### Monthly Health Challenge



## **Eat to Lower Your Cholesterol Levels**

#### **CHALLENGE**

Eat polyunsaturated fats & avoid foods with cholesterol.



## Requirements to complete this HEALTH CHALLENGE™

- 1. Track the amount of saturated fats and cholesterol you eat daily. No more than 7% of your calories should come from saturated fat. Limit dietary cholesterol to no more than 200 mg each day (zero is best).
- 2. Read "The problem of high cholesterol" and "What you can do."
- **3.** To complete the Challenge, eat polyunsaturated fats in place of saturated fats and avoid foods with high cholesterol (containing 100+ mg per serving) on at least 22 days this month.
- **4.** Keep records of your completed Challenge in case your organization requires documentation.

# The problem of high cholesterol

Some cholesterol is necessary for the normal functioning of your body. But too much cholesterol in your blood can lead to heart disease, and heart disease is the number one cause of death in America.

When cholesterol levels are high, it begins to accumulate in the artery walls. High blood pressure, inflammation (caused by being overweight and

sedentary or having periodontal disease), and smoking hasten this process. Over time, the arteries become narrowed, restricting blood flow. When the arteries become narrow and unhealthy from accumulated cholesterol, a clot is likely to form. If the artery is blocked, the heart (or brain, or kidney, or other body part) does not receive adequate oxygen so a heart attack (or stroke) occurs.

High cholesterol is caused by a variety of factors, including hereditary influences, excess body fat, eating too much saturated fat and cholesterol, not eating healthy fats (polyunsaturated fats such as corn oil, soy, and walnuts) at most meals, and not eating enough foods high in dietary fiber. Whether you have heart disease or want to prevent it, you can reduce your risk for having a heart attack by lowering your cholesterol level.

## What should your cholesterol level be?

About 1 out of every 2 adults has cholesterol levels above 200 (the recommended limit). High cholesterol exhibits few symptoms, so unless you have it checked you might not know you're in danger until that heart attack occurs. Everyone should have a blood test to measure cholesterol at least once every 5 years, starting at age 35 – more often if it is high. If you smoke or have diabetes, or if heart disease runs in your family, start having your cholesterol checked at age 20. Your doctor may recommend more frequent tests. Healthy cholesterol is important for everyone – young, middleaged, and older adults.

Have a Blood Test for These Levels								
Туре	What it is Recommended levels							
Total cholesterol	All cholesterol combined	Keep levels below 200 mg/dL.						
LDL (bad) cholesterol	Main source of cholesterol buildup and blockage in the arteries	Less than 100 mg/dL is ideal; less than 130 mg/dL is recommended for healthy people. If you have heart disease or diabetes, your LDL level should be less than 100 mg/dL.						
HDL (good) cholesterol	Helps keep cholesterol from building up in the arteries	Less than 40 mg/dL is low and is considered a major risk factor because it increases your risk for developing heart disease. HDL levels of 60 mg/dL or more help to lower your risk for heart disease.						
Triglycerides	Another form of fat in your blood	Levels that are borderline high (150-199 mg/dL) or high (200 mg/dL or more) may need attention.						

HDL Chole

#### **HDL: The Good Cholesterol**

HDL goes up when you start exercising more, lose weight, and limit how much sugar you eat and drink.

#### **Triglycerides**

To lower your levels, lose weight, exercise regularly, and limit sugar and refined carbohydrates (e.g., white rice and foods made with white flour).



## What you can do to lower your cholesterol levels

Your body produces all the cholesterol it needs to stay healthy. Eating animal-based foods raise your cholesterol level. Plant foods (fruits, vegetables, grains, and legumes) do not contain cholesterol and will not raise your levels.

Even if your cholesterol levels are well outside the healthy range, you can still improve them and sometimes quickly – with small, steady changes to your lifestyle. It is important to choose your foods carefully.

- 1. Reduce saturated fat. Saturated fats come largely from animal sources and are usually solids at room temperature. Saturated fat is found mainly in meat, whole milk, cheese, ice cream, butter, coconut fat, cream, solid cooking fats, and foods made with these items (like rich desserts). Limit saturated fat to less than 7% of your total calories (less than 5% for even better results). The amount of saturated fat in foods is shown on food labels.
- Save butter, cream, and ice cream for special occasions, if eaten at all.
- ✓ Healthier cheeses include low-fat cottage cheese and part-skim milk mozzarella.
- The American Heart Association recommends eating no more than 6 ounces of lean meat, poultry, or fish each day. Trim fat from meat before cooking. Skinless poultry is a better options.
- Fish is best and can be eaten at least twice a week. Bake, broil, grill, or boil rather than bread or fry it.
- Bakery goods are often high in saturated fat. Bake your own cookies, pies, and cakes with unsaturated oils and egg whites.
- 2. Choose polyunsaturated fat. In place of animal or solid fats (e.g., stick margarine, shortening), choose polyunsaturated fats that actually help reduce cholesterol levels and risk of heart disease. Some of the best unsaturated fats to use include: High Blood
- ✓ Olives, avocados, nuts, seeds, and flax meal (all are rich in unsaturated fats and help lower cholesterol).
- ✓ Vegetable oils such as olive, soy, and canola oil. Use these fats moderately because they are refined and high in calories.
- ✓ Salad dressings made from pure vegetable oils.

3. Limit or avoid dietary cholesterol. If you have too much cholesterol in your blood, eating more is not helpful. Eating saturated fats affects your cholesterol the most, but dietary cholesterol does contribute to the problem, especially when it's oxidized (e.g., powdered eggs, cheese). Oxidized cholesterol accumulates in the arteries much faster than non-oxidized cholesterol.

Eat largely a plant-based diet. The DASH diet is good for keeping cholesterol lower. www.nhlbi.nih.gov/health/ public/heart/hbp/dash/ new\_dash.pdf

- ✓ Limit processed meats such as sausage, bologna, salami, and hot dogs. They are high in calories, saturated fat, and cholesterol.
- ✓ Avoid organ meats such as liver, sweetbreads, kidney, brain, and heart because they are very high in cholesterol.
- ✓ Egg whites are high in protein and have no cholesterol. You can substitute two egg whites for one whole egg in recipes. If you choose to eat eggs, limit yourself to 2 or 3 a week – none if you have diabetes.
- ✓ Experiment with tofu, which is made from soybeans, as an alternative to meat. Check out books from the local library or look on the Internet for recipes.

**4. Eat high-fiber foods.** The fiber in whole grains - especially oats, barley, and brown rice – lowers cholesterol levels. Fruits and vegetables are also high-fiber, cholesterol-free, and low-calorie foods.

Studies show that by eating more of these foods, cholesterol levels drop, blood pressure drops, and so do mortality rates for heart disease, stroke, and cancer.

Of all foods, legumes are the highest in dietary fiber and are also good sources of vegetable protein.

- **5. Eat less salt** (sodium).
- **6.** Be physically active for at least 30 minutes every day. You don't have to climb a mountain or run a marathon. Walking will work just fine.
- 7. Lose weight if you need to. Even 10-15 pounds can make a big difference. A good diet and regular exercise will help.

8. Lower your blood pressure, if necessary. Levels 140/90 or higher are considered high blood pressure. Blood pressure above 120/80 What You Need to can increase your risk.

9. Take medications that your doctor prescribes. Ask about

side effects and expected outcomes.

Sources: American Heart Association. National Cholesterol Education Program. National Heart, Lung, and Blood Institute.



Cholesterol:

Know, NHLBI

www.nhlbi.nih.gov/

health/public/heart/

chol/wyntk.htm

### Health Challenge<sup>™</sup> Calendar

## **Eat to Lower Your Cholesterol Levels**

#### Instructions

- **1.** Post the Health Challenge Calendar where you will see it daily (bathroom, kitchen, bedroom, etc.).
- 2. Check off each day you eat polyunsaturated fats in place of saturated fats and avoid high-cholesterol foods. Use this calendar to also record your exercise program (minutes/day), weekly weight, and any other items you may want to track.
- **3.** You must meet this goal at least 22 days out of the month to complete the Challenge. Then keep up this healthy practice for a lifetime of best health!

CHALLENGE

Eat polyunsaturated fats &
avoid foods with
cholesterol.

Number of days this month I avoided high-cholesterol foods  Number of days this month I got 30+ minutes of aerobic physical activity	MONTH:			HC = Health Challenge <sup>™</sup> ex. min. = exercise minutes						
ex. min. ex.	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	Weight & weekly summary		
HC H	НС	HC	HC	HC	HC	НС	НС			
ex.min. ex.min	ex. min	ex. min	ex. min	ex. min	ex.min	ex.min	ex.min			
HC H	НС	HC	HC	HC	HC	НС	HC			
ex.min. ex.mix. ex.min. ex.min. ex.min. ex.min. ex.min. ex.min. ex.min. ex.mix	ex. min	ex. min	ex.min	ex. min	ex. min	ex.min	ex. min			
HC H	НС	НС	НС	HC	НС	НС	НС			
ex. min e	ex. min	ex.min	ex. min	ex. min	ex.min	ex. min	ex.min			
HC H	НС	НС	НС	НС	НС	НС	НС			
ex.min	ex. min	ex.min	ex. min	ex. min	ex.min	ex. min	ex.min			
Number of days this month I ate polyunsaturated fats instead of saturated fats  Number of days this month I avoided high-cholesterol foods  Number of days this month I got 30+ minutes of aerobic physical activity  Other wellness projects completed this month:	НС	НС	HC	НС	HC	НС	НС			
Number of days this month I avoided high-cholesterol foods  Number of days this month I got 30+ minutes of aerobic physical activity  Other wellness projects completed this month:	ex. min	ex.min	ex. min	ex. min	ex.min	ex. min	ex.min			
Signature Date	Number of days this month I avoided high-cholesterol foods									
	Signature				Date					

