

High Cholesterol

(Hypercholesterolemia)

OVERVIEW

High cholesterol is a condition of having too much cholesterol in the blood. Cholesterol is a type of fat (sterol) found in animal fats and oils (not plants) that is a component of cell membranes, and is also converted into vitamin D, as well as steroid hormones (estrogen, testosterone, aldosterone), and bile acids. When blood levels are too high, it is usually because the body's liver is making too much of it. Cholesterol levels should be kept below 200 mg/dl. Low-density cholesterol (LDL-C) is often called the "bad" cholesterol, but it is necessary for life. However, when it becomes oxidized (ox-LDL-C), it has atherogenic properties, contributing to plaque buildup in the arteries.

VITAMINS & MINERALS*

More Helpful: tocotrienols; vitamin B3 (niacin); vitamin B5 (pantethine); calcium; magnesium.

Less Helpful: chromium.

OTHER SUPPLEMENTS*

More Helpful: beta-glucans; beta-sitosterol; flaxseed; glucomannan; guar gum; policosanol; soy isoflavonoids.

Less Helpful: arginine; chitosan; citrus bioflavonoids; conjugated linoleic acid; CoQ10; omega-3 fatty acids (fish oil); gamma oryzanol; guggulipid; inositol hexaphosphate.

HERBS*

More Helpful: red yeast rice (take with CoQ10); psyllium.

Less Helpful: artichoke (globe); chlorella; cordyceps; garlic; ginger; green tea; pine bark (pycnogenols), reishi mushroom.

COMMENTS

Dietary recommendations include decreasing intakes of saturated fat and *trans*-fatty acids, and increasing intakes of monounsaturated fat and fiber. Statin drugs decrease the body's production of cholesterol by inhibiting an enzyme in the pathway for cholesterol synthesis. Unfortunately, they also reduce synthesis of coenzyme Q10.

*See individual listings for dosages and cautions.