

# CHOLESTEROL HDL & LDL

## LOWER YOUR LDL AND CHOLESTEROL

After reviewing many journals and articles I observe the following ways to lower cholesterol

### OBJECTIVES

#### Important

a) Reduction of LDL to 60 mg/dl (Bad Fats)

An LDL level of less than 100 mg/dL is optimal for CAD prevention,

and a level of 70 mg/dL or less is now recommended for persons with existing heart disease

- b) Reduction of triglycerides to 60 mg/dl.
- c) Raising HDL to 60 mg/dl. (Good Fats)

> 50 mg/dL (? 1.3 mmol/L) man or >60 mg/dL (? 1.6 mmol/L) in a woman a reduced risk of atherosclerosis.

>75 mg/dL (? 2 mmol/L) man or woman is associated with a very low risk of atherosclerosis.

Less than 40 mg/dL (? 0.8 mmol/L) in a man <50 mg/dL (? 1 mmol/L) in a woman increases the risk.

- d) Achieving normal blood pressure (<130/80)

Even a small elevation of blood pressure in diseased arteries can cause increased mortality.

Diseased arteries are fragile and plaque rupture can occur easily.

- f) Achieving normal blood sugar if Diabetic (=100 mg/dl). Diabetes is a high risk factor for heart disease.
- g) Reduction of C-reactive protein to <1 mg/l also called (CRP on blood test)

### THINGS TO DO

#### Smoking Cessation

Is associated with a 200% increase in the rate of atherosclerosis

- exercise 45 min cardio daily

Treat underlying conditions:

Hypertension ? Olmesartan medoxomil (angiotensin II receptor antagonist these are preferred)

Diabetes

High Cholesterol or LDL ie Take a Statin ? medication to lower LDL and cholesterol preferred is Crestor (Rosuvastatin) take at night time (as cholesterol is synthesized by the body at night-time)

- Aspirin 100mg / d
- Plant Sterols, margarine, 2 g/d The mean one-year reduction in serum cholesterol was 10.2 percent

Dietary Modification:

- Mediterranean Diet
- Cook with olive oil and use Polyunsaturated fats
- Avoid milk fats
- Decrease red meat increase fish

- Avoidance of fried foods and fast food
- Omega 3 (salmon oil) (specifically focusing on high concentration of high in DHA, EPA where possible >2000 mg per day)
- Garlic 1g / d
- Vit B3 500-1500mg. per day (cheap flush version not anything labelled non-flush which contains inositol)
- Wine? Red wines contain resveratrol, (don't exceed two glasses/ day else has a inverse effect). Bioflavonoids and anti-oxidants have a strong anti-inflammatory effect.
- Lechathin
- Magnesium
- L-carnitine
- Vit B6

### COMMON FOOD SOURCES FOR EACH TYPE OF FAT

Type of fat	Food sources
<b>Saturated fat</b>	Butter, cheese, meat fat, meat products (sausages, hamburgers), full-fat milk and yoghurt, pies, pastries, biscuits, cakes, lard, dripping, hard margarines and baking fats, coconut and palm oil.
<b>Trans fats</b>	Certain margarines, shortenings, biscuits, baked goods.
<b>Monosaturated fat</b>	Olive oil, canola oil, nuts (pistachio, almonds, hazelnuts, macadamia, cashew, pecan, peanut) and the oils from these nuts, avocados, avocado oil, lean meat.
<b>Polyunsaturated fat</b>	Long chain Omega-3 polyunsaturated: Oily fish (salmon, mackerel, herring, trout), Alpha linolenic acid from walnuts, lean red meat, canola oil, soybean, flax seed, and their oils Omega-6 polyunsaturated: sunflower seeds, wheat germ, sesame, walnuts, soybean, corn and their oils. Certain margarines.