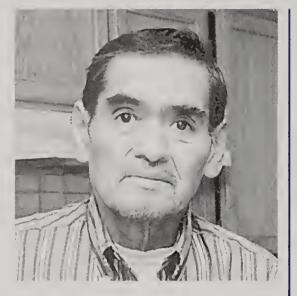
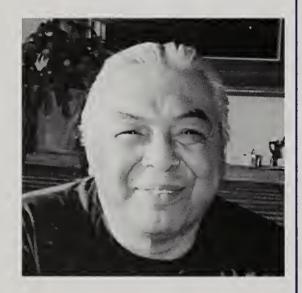
Taking Care of Your Heart



Indian Health Service Division of Diabetes Treatment and Prevention









Inside this booklet...

You can take care of your heart3
What is cholesterol?4
Where does cholesterol come from?5
Why is cholesterol bad for you?6
How does high cholesterol narrow blood vessels?7
What does cholesterol build-up look like?8
Why is a narrow blood vessel a problem?9
Who needs to be careful about cholesterol?10
How do you know if you have high cholesterol?11
What is a good cholesterol level?12
What can you do if you have high cholesterol?13
What are the foods you can choose?14
What are the foods you should limit?15
What are ways to eat less high-fat food?16
What are ways to cook with less fat?17
What are ways to be more active?18
What are good ways to walk?19
What other things can you do to
help lower cholesterol?20
What happens if you still have high cholesterol?21
You can lower your cholesterol22





You can take care of your heart

You can take care of your heart. One way to do this is to lower your blood cholesterol.

This booklet tells you about blood cholesterol. You will learn how to lower your blood cholesterol. "I am at high risk for heart disease.

I am learning to take care of my heart."

What is cholesterol?

Cholesterol is a fat. It is in your blood. High cholesterol means having too much fat in your blood. You can lower your blood cholesterol.

"My cholesterol used to be over 300.

I lowered my cholesterol.

Now, it is below 200."







Where does cholesterol come from?

Most cholesterol comes from animal foods high in fat. Eating too much high-fat food can raise your cholesterol.

Your body also makes cholesterol. Some people make more than others. These people can have high cholesterol even when they eat few fat foods.

"Fry bread that is made with lard has a lot of cholesterol.

I make mine with vegetable oil.

I make small pieces."

"I have diabetes and high cholesterol.

I'm at risk for heart disease."



Why is cholesterol bad for you?

High levels of cholesterol can narrow blood vessels. Narrow blood vessels can lead to heart disease or stroke.



How does high cholesterol narrow blood vessels?

Think of blood vessels as pipes. Pipes carry water from the pump to your house. Sometimes minerals inside the pipe build up, and block the pipe.

Blood vessels are like water pipes. Blood vessels carry blood from the heart to all parts of the body. Cholesterol can build up in your blood vessels, like minerals can build up in pipes.



"Cholesterol
builds up in your
blood vessels.
This shows how
cholesterol slowly
builds up and
blocks your blood
vessels."

What does cholesterol build-up look like?

The first drawing shows an open blood vessel, without any build-up. Blood can go through it without any problem.

The second drawing shows a blood vessel almost half-blocked by build-up. Blood can get through, but with some trouble.

The third drawing shows a blood vessel almost fully blocked. Very little blood can get through.

Cholesterol can
build up on
blood vessels.
It can block
blood vessels.



1. No cholesterol build-up



2. Half blocked by cholester ol



3. Almost fully blocked by cholesterol





Why is a narrow blood vessel a problem?

A narrow blood vessel can become blocked. If a blood vessel gets blocked, it can cause a heart attack or stroke.

"I have diabetes.

My blood vessels
became blocked.
I could hardly walk.
Then, I had heart
surgery. Now, I can
walk one mile each
day. Walking helps
keep my heart
healthy."



"My father had heart disease.

I have angina and diabetes.

I need to be careful about cholesterol."



Who needs to be careful about cholesterol?

Everyone needs to be careful about cholesterol. Cutting down on high-fat fat food is good for everyone in your family.

Some people need to be more careful than others:

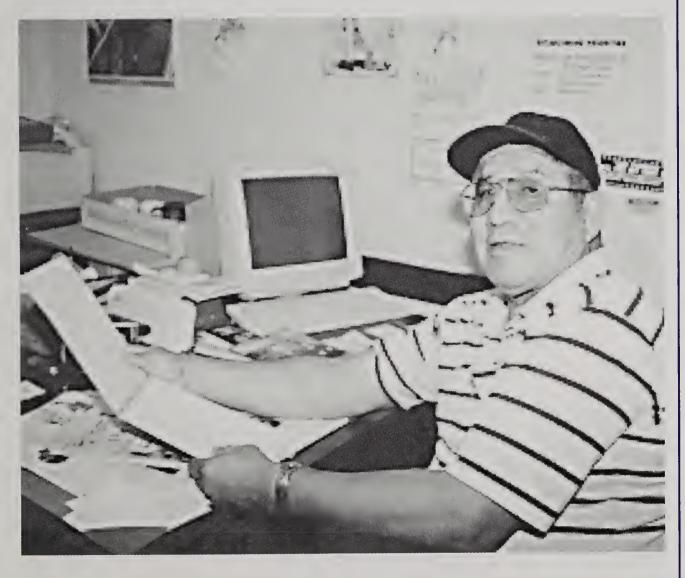
- men of all ages
- tobacco users
- people with diabetes
- people with high blood pressure
- people who have heart disease
- people with a family member who has had a heart attack
- women after menopause

How do you know if you have high cholesterol?

You cannot feel high cholesterol. You cannot feel fat build-up inside your blood vessels. It is a silent killer like high blood pressure.

Your health care provider has a test for cholesterol. A simple blood test can tell you and your health care provider about your cholesterol and other blood fats.

You can lower your blood cholesterol.



"I keep a list of my cholesterol readings. They show me that I have lowered my cholesterol level."



What is a good cholesterol level?

A good cholesterol level is under 200. Between 200 and 240, chances of early disease or death goes up. Above 240, the risk is **very high** for a heart attack or stroke.

20	00 24	40
Low Risk	Some Risk	High Risk

"My cholesterol used to be over 250. Now it is below 160."





What can you do if you have high cholesterol?

If you have high cholesterol, you can do two things to lower it:

- Choose low-fat foods.
- Be more active. Walking is a good way to be active.

Eating less fat is good for everyone in your family. Fat build-up in blood vessels can start in childhood.

"My children
are at high risk
for diabetes.
They are at high
risk for heart
problems.
We are making
changes to lower
our risk."



Choose foods that are low in fat.



What are the foods you can choose?

You can lower the amount of fat in your blood. Choose foods that are low in fat. This will help lower fat in the blood. Choose these foods to eat:

- vegetables
- fruit
- soft margarine
- chicken, turkey, fish, or wild game meats
- oat cereals and whole grains
- low-fat or skim milk, and low-fat milk products

What are the foods you should limit?

Limit food that is high in fat. These foods put fat in the blood. Limit these foods:

- fatty cuts of meat
- eggs
- non-dairy coffee creamer
- fried foods
- ice cream, cream, butter, whole milk and cheese



Limit these foods.

They are high
in fat.



What are ways to eat less high-fat food?

There are ways to eat less high-fat food. While shopping, choose food that has less fat:

- Read food labels. Many foods contain hidden oils or fats.
- Look for food labels that say "low-fat" or "no cholesterol."
- "Low-fat" or "no cholesterol" doesn't mean low-calorie. Read the food label for portion sizes. Eat small amounts.
- Choose plain, non-fat yogurt to use in fruit salads, dips and dressing, instead of mayonnaise.

"Reading food labels helps.
I can choose better food.
I can choose low-fat food."





What are ways to cook with less fat?

Eating less high-fat food will lower fat in the blood. Here are some ways to cook food with less fat:

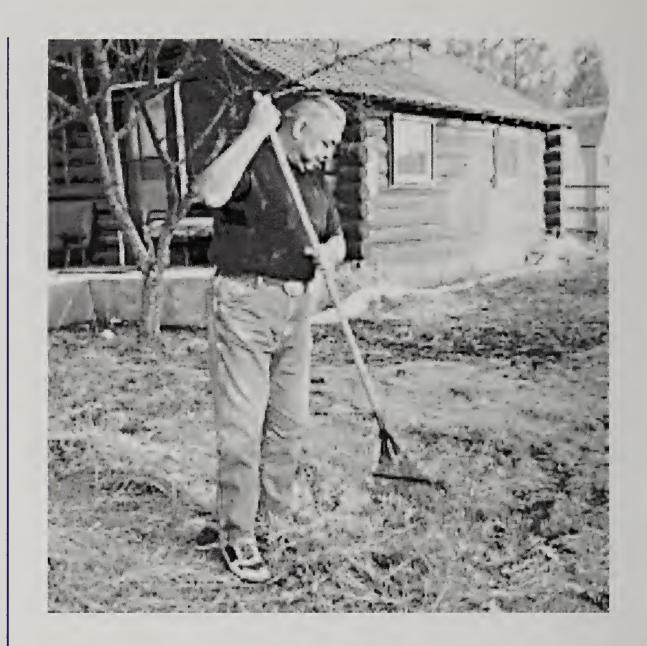
- Cut fat from meat edges before cooking.
- Cut off fat and skin from chicken or turkey before cooking.
- Broil, barbecue, bake or boil your foods. Frying adds more fat.
- Do not add fats after cooking food. Use gravy, sour cream, cheese sauce, margarine or butter less often.
- When you cook with fat, liquid cooking oil is better than shortening. Use small amounts.

"I'm making changes in the way I cook.
I choose lean meats. I use vegetable oil.
I use small amounts."

"Doing yard work gets me outside.

I enjoy it.

It's peaceful."



What are ways to be more active?

Being more active will lower fat in the blood. Being active for 10 minutes at a time, three times a day, adds up to good health. These activities will help lower fat in the blood:

- walking
- riding a bike
- working in the yard
- dancing
- canoeing
- swimming

What are good ways to walk?

Walking is a good way to be more active. You can help lower your cholesterol level if you walk.

Walking for 30 minutes each day is best. You can break the 30 minutes into three 10-minute sessions. Start out walking three or more times a week. Work up to 30 minutes of walking each day.

You can lower your cholesterol. Your health care provider can help you make a plan to be more active.



"I walk
every day.
Walking helps
keep my
cholesterol
down."



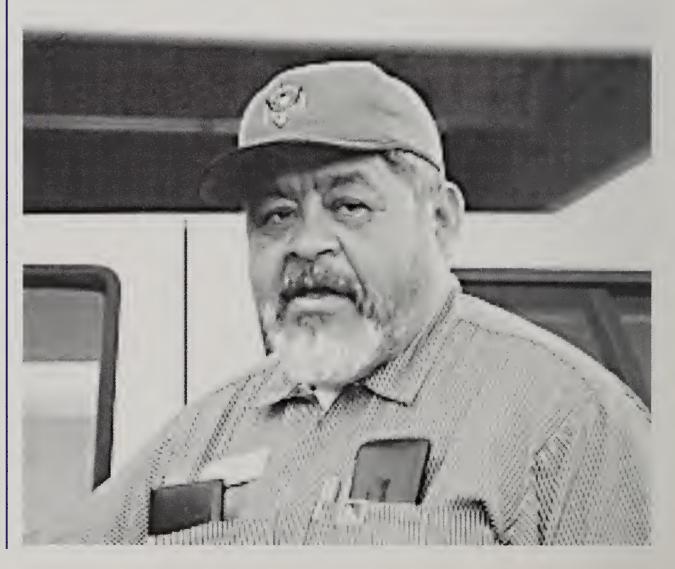
What other things can you do to help lower your cholesterol?

There are other things you can do to help lower your cholesterol:

- Lose weight. Plan a weight loss program with your health care provider. Losing weight can lower cholesterol. Losing 5-10 pounds will help.
- Stop smoking. Smoking is never good for you. Smoking leads to early heart disease.

"I quit smoking to take care of my heart.

I've noticed my heart is beating better."





What happens if you still have high cholesterol?

Some drugs may help lower cholesterol. The drugs may have side effects. Your health care provider will prescribe a drug if you need it.

Taking drugs alone will not lower your cholesterol. You will still need to make changes in eating, and become more active. Drugs work best when you eat healthy and are more active.

"I'm active
every day.
I have lost
weight.
My cholesterol
is below 200.
I feel like a
spring chicken!"



"I quit smoking.

I eat low-fat food and walk every day with my husband."



You can lower your cholesterol

Do these things to lower your cholesterol:

- eat less fat food
- be more active
- lose some weight
- stop smoking

You can lower your cholesterol.

Talk with your health care provider about cholesterol. They can help you lower your cholesterol.



Know your blood cholesterol level

Your health care provider can order a simple test to check your cholesterol and other blood fats. People with diabetes need this blood test done at least once a year. Find out your numbers. Keep a record. Ask your health care provider what numbers are best for you.

Date	Total Cholesterol (Target Goal Below 200)	HDL (Target Goal Above 45)	LDL (Target Goal Below 100)	Triglycerides (Target Goal Below 150)

Sincere thanks go to the many people who appear in this booklet.

They generously shared their stories about diabetes, and allowed photographs to be taken to help others who have diabetes or are at risk for diabetes.



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