## Atherosclerosis: The Chronic Inflammatory Condition

Atherosclerosis, or hardening of the arteries, is an inflammatory-associated condition and the primary cause of cardiovascular disease. Modifiable lifestyle factors, such as stress, smoking, diet, exercise, and toxic burden, will all increase the inflammatory burden and affect the speed at which atherosclerosis progresses.



## **Understanding Inflammation**

Inflammation is a sequence of events triggered by the body's immune system in response to a harmful stimulus. It involves increasing blood flow to the affected area, eliminating the initial trigger, cleaning up the damage, and finally, beginning the repair process.

#### **Acute Inflammatory Response**

An acute inflammatory response typically follows a significant injury or infection such as a broken bone, sprained joint, laceration or infection. Typically, heat, pain, redness, swelling and loss of function are the signs of an acute inflammatory response.

#### **Chronic Inflammatory Response**

Uncontrolled, chronic inflammation contributes to the slow deterioration of blood vessel function. If this process is not halted endothelial dysfunction can develop, fueling many major diseases such as cardiovascular disease, type 2 diabetes, Alzheimer's and cancer. Chronic inflammation is a self-perpetuating cycle characterized by continuous damage and repair.

### Acute Inflammation



## **Chronic Inflammation**



# Lifestyle Medicine: The Ultimate Anti-Inflammatory



### Daily Physical Activity

- Three to five days per week
- Moderately stressful to stressful sessions
- >20 minutes
- Continuous movement
  throughout the day



#### Plant-Based Mediterranean Diet

- Limit sugar
- Colorful, diverse fruits and vegetables daily
- Lean protein
- Manage portion size



### Stress Management

- Commit to a plan
- Practice deep breathing and meditation
- Practice good sleep habits
- Take at least one 10-minute walk each day



### **Environmental Factors**

- Avoid harsh cleaners
  and detergents
- Practice good hygiene
- Choose organic food
  whenever possible
- Utilize a HEPA air filter at home

Omega-3 Fatty Acids	Anti-Inflammatory Phytochemicals (berberine, pomegranate, olive)	Bergamot	Alpha Lipoic Acid
Essential fatty acids that improve cardiovascular health by lowering blood pressure and cholesterol levels Provide a potent anti-inflammatory benefit	Dampens inflammation by restoring cell signaling Improves arterial elasticity, function and blood flow	Improves entire cholesterol profile (total, LDL, HDL and triglycerides) Helps support blood sugar numbers	Potent antioxidant Lowers the inflammatory burden Decreases metabolic risk
1 g per day	Individualized Dosing	500 - 1,000 mg per day	400-800 mg per day

Personalized Recommendations for You:







## **Nutrient Solutions**