

When you have your cholesterol checked, your results report will include numbers for HDL, LDL and total cholesterol. It will also include a number called a ratio. The ratio is your total cholesterol divided by the number of your HDL.

## What are LDL and HDL?

LDL stands for low-density lipoprotein. LDL is known as bad cholesterol because it can build up in the walls of your arteries, increasing the risk for heart attack and stroke.

HDL stands for high density lipoprotein. HDL is called the good cholesterol because it protects against heart disease by removing the bad cholesterol, LDL, from the walls of your arteries.

## Why is the ratio important?

The ratio, your total cholesterol divided by your HDL, is important because it's the best number for predicting your chances of heart disease.

In general the number of your ratio should be 4.5 or lower. The higher your level of HDL, the lower your ratio will be. The lower your ratio is, the lower your risk for heart disease.

## Why is it important to have a higher HDL number?

Having a higher HDL number is important because HDL helps rid your body of LDL cholesterol. This helps keep your artery walls from getting clogged with harmful buildup over time. The lower your HDL is, the higher your risk of clogged arteries.

## What should my LDL number be?

In general, most adults should aim for an LDL number under 130. Adults with diabetes or heart disease should aim for an LDL lower than 100.

## What can I do to raise my HDL and lower my LDL?

There are several things that have an impact on your cholesterol numbers, including your family's genes and your health history.

While you can't change either of those, there are several actions you can take to improve your numbers. These actions can increase your good cholesterol, lower your bad cholesterol, and help protect you against heart disease.

## Here's what you can do now:

- **If you smoke, quit.** Smoking lowers HDL. We have resources to help. For more information, visit Quit For Life® at [quitnow.net/kpwa](http://quitnow.net/kpwa) or call 1-800-462-5327.
- **Exercise regularly.** If you're not exercising now, start with 10 minutes of daily physical activity, like walking, bicycling, or swimming. Work up to at least 30 minutes of exercise each day. If you're not sure what exercises are safe for you, check with your doctor before starting your exercise program.
- **Eat a heart-healthy diet.** Follow these guidelines to help you raise your HDL levels and lower LDL:

### **Include foods high in fiber and low in saturated and trans-fats.**

– Whole-grains, legumes (including cooked dried beans and lentils), fruits, and vegetables are good sources of dietary fiber and, depending on how you prepare them, can have little or no fat.

**Lower the amount of total fat you eat each day.**

–This is especially important for saturated fat and trans-fat, which can raise levels of bad cholesterol in your blood. Saturated fats are found in butter, full fat dairy products, fat on meat and in poultry skin. Trans-fats are found in processed foods using partially hydrogenated oils.

**Choose protein that is non-fat or low fat**

–Good choices can include non-fat or low fat dairy products, legumes (such as cooked dried beans and lentils) tofu, fish, lean poultry, and lean cuts of meat.

**When using fat in your diet, use monounsaturated fats**

–These are good fats such as those found in olive and canola oil. Nuts and avocados are also a good source of monounsaturated fats.

## What if these changes don't improve my cholesterol numbers?

If diet and lifestyle changes don't raise your HDL or lower your LDL, talk with your doctor. He or she might prescribe medicine that can help.

## Resources

**Nutrition Services** offers one-on-one counseling with dietitians to help patients develop meal and exercise plans that work for them. Ask your primary care provider for a referral to meet with a dietitian.

The **Kaiser Permanente Resource Line** has information on a variety of health topics and resources. Call weekdays from 9 a.m. to 4 p.m. toll-free 1-800-992-2279 or by e-mail at [resource.l@ghc.org](mailto:resource.l@ghc.org).

The Health and Wellness Resources section of the **Kaiser Permanente website** at [kp.org/wa](http://kp.org/wa) has information on meal planning, healthy eating, exercise, and hundreds of other health topics.

USDA's **MyPlate** website at [choosemyplate.gov](http://choosemyplate.gov) has interactive tools, including meal planners, food and physical activity trackers, and a look-up tool to find the calories and food exchanges for thousands of foods.

## How to improve your cholesterol numbers

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