

## Therapeutic Lifestyle Changes (TLC) Diet for High Cholesterol

People have varying degrees of success in lowering their [cholesterol](#) by changing their diets. People who have high cholesterol because they eat too many fatty foods may be able to lower their cholesterol 10% to 20% with diet changes alone, while others may only achieve a 5% to 8% reduction. Those who are most successful using diet changes to lower their cholesterol are those who lose excess weight. Diet changes are usually the first step in lowering cholesterol before medicines are added.

The Therapeutic Lifestyle Changes (TLC) diet is recommended by the National Cholesterol Education Program of the U.S. National Institutes of Health. The diet's main focus is to reduce the amount of saturated fat you eat, because saturated fat elevates your cholesterol. You can reduce the saturated fat in your diet by limiting the amount of meat and milk products you eat. Choose low-fat products from those food groups instead. Replace most of the animal fat in your diet with unsaturated fat, especially monounsaturated oils, such as olive, canola, or peanut oil. Monounsaturated fat lowers [LDL](#) ("bad") cholesterol if it is substituted for saturated fat and keeps [HDL](#) ("good") cholesterol up.

**The TLC diet calls for less than 7% of your daily calories to come from saturated fat and for eating no more than 200 mg of dietary cholesterol a day.** But the diet allows 25% to 35% of daily calories from fat, mainly from unsaturated fat.<sup>1</sup> Most of the fat should be monounsaturated, and only 10% should be polyunsaturated fat. Your diet should include only enough calories to maintain your desired weight and avoid gaining weight.

**Therapeutic Lifestyle Changes (TLC) diet recommendations**

Food group	Number of servings	Serving size
Lean meat, poultry, fish, dry beans, and dry peas	No more than 5 ounces total a day	5 ounces maximum a day of lean meat, poultry, or fish Substitute ¼ cup dry beans or peas for 1 ounce of meat.
Eggs	No more than 2 yolks a week	1 whole egg. Egg whites or substitutes are not limited.
Low-fat milk and milk products	2–3 a day	1 cup nonfat or 1% milk 1 cup nonfat or low-fat yogurt 1 ounce nonfat or low-fat cheese (3 grams of fat or less per ounce)
Fruits	2–4 a day	1 piece fruit, such as apple, orange, or ½ a banana ½ cup canned fruit 1 cup berries or melon ¾ cup fruit juice
Vegetables	3–5 a day	1 cup raw leafy greens ½ cup cooked or raw vegetables ¾ cup vegetable juice
Bread, cereals, pasta, rice, and other grains	6–11 a day	1 slice of bread ½ hot dog or hamburger bun, bagel, or English muffin 1 ounce cold cereal ½ cup cooked pasta, rice, noodles, or other grains

Fat and oils	6–8 a day	<ul style="list-style-type: none"> <li>1 teaspoon monounsaturated oil, such as canola, olive, or peanut</li> <li>1 teaspoon polyunsaturated oil, such as corn or safflower</li> <li>1 teaspoon soft margarine (one that does not contain hydrogenated oils)</li> <li>1 tablespoon salad dressing</li> <li>1 teaspoon mayonnaise</li> <li>2 tablespoons nuts or seeds</li> </ul>
Sweets and snacks	Within calorie limit	Choose snacks that are low in fat or are made with unsaturated fat.

## ***Lowering Cholesterol: 15 Tips for Avoiding Heart Disease***

### **Simple Steps Can Help**

Has your doctor said you have high cholesterol (called hypercholesterolemia)? Then you know you need to change your diet and lifestyle to lower cholesterol and your risk of heart disease. Even if your doctor prescribed a cholesterol drug to bring levels down, you'll still need to change your diet and become more active for cardiovascular health. These simple tips can help you keep cholesterol levels in check.

### **Cholesterol, Good and Bad**

Your body needs a small amount of cholesterol to function properly. But we may get too much saturated fat and cholesterol in our diet – and both raise levels of LDL "bad" cholesterol. LDL cholesterol can cause plaque to build up in arteries, leading to heart disease. HDL "good" cholesterol, on the other hand, helps clear bad cholesterol from your blood. You want to lower LDL cholesterol and raise HDL cholesterol, starting with your diet.

### **Give Yourself a Hand**

Most Americans eat super-sized meals, with portions that are twice the size recommended for good health. That can contribute to weight gain and high cholesterol. Here's an easy way to practice portion control for a meal: Use your hand. One serving of meat or fish is about what fits in the palm of your hand. One serving of fresh fruit is about the size of your fist. And a serving of cooked vegetables, rice, or pasta should fit in your cupped hand.

### **Serve Up the Heart-Healthy Food**

Load your plate with fruits and vegetables — five to nine servings a day — to help lower LDL "bad" cholesterol. Antioxidants in these foods may provide the benefit. Or it may be that when we eat more fruits and veggies, we eat less fat. Either way, you'll also help lower blood pressure and maintain a healthy weight. Foods enriched with plant sterols, such as margarine spreads, yogurts, and other foods, can also help lower LDL cholesterol.

### **For heart health, look to the sea.**

A heart-healthy diet has fish on the menu twice a week. Why? Fish is low in saturated fat and high in healthy omega-3 fatty acids. Omega-3 fatty acids help lower levels of triglycerides, a type of fat in the blood. They may also help lower cholesterol, slowing the growth of plaque in arteries. Go for fatty fish, such as salmon, tuna, trout, and sardines. Just don't drop the filets in the deep fryer – you'll negate the health benefits.

## Start Your Day With Whole Grains

A bowl of oatmeal or whole-grain cereal has benefits that last all day. The fiber and complex carbohydrates in whole grains help you feel fuller for longer, so you'll be less tempted to overeat at lunch. They also help reduce LDL "bad" cholesterol and can be an important part of your weight loss strategy. Other examples of whole grains include wild rice, popcorn, brown rice, barley, and whole-wheat flour.

## Go Nuts for Cardiovascular Health

Need a snack? A handful of nuts is a tasty treat that helps in lowering cholesterol. Nuts are high in monounsaturated fat, which lowers LDL "bad" cholesterol while leaving HDL "good" cholesterol intact. Several studies show that people who eat about an ounce of nuts a day have lower risk of heart disease. Nuts are high in fat and calories, so only eat a handful. And make sure they're not covered in sugar or chocolate.

## Unsaturated Fats Protect the Heart

We all need a little fat in our diet – about 25% to 35% of our daily calories. But the type of fat matters. Unsaturated fats -- like those found in canola, olive, and safflower oils – lower LDL "bad" cholesterol levels and may help raise HDL "good" cholesterol. Saturated fats – like those found in butter and palm oil – and trans fats raise LDL cholesterol. Even good fats have calories, so eat in moderation.

## More Beans, Fewer Potatoes

You need carbohydrates for energy, but some do your body more good than others. Whole grains – such as brown rice or quinoa – whole-wheat pasta, and beans have more fiber and raise sugar levels less. They lower risk of diabetes and high cholesterol. Other carbs, like those found in white bread, white potatoes, white rice, and pastries, quickly boost blood sugar and may raise risk of type 2 diabetes.

## Move It!

Even 30 minutes of physical activity five days a week (20 minutes three times a week for vigorous exercise, such as jogging) can help lower LDL cholesterol and raise HDL cholesterol – although more exercise is even better. It also helps you maintain an ideal weight, reducing your chance of developing clogged arteries. You don't have to exercise for 30 minutes straight – you can break it up into 10-minute increments.

## Walk It Off

If you're not used to exercising – or hate the thought of going to a gym – just go for a walk. It's easy, healthy, and all you need is a good pair of shoes. Aerobic or cardiovascular exercise such as walking lowers risk of stroke and heart disease, helps you lose weight, and keeps bones strong. If you're just starting out, try a 10-minute walk and gradually build up from there.

## Work Out Without Going to the Gym

If exercise sounds like a dirty word to you, here's some good news: You can boost your heart health by incorporating physical activity into your day. Any kind of cardiovascular activity counts – gardening, dancing, or taking the stairs instead of the elevator. Even housework can qualify as exercise – as long as you're doing serious cleaning that gets your heart rate up and not just light dusting.

## Take Charge of Your Health

If you have high cholesterol, you and your doctor may be using a number of strategies to lower cholesterol levels. You may be working on your diet, losing weight, exercising more, and maybe taking cholesterol drugs. There are other actions you can take, too, to make sure you stay on the right track

### What to Do When Eating Out

If you're eating healthy food at home to keep cholesterol in check, don't blow it when you eat out. Restaurant food can be loaded with saturated fat, calories, and sodium. Even healthy choices may come in super-size portions. Try these tips to stay on track:

- Choose broiled, baked, steamed, and grilled foods – not fried.
- Get sauces on the side.

### Look for Hidden Traps

A close look at nutrition labels is essential for a low-cholesterol, heart-healthy diet. Try these tips:

- Check serving sizes. The nutrition info may look good, but does the package contain two servings instead of one?
- If it says "whole grain," read the ingredients. Whole wheat or whole grain should be the first one.
- A food with "0 grams cholesterol" could still raise your LDL cholesterol. Saturated fat is the other culprit to watch for.

### Don't Stress Out

Chronic stress can raise blood pressure, adding to your risk of atherosclerosis, which occurs when plaque from cholesterol builds up in arteries. And research shows that for some people, stress might directly increase cholesterol levels. Reduce your stress levels with relaxation exercises, meditation, or biofeedback. Focus on your breathing and take deep, refreshing breaths. It's a simple stress-buster you can do anywhere.

### When Losing Means Winning

Losing weight is one of the best things you can do to fight cardiovascular disease. Being overweight affects the lining of your arteries, making them more prone to collect plaque from cholesterol. Losing weight – especially belly fat, which is linked to hardening of the arteries – helps raise HDL "good" cholesterol and reduce LDL "bad" cholesterol. Aim to keep your body mass index (BMI), an indicator of body fat, under 25.

### Follow Your Doctor's Advice

Managing your cholesterol is a lifelong process. See your doctor regularly to keep tabs on your health. Follow your doctor's recommendations on diet, exercise, and medication. Working together, you and your doctor can lower your cholesterol levels and keep your heart going strong.

1. Citations Grundy SM, et al. (2001). Executive summary of the third report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III). *JAMA*, 285(19): 2486–2497.

## Low Fat Substitutes

Here are some low fat substitute suggestions, to reduce your dietary fat intake.

<b>Full Fat Food</b>	<b>Lower Fat Substitution</b>
Hard shortening, lard, or bacon grease	Olive, safflower, corn, sunflower, canola, or soybean oil.
Creamy salad dressings like blue cheese	Oil and vinegar, lemon juice, or reduced-calorie dressings.
Fats or oils for frying or sautéing	Nonstick cooking spray.
Added fat, like oil, butter, margarine, or gravy	Herbs and spices, onion, garlic, low- fat broth, or wine.
Mayonnaise	Sour cream Plain nonfat or low-fat yogurt or nonfat sour cream.
Whole milk, nondairy creamers, half-and-half	Skim (nonfat) or low-fat (1 percent) milk.
Hard full-fat cheeses	Lower-fat cheeses like part-skim ricotta, low-fat and cream cheese, Jarlsberg, cottage cheese, and Neufchatel.
Full-fat Ice cream	Nonfat or low-fat frozen yogurt, ice milk, fruit ices, or sherbet.
A whole egg	Two egg whites or 1/4 cup egg substitute.
Fat in baking recipes	Equal amounts fruit puree like prune, or applesauce.
Whipping or heavy cream	Evaporated skim milk or one part skim milk and one part cream.
Frying	Bake or roast on a rack, broil, grill, steam, or microwave.