

In This Issue

- Cholesterol – The Good, the Bad and the Ugly
- Know Your Numbers
- What You Can Do

Cholesterol – The Good, the Bad and the Ugly

WHAT IS CHOLESTEROL?

Cholesterol is a soft, fat-like, waxy substance found in the bloodstream and in every cell of the body. It is used by the body to insulate nerve cells and form cell membranes and certain hormones. But a high level of cholesterol in the blood, which is called **hypercholesterolemia**, is a major risk factor for health conditions that lead to cardiovascular disease – America’s number one killer.

Cholesterol comes from two sources. It is produced by the liver in varying amounts and supplied in the diet through animal products such as meats, poultry, fish and dairy products. Because the body makes all the cholesterol it requires, dietary cholesterol is unnecessary.

Cholesterol and other fats cannot dissolve in the blood. (Think of trying to mix oil and water.) These substances need to be transported to and from cells by special carriers called **lipoproteins**. There are several kinds of lipoproteins, but the most important ones are low-

density lipoproteins (LDL) and high-density lipoproteins (HDL).

HDL AND LDL – “GOOD” AND “BAD” CHOLESTEROL

First, the bad news: Low-density lipoprotein (LDL) is the major cholesterol carrier in the body. When too much LDL circulates in the blood, it can build up slowly in the walls of the arteries that feed the heart and brain. This build-up combines with other substances to form plaque, a thick, hard deposit that can clog those arteries. This condition is known as **atherosclerosis**. If a clot forms in an artery narrowed by plaque, it can block the flow of blood to part of the heart or brain, resulting in a heart attack or stroke. This is why LDL is called “bad” cholesterol.

High-density lipoprotein, or HDL, is known as “good” cholesterol. Medical experts believe HDL tends to carry cholesterol away from the arteries to the liver, where it is eliminated by the body. A high level of HDL seems to protect against heart attack; a low HDL level indicates a greater risk.

WHAT ARE TRIGLYCERIDES?

Triglyceride is a form of fat. Like cholesterol, it comes from food and is produced in the body. People with high triglycerides often have a high total cholesterol, high LDL but low HDL.

Know Your Numbers!

Do you know your cholesterol numbers – total cholesterol, HDL, LDL and triglycerides? Here's a question from a cholesterol quiz found on the Web site of the American Heart Association worth considering:

You know you have high cholesterol when:

- a) You have a lot of headaches.
- b) You start to gain weight.
- c) Your blood pressure is high.
- d) You have it checked by a doctor.

The correct answer is D. The only way to know your cholesterol numbers is by having a blood test because ***high cholesterol has no symptoms.***

HEALTHY CHOLESTEROL LEVELS*

Total Blood Cholesterol Levels

- Desirable – Less than 200 mg/dL
- Borderline High Risk – 200-239 mg/dL
- High Risk – 240 mg/dL and over

LDL Cholesterol Levels

- Optimal – Less than 100 mg/dL
- Near Optimal – 100-129 mg/dL
- Borderline High – 130-159 mg/dL
- High – 160-189 mg/dL
- Very High – 190 mg/dL and above

HDL Cholesterol Levels

- Desirable – 50 mg/dL or higher
- At Risk – Less than 40 mg/dL

Triglycerides

- Desirable – Less than 150 mg/dL

**Source: American Heart Association*

What You Can Do

Although heredity plays a role in how your body produces and processes cholesterol, there's a great deal you can do to keep your cholesterol in check. Although it's sometimes difficult to change a lifetime of less-than-optimal health habits, with persistence and the right information it can be done. Here are some guidelines to get you started.

FOLLOW A HEALTHY EATING PLAN

The American Heart Association recommends a diet that's low in cholesterol and saturated fat. Remember that the body produces all the cholesterol it needs – so dietary cholesterol should be reduced as much as possible.

Not all fats are created equal. There are four major fats in the foods we eat: saturated fats and *trans* fats are considered “bad” fats; monounsaturated fats and polyunsaturated fats are “good”

fats. Their physical properties and chemical structures differ, and they have different effects on the body's cholesterol levels.

BAD FATS: Saturated fats and *trans* **fats** are bad fats because they raise the level of LDL (bad) cholesterol in your blood. Saturated fats occur naturally in many foods of both animal and plant origin and are solid at room temperature (like a stick of butter). *Trans* fats are created in an industrial process that adds hydrogen to liquid vegetable oils to make them more solid. When you see “partially hydrogenated oil” on an ingredient list, the product contains *trans* fats.

Foods containing saturated fats include:

- Beef, veal, lamb
- Poultry with skin
- Butter, cream and whole milk and whole milk products (cheese, etc.)
- Cocoa butter
- Coconut oil and palm oil

Foods containing *trans* fats include:

- Fried foods like French fries and doughnuts
- Pastries, pie crusts, biscuits, pizza dough
- Cookies and crackers
- Stick margarine and shortenings

GOOD FATS: Monounsaturated fats and **polyunsaturated fats** are good fats because they can help reduce the levels of cholesterol in the blood. Typically liquid at room temperature, these fats can have a beneficial effect on your health – when

eaten *in moderation* and used to replace saturated and *trans* fats in your diet. Although most foods contain a combination of different fats, foods high in monounsaturated fats include:

- Olive oil, canola oil, peanut oil, sunflower oil and sesame oil
- Avocados
- Peanut butter, many nuts and seeds

Foods containing polyunsaturated fats include:

- Soybean oil, corn oil and safflower oil
- Fatty fish such as salmon, mackerel, herring and trout
- Some nuts and seeds

ENGAGE IN REGULAR PHYSICAL ACTIVITY

There's just no getting around it – regular physical activity is essential to good health. According to the American Heart Association, regular physical activity increases HDL – good cholesterol – in some people. In addition, physical activity helps to control weight, diabetes and high blood pressure. Aerobic exercise like walking, jogging and swimming also conditions your heart and lungs.

On the other hand, physical inactivity is a major risk factor for heart disease. It's not necessary to run marathons to obtain the benefits of exercise. Even moderate-intensity activities can help reduce your risk when done on a daily basis. Try taking a walk for pleasure, working in the yard or even dancing. Just start moving!

DON'T SMOKE

Smoking actually affects your cholesterol levels – it lowers the body's levels of HDL, or good cholesterol. It also increases the tendency for blood to clot and greatly aggravates and speeds up the growth of atherosclerosis in the coronary arteries, aorta and arteries of the legs. **Quitting smoking now is one of the most important things you can do to reduce your risk of heart disease.**

SEE YOUR DOCTOR

It's important to follow your physician's instructions when you are being treated for any medical condition. If you are taking medication to manage your cholesterol, see your doctor regularly so your cholesterol can be monitored. Remember, high cholesterol has no symptoms. Take care of yourself by relying on the expertise of your physician.

COOKING AND EATING FOR LOWER CHOLESTEROL

Yes, you can *enjoy* a heart-healthy diet! Eating right for your health does not mean existing solely on lettuce and rice cakes. By substituting high-fat, high-cholesterol foods with healthier choices and learning a few cooking techniques, good health and dining pleasure can share the same plate.

EASY FOOD SUBSTITUTIONS

Instead of	Try
Whole-milk dairy products	Fat-free (skim) or 1% milk and other products
Egg yolks	Egg whites or egg substitutes
Full-fat cheeses	Low-fat cottage cheese, part-skim mozzarella, ricotta and other low-fat cheeses
Ground beef	Ground turkey or ground beef with 15% or less fat
Pork sausage	Chicken or turkey sausage

HEALTHIER COOKING METHODS

- Instead of frying, try broiling, boiling, roasting, sautéing, poaching or stir-frying.
- Use oils sparingly; use spray cooking oil whenever possible.
- When a recipe calls for butter, lard, bacon, bacon fat or chicken fat, use unsaturated vegetable oil or a soft margarine that lists vegetable oil as the first ingredient.
- Use herbs and spices rather than salt – the flavor possibilities are endless!
- Use a rack to drain fat when broiling, roasting or baking. Baste meats with wine, fruit juices or an acceptable oil-based marinade rather than meat drippings.
- Make gravies after the fat has hardened and can be removed from the liquid.
- Remove the skin from chicken before cooking.

Want to know more? A wealth of information is at your fingertips. Log onto the American Heart Association Web site at www.americanheart.org.

"Partners 2 Health" is the companywide initiative for employees and their families to work together with Gulfstream to achieve a healthy life and reduce healthcare costs. Under this partnership, Gulfstream will supply the resources (medical plans and health-related information) and families will make informed decisions (taking into consideration that health guidance) to maintain or improve their health. In addition to substituting for the preposition "to" ("Acting as partners will lead to better health"), the "2" signifies the two partners (employees and Gulfstream) and the two phases (short-term and long-term) of everyone's health. Additionally, the "2" represents the two goals of the initiative -- the primary goal of better health and the secondary goal of lower healthcare costs.