*McMinn Clinic*

 Cardio Wellness

## Labs to Monitor and Optimal Levels

Cholesterol <200 (Higher OK if age > 70). Consider getting a NMR lipid panel (more thorough)

HDL > 50

LDL < 100

Triglycerides < 150

CRP < 1

Homocysteine level < 8

LP-a < 10

Fibrinogen 150-300

Fasting Blood Glucose

 Ideal 60-85

Pre-diabetic= 95-110

Diabetic >110

Hypoglycemia < 60 (Critical < 40 and > 450)

Fasting Insulin

Best= 2-3

Good < 5

High risk for diabetes >10

HbA1C < 5.7

Uric Acid

Ferritin

Fibrinogen

Other Screening to Consider:

-Lifeline Screening 1-800-897-9177 (ultrasound of aorta and major vessels)

 -EKG

 -Echocardiogram

 -DPA scan (digital pulse wave analysis)

 -Coronary Calcium Score

 -Cardiac CT

 -CIMT- Carotid Intima Media Thickness

RISK FACTORS

Non- modifiable Risk Factors: Family history, older age, race, gender, previous personal history of cardiac problems

Modifiable Risk Factors: Inactivity, tobacco use, unhealthy diet, being overweight (especially belly fat), inflammation, high blood sugar, cholesterol dysfunction, high blood sugar or insulin, high uric acid, metabolic syndrome, diabetes, insufficient Vitamin D, hypertension, low vitamin K, stress, depression, anxiety, loneliness, social isolation, PTSD, emotional and psychological trauma, low socioeconomic status, toxins, ethnicity, lack of sleep or sleep apnea, shift work, sarcopenia (loss of muscle mass), nutritional deficiencies, medication side effects, immune dysfunction, allergies, alterations in the gut or oral microbiome, poor hydration, excess alcohol intake, illicit drugs such as meth, clotting disorders, certain infectious diseases, sensitivities (such as gluten), and other organ failure- such as kidney and liver.

When a woman goes through menopause her risk for heart disease increases dramatically- unless treated with proper hormone replacement therapy within 10 years of the onset of menopause.

## General Measures to Improve Cardiac Health:

-Assess and address risk factors mentioned above.

-Repair endothelial dysfunction (lining of the arteries) –bioflavonoids, quercitin, pomegranate

-Optimize mitochondrial function

-Identify and correct nutrient deficiencies (anti-oxidants, magnesium, Co Q 10, etc.)

-When a woman goes through menopause, then consider a course of HRT with bioidentical hormones. Make sure that the estrogens are not oral, and excessive. Also, use micronized progesterone and NOT Provera. Be sure to start the regimen within 10 years of menopause.

Diet: Pan Asian/ Mediterranean, Anti-inflammatory, DASH diet (dietary approach to stopping hypertension).

 Whole foods, **plant-centered**. Some lean protein and “good fat,” such as olive oil.

High in Fiber and omega 3s, with a high nutrient to calorie ratio

Avoid sugar, simple carbs, and processed foods

No trans fats

## Supplements to Consider:

Evaluate and treat any known specific nutrient depletion

Co-Q10: 240-400 mg per day

Magnesium- 400-1,000mg per day

Vit C- 1-2 grams per day

**Vitamin D- Optimize blood levels between 50- 100.**

**Fish Oils**: 1-6 (only for people with existing heart disease).

L- Arginine 2-5 grams per day- lowers blood pressure, and treats stiff arteries

L Carnitine 1-3 grams per day

Policosanol- 5-10 mg per day

Natto kinase- 1000 mg twice a day with meals, or Bolouke if high risk for clotting.

Niacin- 100 mg twice a day, can titrate up niacin to 500 mg twice a day (dose may be limited by flushing, diarrhea, headache)- tends to lower all “bad lipids” and raise “good lipids.”

D-ribose- 5,000 mg per day- supports ATP production for energy, protects heart cells from toxins

 -Especially good for congestive heart failure and mitochondrial dysfunction.

Pomegranatejuice- helps heal the inflammation in the lining of the arteries.

Olive oil

Isoquercitin and other  **Bioflavonoids**- strengthens blood vessel walls and prevents clots.

Resveratrol

B complex

B6 at 75-125 mg

B12 up to 2,000 mcg per day

Folic acid 800-6,000 mcg per day.

**Garlic-** either eat a lot of garlic, or take a garlic supplement, such as Allicin Max

Trace minerals

Consider **Cardio 4 Life**- This is a combo formula that has many of the above in it.

**Heart Savior**- Natural product, which is excellent for reducing cholesterols.

Curcumin- excellent anti-inflammatory supplement.

Vitamin K2 (MK-7) – reduces propensity to clot. Don’t take this with Coumadin.

Cranberries have been shown to improve CV function in men.