

## HOW DOES CHRONIC INFLAMMATION AFFECT MY BODY?

### BRAIN

Chronic Inflammation may result in damage to our brain tissue, increasing our risk for Alzheimer's and Parkinson's diseases. It may also create changes in the brain that may result in anxiety, depression, memory loss and sleep issues.



### LUNGS

Chronic Inflammation of the lung is typically caused by our body's immune response to infectious organisms (bacterial, fungal, viral) or from injury (indoor and outdoor air pollutants). CI may result in diseases such as chronic obstructive pulmonary disorder (COPD), emphysema, lung cancer and pulmonary fibrosis. Asthma is the result of bronchial hypersensitivity and airway inflammation or obstruction.



### LIVER

Chronic Inflammation of the liver has several different triggers, such as bacterial, fungal or viral infections or chemical activation as a result of alcohol and drugs (prescription and recreational) and environmental toxins (smoking). Autoimmune hepatitis and non-alcoholic fatty liver disease are other frequent causes. Chronic Inflammation may interfere with many important biological functions, including filtering toxins, producing bile, breaking down carbohydrates, fats and proteins, and producing blood proteins and clotting factors.



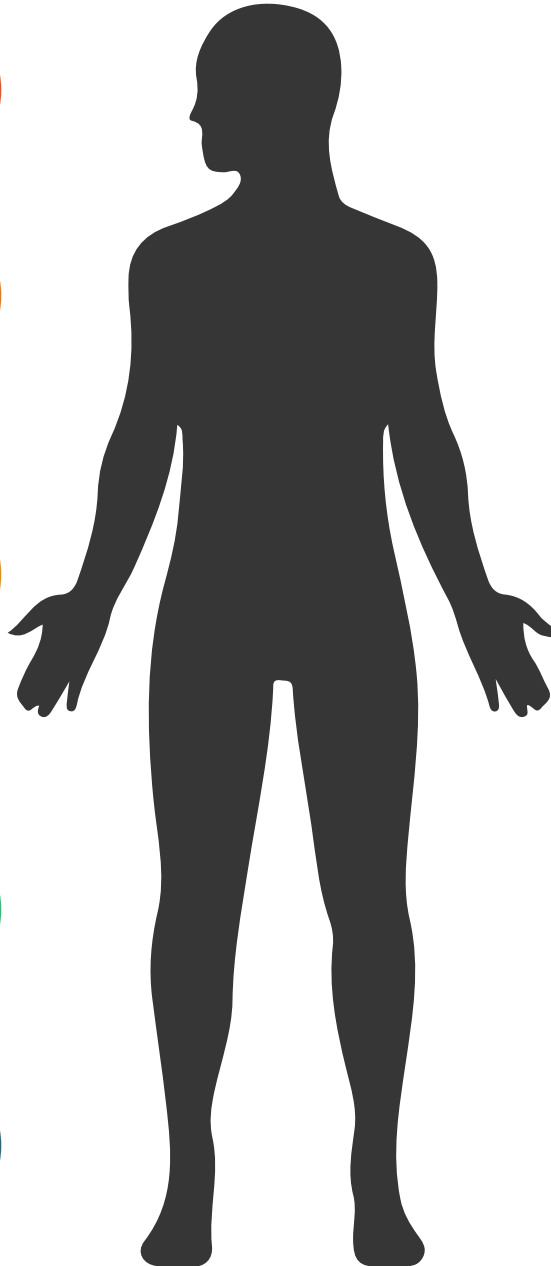
### ERECTILE DYSFUNCTION

Chronic Inflammation may be the root cause of erectile dysfunction as it interferes with the lining of our arteries and blood vessels by lowering nitric oxide availability. Infectious agents such as Chlamydia pneumonia or cytomegalovirus frequently initiate chronic inflammation.



### JOINTS

Chronic Inflammation of joints is frequently the result of damage to a joint or infection from infectious organisms. Psychological and physical stress contributes as well. Frequently, the result is damage to our immune system resulting in various types of arthritis. Rheumatoid arthritis and osteoarthritis are the most common.



### HEART

Chronic Inflammation appears to be the root cause of heart disease. It can damage muscle cells of the heart and the heart valves. CI can also damage the inside lining of arteries resulting in plaque buildup. Our blood clotting system may also be activated causing blood clots resulting in heart attacks. Elevated blood pressure, heart arrhythmias, murmurs and congestive heart failure are also possibilities.



### STOMACH

Chronic Inflammation affecting the stomach (Gastritis) is typically the result of irritation or infection. The bacterium, Helicobacter pylori (H. pylori) is the most frequent cause and is strongly linked to stomach cancer. Common symptoms of gastritis are indigestion, nausea or vomiting and pain in the upper abdomen.



### BOWEL

Chronic Inflammation may result in inflammatory bowel disease (IBD), of which Crohn's disease and ulcerative colitis occur most frequently. CI may result from environmental toxins, food allergens and infectious agents triggering our immune system resulting in IBD. Poor digestion of nutrients in food is a common occurrence.



### KIDNEYS

Chronic Inflammation of the kidney is typically the result of infectious agents or an auto-immune disease process. The main function of the kidney is to remove toxic waste products from the blood. CI may damage or close up the filters in the kidney resulting in excessive removal of necessary nutrients such as protein from the blood.



### SKIN

Chronic Inflammation of the skin frequently occurs when the skin is exposed to stimuli such as allergens, irritants and UV radiation. The triggering event is followed by an increased inflammatory response resulting in significant damage (disease) to the skin. Our immune system is less effective as we age, and we lose our ability to manage the inflammatory response. Wrinkles and sagging skin are frequently the result.



### CANCER

Chronic Inflammation may begin as the result of on-going or reoccurring infections, abnormal immune reactions or lifestyle/dietary habits. This Chronic Inflammation may over time result in damage to our DNA, leading to the onset of cancer. CI may also play a significant role in the development and metastases of many different cancers.

### NON ORGAN SPECIFIC

### BACTERIA, VIRUSES, PARASITES, ETC. (INFECTIOUS AGENTS)

Chronic Inflammation may result from pathogens that: 1) are not detected or treated, 2) are recognized and persistent but not appreciated for their disease-producing potential, or 3) pathogens that cause an immune response producing persistent inflammation in the absence of the causative agent.