



Managing Your Cholesterol

Total Cholesterol

Cholesterol has important roles in the body, but too much in the bloodstream can increase the risk of heart disease. Total cholesterol is a measure of LDL, HDL, and 20% of the triglyceride level. It is not always an accurate indicator of heart health, as knowing the individual cholesterol values gives a better picture.

LDL (bad) Cholesterol

LDL (low density lipoprotein) cholesterol takes cholesterol from the liver and delivers it to other tissues. Along the way, LDL cholesterol can leave fat and cholesterol in the walls of blood vessels, causing plaque buildup and raising the risk for heart disease and stroke.

HDL (good) Cholesterol

HDL (high density lipoprotein) cholesterol is helpful because it can remove LDL from the bloodstream. This may decrease plaque buildup in the walls of blood vessels.

TC/HDL ratio

Total cholesterol divided by HDL estimates if there is enough HDL to manage the LDL. Even with elevated total or LDL cholesterol, HDL may help protect from heart disease and stroke.

Triglycerides

Triglycerides are the most common fats in the body. Too many triglycerides in the blood may make it difficult for HDL to remove LDL. There are many reasons triglycerides may be elevated, such as lack of exercise, extra weight, insulin resistance, or consuming too much sugar, simple starches, or alcohol.

Metabolic syndrome raises the risk of heart disease, diabetes, and stroke. It affects about a quarter of adults and occurs when three of these risk factors are found:

- low HDL cholesterol
- triglycerides 150 or above
- blood pressure 130/85 or greater
- blood sugar 100 or more
- elevated waist circumference

What Do the Numbers Mean?

	Desirable Level	Borderline Level	High-risk Level
LDL	Less than 100 mg/dL Near optimal/above optimal: 100-129 mg/dL	130-159 mg/dL	High: 160-189 mg/dL Very high: 190 mg/dL+
HDL	Greater than 60 mg/dL	Increased risk of heart disease Men: Less than 40 mg/dL Women: Less than 50 mg/dL	
Triglycerides	Less than 150 mg/dL	150-199 mg/dL	High: 200-499 mg/dL Very high: More than 500 mg/dL
Total Cholesterol	Optimal: Less than 180 mg/dL Desirable: 181-200 mg/dL	200-239 mg/dL	240 mg/dL and over

What habits can improve cholesterol and triglycerides?

Being more physically active.

- Start small and work up to at least 2 ½ hours each week.
- Do muscle-strengthening exercises at least twice a week.
- Add in flexibility and stretching.

Achieving a healthy weight.

- If losing weight is desired, try for 3-10% weight loss.
- Aim for a gradual weight loss of ½ to 2 pounds per week.
- Try to maintain weight through healthy habits.

Limiting alcohol intake.

- No more than 1 drink each day for most women
- No more than 2 drinks each day for most men

Avoiding all tobacco use to protect blood vessels and improve HDL.



Choosing healthy fats.

- Unsaturated fats are liquid at room temperature and include polyunsaturated and monounsaturated fats. They may improve cholesterol when used instead of saturated fats. They are found in nuts, seeds, olives, avocados, seafood, and most plant oils like olive oil.
- Omega-3 fatty acids are a type of polyunsaturated fat that may reduce inflammation and improve heart health. Choose at least 8 ounces of non-fried seafood each week and include plant sources of omega-3 fatty acids such as flaxseeds, chia seeds, hemp seeds, walnuts, and canola oil.
- Saturated fats are usually solid at room temperature and too much may cause unhealthy changes in cholesterol and triglycerides. They are found in almost all fatty foods, but especially in meat, dairy, palm oil, and coconut oil. Much of the saturated fat we eat comes from desserts and dishes that are also high in salt or sugar.

Getting enough fiber can lower LDL and triglycerides.

- Build meals around beans, lentils, vegetables, fruits, whole grains, nuts, and seeds.
- Choose whole grains like oatmeal, barley, whole wheat, brown rice, popcorn, and quinoa.
- Eat fruits and vegetables instead of drinking juice.
- Aim for 21-38 grams of fiber daily.

Reducing added sugar may improve triglycerides and LDL cholesterol.

- Limit sugary drinks, the number one source of added sugar in America.
- Make sweet treats just that – an occasional treat rather than a daily food.

Choosing proteins wisely.

- Limit processed meat like hot dogs, bologna, sausage, bacon, and deli meat.
- Have beans and legumes instead of meat a few times a week.
- When eating meat, opt for leaner cuts of beef and pork and skinless poultry.