inflammation, and, thus, reduce risks of disease.

Face it: we cannot avoid the causes of inflammation. Fact: we can prolong life, reduce risk of serious disease, improve current health status, reduce pain and suffering by taking the proper steps with the proper supervision and guidance.