

# Nutrients that help cardiovascular disease

In addition to limiting your intake of saturated fats, increasing omega-3 fats, and including more fiber in your diet, there are specific changes that you can make in order to help prevent and treat cardiovascular disease.

## CHOOSE SOY PRODUCTS

Studies have shown that 1oz (28g) of soy protein per day will lower LDL-cholesterol levels by about five percent. The Food and Drug Administration has approved a health claim for soy foods that encourages eating at least 1oz (28g) of soy protein daily, as part of a diet low in saturated fat and cholesterol, to reduce the risk of cardiovascular disease.

## REDUCE HOMOCYSTEINE LEVELS

An emerging risk factor for developing cardiovascular disease is a high level of an amino acid called homocysteine in the blood. This can be caused by a genetic defect in the enzymes that break down homocysteine, as well as by a diet

low in folate. Vitamins B<sub>6</sub> and B<sub>12</sub> are also needed to break it down in the body, so most doctors prescribe a supplement that contains these three vitamins for anyone with elevated homocysteine levels. If you are at risk of cardiovascular disease, ask your doctor about taking a multivitamin supplement.

## EAT PLANT OILS

Plant sterols and stanols, derived from natural plant oils, have been shown to significantly lower LDL-cholesterol levels in the blood by up to 14 percent. These have been incorporated into some brands of spreads.

The National Cholesterol Education Program recommends including 2g of plant stanol/sterol (esters) daily as part of a diet low in saturated fat and cholesterol for those with elevated LDL levels. In the gastrointestinal tract, stanol/stanols compete with cholesterol for absorption, so less dietary and biliary cholesterol is absorbed by the body.

Since spreads with added sterol/stanol are the main source of these compounds, it is important to substitute these for other added fats, such as butter, margarine, oil, or cream cheese, so that your total calories will not be increased by adding these to your diet.

### What about alcohol?

The antioxidant properties of red wine may protect your heart by increasing HDL-cholesterol levels and reducing LDL-cholesterol from being oxidized and deposited in arteries. However, if you regularly have more than two drinks a day (for men) or one drink a day (for women), you may increase your risk of developing high blood pressure, elevated triglyceride levels, enlarged heart, and stroke. So you should make sure that you drink alcohol in moderation.

# Therapeutic lifestyle changes (TLC) diet

If you have cardiovascular disease you need to think carefully about what you eat as it could have a major impact on your condition. Changes such as substituting low-fat products for full-fat ones, cutting the amount of saturated fat in your diet,

substituting low-fat dairy foods for high-fat varieties, using monounsaturated oils and increasing your intake of omega-3 fatty acids can all be beneficial. The Therapeutic Lifestyle Changes (TLC) diet, as outlined below, is a great starting point.

FOOD GROUP	GOOD CHOICES	POOR CHOICES
Breads and cereals (6 servings daily)	Low-fat crackers and cookies, whole-grain bread, cakes, and cereal bars; brown rice and pasta; lentil burgers; low-fat hummus; low-fat popcorn	Products high in saturated and trans fats, such as doughnuts, croissants, pastries, pies, and cookies; refined rice and pasta; chips and snack mix; full-fat crackers; buttered popcorn
Vegetables (3–5 servings daily)	Steamed vegetables and baked root vegetables (no butter); roasted vegetables drizzled with olive oil; raw vegetables with low-fat dips	Vegetables fried or prepared with butter, cheese, or cream sauce; baked potatoes with butter; raw vegetables with full-fat dips
Fruits (2–4 servings daily)	Fresh fruits; canned fruit in own juice; baked fruit served with low-fat sour cream or yogurt; and low-fat fruit tarts and pies	Fruits served with butter or cream; canned fruit in sugary syrup; and fruit pies with pastry made with shortening or butter
Dairy products (2–3 servings daily)	Low-fat (1 percent) milk; low-fat yogurt; fat-free frozen yogurt; low-fat or part-skim cheeses	Whole or 2 percent milk; cream; whole-milk yogurt; ice cream; full-fat hard and soft cheeses; sour cream; cream cheese
Eggs (2 yolks a week)	Egg whites; egg substitutes; omelets made from egg whites or egg substitutes	Egg yolks; whole eggs; omelets made from whole eggs
Fish, poultry, and meat (5oz/142g daily)	Grilled or barbecued fish; baked or broiled skinless meat and poultry; lean cuts of meat, such as loin or leg; cold cuts and sausages made with lean meat or soy protein, fat-free hot dogs	Fried fish; fried poultry with skin; fatty cuts of meat such as ribs or T-bone steak; sausages; cold cuts such as salami or bologna; organ meats; pastrami; corned beef, hot dogs
Fats and oils (1–2 tbsp daily)	Canola and olive oil; stanol-supplemented margarines; trans-free tub margarine	Butter; shortening; lard; stick margarine; full-fat salad dressings; coconut cream