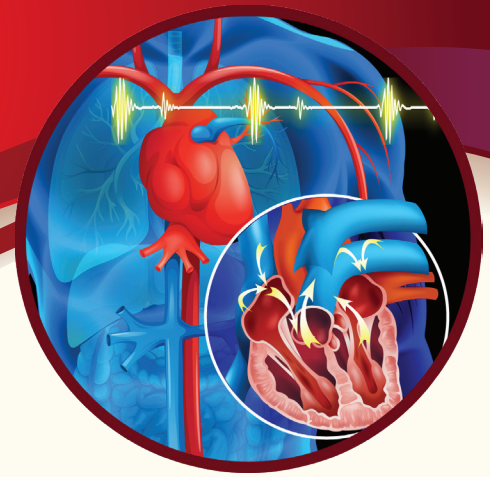


Are Your Heart and It's Valves Functioning Optimally? Is Your Blood Pressure Healthy?

# Restore and Maintain Heart Health



## The Exact Disease Progression

Despite all the progress medical science has made in recent decades to combat heart disease, cardiovascular problems remain the nation's No. 1 killer.

- ☞ Approximately 1,600,000 heart attacks occur every year in the U.S.
- ☞ Nearly a third of these are fatal.
- ☞ 80% of heart disease is caused by heart valve malfunction.
- ☞ Direct and indirect costs of heart disease total more than \$320.1 billion. That includes health expenditures and lost productivity.
- ☞ The heart is the most nutritionally responsive of the 78 organs found in the human body. Likewise, it is the organ most negatively impacted by faulty nutrition.

Atherosclerosis (plaque formation) and thrombosis (clots) impact general circulation only when very severe.

That's why heart disease is the "silent killer".

View circulation as currents. Your arteries feed tiny vessels called capillaries. Nutrients and other factors move out of capillary walls into clefts and cleavages in a gelatinous matrix that bathes all cells. This is not "free diffusion" and it requires that all systems are operating correctly.

Disease progression:

1. **Reduced delivery of** oxygenated blood, nutrients and fluids; increased local toxicity.
2. **Cell degeneration**; initially enlargement & swelling due to fluid influx, fat buildup or increased toxicity *inside* the cell.
3. Tissue or organ **atrophy** (wasting) or **necrosis** (death).
4. **Blood vessel injury**: toxicity and/or high blood sugar, cause micro-tears and inflammation of blood vessels. Plaques and clots form, further reducing circulation.
5. **Edema**: breakdown in the matrix *outside* the cell involves pooling of fluids along with increasing toxicity.

## What Causes Heart Disease?

- ☞ Cigarette smoking
- ☞ High blood pressure
- ☞ Central obesity
- ☞ Diabetes / High insulin
- ☞ An inflammatory lifestyle
- ☞ Stress (type A personality)
- ☞ Half of heart attack victims had LDL-cholesterol *below* the target of 130 mg/dL
- ☞ Drugs that raise HDL had no effect



## Predictive Markers

(indicate a problem; do not cause the problem)

- ☞ Elevated IL-6 (made by the liver, stimulates manufacture of additional inflammatory markers)
- ☞ Elevated C-Reactive Protein (made by the liver in response to cell/tissue injury and IL-6)
- ☞ TNF- $\alpha$  (another "acute phase" inflammation marker —also called a cytokine which is a type of hormone)
- ☞ Elevated triglycerides (from elevated blood sugar)
- ☞ Chronic kidney disease / low filtration rate

## Inflammation is the Problem

# Take control of your diet & lifestyle to take control of your heart health

The role of diet is crucial in the development and prevention of cardiovascular disease:

If we chronically expose the body to injury by toxics or foods the human body was never designed to process, we create chronic inflammation:

- ☞ Sugar (any source), flour and processed grains increase blood sugar, insulin production, inflammation, triglyceride production, LDL-C production and the odds of prediabetes and plaque production.
- ☞ Smoking and other toxic exposures cause an accumulation of chemicals in the body that cause inflammation. This includes medications, vaccines, and many medical procedures; try diet and lifestyle changes first.
- ☞ Inflammation of blood vessels is normally repaired by cholesterol and immune cells. But modified cholesterol over-accumulates in white blood cells to form plaques that narrow arteries. Elevated blood sugar, toxic chemicals, and free radicals modify cholesterol. Without inflammation, cholesterol in lipoproteins would move freely throughout the body, delivering nutrients to cells and removing fatty waste products.

## 30-Day Heart Tune Up: Solve heart disease progression with a heart protecting diet (and maintain it longer for great health and quality of life)

**Plants:** 6-9 servings daily, fresh from the produce section, help clean & detoxify (1 serving = ½ cup cooked or 1 cup raw).

### The miracles of plants:

- ☞ fibers improve gut microbiome which, in turn, provides anti-inflammatory compounds
- ☞ flavonoids make vitamin C work, improve blood vessel integrity
- ☞ Leafy plants are especially high in minerals like potassium and magnesium that lower blood pressure.

**Healthy Fats:** switch to olive oil; emphasize fish and other types of seafood, almonds, pecans, pistachios, walnuts, and hazelnuts, including nut butters and nut oils.

**Clean, Lean Protein:** Wild-caught seafood, 3-4x/week; pastured, 100% grass-fed lean poultry or beef 1-2x/week; have more plant-based proteins. Skip the cheeses and dairy.

**Limited Whole Grains:** buckwheat, quinoa, millet, NO processed grains get **Fibers** from legumes & flax

**Beneficial Beverages:** Several cups/day of green tea, ginger tea and/or Roiboos tea; if you drink alcoholic beverages, no more than 1–2 glasses red wine daily.

**Flavor:** avoid spice mixes and table salt as most contain inflammatory anti-caking agents. **NO added sugars.**

These specifically help:

chili (cayenne)	raw garlic	rosemary
cinnamon	ginger	thyme
cumin	oregano	turmeric

### The miracles of 1-2 cloves of raw or dried garlic per day:

- ☞ 9-12% lower total serum cholesterol & triglycerides
- ☞ improved aortic stiffness (better elasticity)
- ☞ reduced platelet aggregation (thins blood)
- ☞ relaxes smooth muscle & dilates blood vessels
- ☞ anti-inflammatory & anti-oxidant

### A word on Statin drugs:

While Statins can change cholesterol profiles, their most likely mechanism of action is by reducing inflammation.

But even modest doses of various Statins have been shown to lower blood levels of Coenzyme Q10—an antioxidant necessary for cells to function properly and make energy.

This likely explains the loss of muscle strength and pain side effects of taking Statins.

Coenzyme Q10 is vital for heart health.

**There are no unwanted effects of an anti-inflammatory diet.**

**Nutrition Response Testing®** reveals the exact digestive enzyme, nutrient support, and herbal protocol to support affected organs including your heart and blood vessels.

Don't forget your kidneys! Often, high blood pressure is an adaptive response to kidneys that are not filtering well. Quickly lowering blood pressure can impact kidneys, go slow.

While certain herbs can also help, please use herbs and essential oils only with professional guidance—not all are appropriate for all cases.

Use Nutrition Response Testing® to determine which herbal **Anxiolytics** (manage stress-related high blood pressure), **Cardiotonics** (support cardiac and smooth muscle), or **Vasodilators** could help in your case.

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