



## HEART HEALTH

Your lipid profile is a group of blood tests that can help determine your risk for heart disease. The tests included in this profile are total cholesterol, HDL cholesterol, LDL cholesterol and triglycerides.

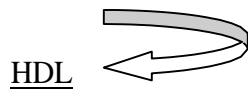
### *What is Cholesterol?*

A yellowish waxy lipid material. We get cholesterol from two sources: cholesterol made in the body by the liver and cholesterol that comes from foods we eat. While some cholesterol is needed for good health, too much cholesterol in your blood can raise your risk of having a heart attack or stroke.

The extra cholesterol in your blood may be stored in your arteries (blood vessels) and cause them to narrow; this is called atherosclerosis. Large deposits of cholesterol can completely block an artery so the blood can't flow through. If an artery to your heart becomes blocked, a heart attack can occur. If an artery that supplies blood to your brain becomes blocked, a stroke can occur.

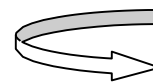
**Goal for total cholesterol: less than 200.**

Cholesterol can be divided into two groups:



HDL

“Good” cholesterol  
-Removes cholesterol  
from the bloodstream



LDL

“Bad” cholesterol  
-Delivers cholesterol  
to the body

**Goal for LDL: Less than 100; your doctor may recommend less than 70**

**Goal for HDL: Greater than 40 (50 for women); greater than 60 is optimal for both**

*What can you do to lower your total and LDL cholesterol, and raise HDL?*

1. Quit smoking.
2. Increase physical activity. A good goal is to exercise 30 minutes, 5 days a week. However start where you are comfortable- even 10 minutes counts!
3. Tip back the scale. If you're overweight, a modest 10 lb. weight loss can be beneficial.
4. Add fiber to your diet- aim for 25 to 35gm a day. Soluble fiber, particularly, can reduce the absorption of cholesterol in your bloodstream. Good choices include oats, flax seeds, kidney beans, apples, pears, barley and prunes.
5. Choose healthy fats such as omega-3 fatty acids found in fatty fish, walnuts and flax seeds, along with mono- and polyunsaturated fats like raw unsalted nuts/seeds, natural peanut or

nut butter, avocados, olives and olive oil.

6. Avoid trans fats, or hydrogenated/partially hydrogenated oils, on food labels. These increase LDL, decrease HDL and increase risk for developing heart attack and stroke.

**Here are some suggestions for diet changes:**

- Choose lean meats more often such as chicken and turkey, fish (not fried), and game
- Choose leaner cuts of beef like round and loin, choose 90% or greater lean ground beef; cut off visible fat
- Choose low fat milk, cheese, cottage cheese and yogurt
- Increase intake of fruits, vegetables, whole grains (minimally processed such as rolled or steel cut oats, quinoa, barley and wild rice), beans and lentils, and ground flaxseed (fiber, omega 3 fatty acids and antioxidants).
- Eat fatty fish at least 2x/week. Good examples are salmon, herring, tuna, sardines, halibut, and mackerel.
- Avoid anything with “hydrogenated oils” on the label. Look for these in fried foods, stick margarine, shortening, baked goods (cakes, pie crust, frozen pizza and cookies), peanut butter, and coffee creamers.

*What are triglycerides?*

The form in which most fats exist in food as well as in the body. Triglycerides in the blood are derived from fats in food or made in the body from other sources like carbohydrates. Excess calories (particularly from sugars and processed carbohydrates) in a meal are converted to triglycerides for storage. High triglycerides are linked to the occurrence of coronary artery disease in some people.

**Goal for triglycerides: Less than 150**

*What can you do to lower your triglycerides?*

1. Reduce processed carbohydrates and added sugars. Choose *whole* foods over white foods like white breads, crackers, white pastas and rice. These all turn into sugar quickly in our bloodstream and are readily stored as triglycerides. Instead choose sweet potatoes, beans, lentils, fruits and vegetables (high in fiber and antioxidants).  
Added sugars are hidden in many foods. Search the label for these common ones:  
Corn sweetener, corn syrup, dextrose, fructose, fruit juice concentrates, glucose, high-fructose corn syrup, invert sugar, lactose, maltose, malt syrup, raw sugar, sucrose, sugar syrup, cane crystals, cane sugar, crystalline fructose, evaporated cane juice, corn syrup solids, malt syrup
2. Reduce or avoid alcohol.
3. Include fish high in omega 3 fatty acids. If you don't like fish consider taking a high quality fish oil supplement. Speak with your provider to learn which are best.
4. Be physically active for at least 150 minutes per week. Walking is a great form of exercise.
5. Modest weight loss