

The Patient Channel Presents: Managing High Cholesterol

Natural Sound

"Watch out, yeah! Laughter

Narrator

Maria Johnson was 32 years old and 7 ½ months pregnant when she found out that her blood cholesterol levels were off the chart.

After being hospitalized with elevated blood pressure and a sky-high blood cholesterol level of 765, Maria suffered a heart attack before prematurely giving birth to a healthy son. The second heart attack came just a few days after her C-section.

Natural Sound

Let's get some vegetables.

Narrator

Beset with high blood cholesterol because of a family history and inattention to her diet, Maria has made some major changes in her life. She's joined the growing ranks of men and women who are successfully managing their cholesterol.

Natural Sound

Go, go, go!

Maria Johnson, Patient

"It was such a struggle for me. I love my family, I love my husband and I love my children and I want to be with them for as long as I could so I did this for my family and for myself."

Narrator

In today's program we'll see how eating smarter, getting more exercise and when necessary taking one of an array of safe and proven medications can make a healthy difference.

Narrator

For many people, "cholesterol" has become an all too familiar medical term, but for too many people it has also been associated with some mystery and menace. But it's all rather simple and here's what you really need to know.

More than 100 million Americans have high blood cholesterol levels. This condition is a significant risk for coronary artery disease or heart attack and stroke, which cause more deaths and disability than any other diseases in the industrialized world more than all forms of cancer combined.

The problem for some people is that they have a genetic abnormality that changes the way their body handles cholesterol, for others it's a diet too high in saturated fat. As a result of sustained high blood cholesterol levels, our arteries become gradually narrowed with dangerous deposits of the waxy substance.

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Narrator

There are two main types of carriers of cholesterol in the bloodstream:

- Low Density Lipoproteins or LDLs
- High Density Lipoproteins or HDLs

Narrator

HDLs and LDLs affect our health in a dramatically different manner, which explains why they are frequently referred to as “good” and “bad” cholesterol.

Richard Safeer, MD

University of Maryland

“The good cholesterol, also known as HDL, is an important ingredient in keeping our blood vessels healthy. The bad cholesterol, known as LDL cholesterol, is a type of cholesterol that builds up in our arteries and can lead to heart attack and stroke.”

Neil Stone, MD

Northwestern University Hospital

“It is extremely important for people to first of all know your cholesterol. Number two: know which kind of cholesterol you have and lastly do something about it - always emphasizing a therapeutic lifestyle, a diet that’s healthy, regular exercise, avoiding weight gain and considering medication if you’ve developed a high enough risk to deserve it.”

Narrator

But because cholesterol is a silent condition, many people may not realize they are at risk.

Richard Safeer, MD

“It’s silent until you have a heart attack or stroke. So, just because you don’t feel bad doesn’t mean you should ignore your elevated cholesterol problem.”

Maria Johnson, Patient

“Having high cholesterol, there are no symptoms. I think the only way that you can know your levels is when you have your cholesterol checked.”

Narrator

Overnight fasting before a routine blood test is all that’s needed to identify our blood lipoprotein profile.

Roger Blumenthal, MD

Johns Hopkins Hospital

“The National Cholesterol Education Program recommends that all adults after the age of 20 get a full cholesterol panel drawn at least every five years. That full cholesterol panel includes the total cholesterol, the good HDL, the bad LDL and the blood fats which are the triglycerides.”

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Roger Blumenthal, MD

"Once someone's older, then doctors may want to check the cholesterol more frequently, especially if other risk factors are present such as high blood pressure, smoking or diabetes."

Narrator

Although they are an extremely useful measurement blood cholesterol levels don't tell the whole story.

Roger Blumenthal, MD

"Many patients have borderline cholesterol or blood-pressure numbers, it's important to do what's termed the Framingham risk score. The Framingham score takes into account one's age, systolic blood pressure, whether they smoke, their total cholesterol and their good HDL cholesterol. With those five factors, one can determine what a person's risk is of a heart attack over the next 10 years."

Narrator

As they have gained more knowledge in recent decades, health experts have come out with guidelines urging patients to strive for ever lower blood cholesterol levels based on their risk factors. Of course, the more risk factors, the greater the chance of developing heart or brain damage.

For healthy adults, the total blood cholesterol level should be between 160 and 200, with an LDL reading of 130 or less and a HDL level greater than 40.

Narrator

For adults with just one of those risk factors: LDL should be 130 or below

For adults with two or more risk factors: for example those with a family history of heart attack or stroke, or who smoke, or who are overweight, or have hypertension and/or diabetes, the LDL should be kept at 100 or below.

For patients who are considered at very high risk: those who already have cardiovascular disease, and also either smoke, have diabetes and/or hypertension, are judged to be at much higher risk of having a heart attack or stroke. Experts have determined that there should be a new goal of achieving and maintaining an LDL of 70 or below.

Patients should talk with their doctors to determine if an LDL of 70 is an appropriate goal for them.

Narrator

For patients like Charles Fiore, who has a family history of heart disease, the first step in treating his high blood cholesterol levels involved making significant lifestyle changes. Nutritionist Lisa Bookstein worked with Charles to improve his diet and increase the amount of time that he was devoting to exercise.

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On average, properly balanced diet and regular, routine exercise can lower LDL cholesterol by about 10 percent to 15 percent. Exercise adds additional benefit since it will help elevate the “good” HDL levels.

Natural Sound

“This would be a good snack if you wanted to have this after dinner.”

Narrator

Besides promoting consumption of fiber, fruits, grains, nuts and vegetables, rather than fatty meats and dairy products, Lisa encourages patients to get in the habit of reducing the size of servings at every meal. Instead of recommending that individuals eliminate certain favorite foods that may not be especially healthful, she tries to persuade patients to eat smaller portions and less frequently.

Lisa Bookstein,

Nutritionist

“The most difficult thing for patients to probably follow when it comes to eating healthier is really portion control. I feel it’s important for them to watch their portions and also focus on foods they like to eat. So rather than saying, you are not going to be eating pizza - because most people really enjoy eating pizza - I just tell them instead of eating pizza twice a week, why don’t we have it once a week or once every other week. But I think it is important to not restrict and deprive people from foods that they really enjoy eating.”

Charles Fiore, Patient

“It was a challenge. Like I told Lisa when we first started, I said I feel like I’m a perfectly happy, healthy, middle-aged Italian guy that loves his food, and I did.”

Richard Safeer, MD

“Most people have been eating for many, many years before they find out they have an elevated cholesterol level then to all of a sudden change what the way you eat is very difficult.”

Narrator

Lisa used a model of 5lbs of fat to explain to Charles that the steaks and pasta dishes that he was eating perhaps too often were not helping his blood cholesterol levels.

Charles Fiore, Patient

“She explained why they were bad for me, why the new foods would be better for me and we went on the program I had to write down everything that went into my mouth over a two-year period. Slowly but surely she got me to change into eating better health foods.”

Narrator

In addition to embracing a healthier diet with less saturated fat and smaller portions, Charles now exercises regularly.

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Charles Fiore, **Patient**

"Besides feeling better, I think you look a little better. It's more fun being able to do more physically active things, especially at my age now. You know I'm 62 and you have got to be a little careful of some of the things you do. You're always kind of aware of your physical condition."

Narrator

Reasonably vigorous activities like walking, jogging, biking and swimming help increase the amount of HDL cholesterol - while reducing the amount of LDL cholesterol.

A sample program would be to start with walking 20 minutes per day, four days a week. Within six to eight weeks, increase to one hour, six to seven days a week, of walking over hilly terrain or walk-jogging over relatively flat ground. Whatever exercise form you select, it should be something you enjoy.

In 12 to 16 weeks this volume of exercise can reduce total cholesterol by 10 to 20 percent on average.

It has been observed by experts that even lower levels of less vigorous routine, daily, even a few days a week, exercise can still produce many other benefits, such as improved fitness and overall health, reduced blood pressure and increased psychological well-being. Again, it is simply a matter of integrating it into your daily routine.

Narrator

Better nutrition and additional exercise have led to positive results for Charles. He is one of the fortunate individuals who have been able to manage his cholesterol levels through diet and lifestyle changes alone.

Charles Fiore, **Patient**

"The numbers that are being produced from the blood tests are good. I'm happy with the progress I've made and with what I've been able to maintain myself at."

Narrator

Following her two heart attacks, Maria Johnson also made sweeping changes in her diet and started exercising.

Maria Johnson, **Patient**

"From French fries, I am eating carrots now. I have discovered there are lots of ways to prepare foods that are low in cholesterol and they are very, very delicious."

Natural Sound

"This is very good, Mom. Thank you."

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Maria Johnson, **Patient**

When I go grocery shopping, I always look for the symbol of the American Heart Association - the one with the heart - which tells me, OK this is good for the heart. This is low in cholesterol. This is what I'm going to get. This is what I'm going to feed myself and my children..

Narrator

Maria is among those patients who cannot completely manage to bring her elevated blood cholesterol into normal range with diet and exercise alone. This is due to the nature of her genetic make-up.

Neil Stone, MD

"People have a variable sensitivity to diet. I have patients who can drop their cholesterol 100 points with diet, they are very sensitive. Others' diet don't budge their cholesterol. So I can't make a generalization about diet, except to say that being on a healthy diet and avoiding weight gain as you get older certainly puts you in the best chance of having a good cholesterol profile as you age."

Narrator

With the help of medication, Maria has succeeded in bringing her cholesterol under control.

Up next, we'll tell you how to manage high blood cholesterol levels when diet and exercise are just not enough.

Narrator

There are basic ways to bring down blood cholesterol levels. Individuals who are otherwise healthy can modify their lifestyle by improving their diet and also controlling their weight, increasing regular, routine exercise, and stopping smoking. Yet if these changes aren't enough, several excellent cholesterol-lowering medications are available.

Richard Safeer, MD

"For some people, regardless of their diligence in trying very hard to exercise and change their diets, they still have a problem with their cholesterol level and it may be time for to start a cholesterol-modifying medication."

Natural Sound

"Some of the original research on statins..."

Narrator

Without question, statin drugs are the mainstay medications that most physicians rely on to manage their patients' blood cholesterol levels.

The statins on the market in the United States are the most frequently prescribed cholesterol-lowering medications. They are designed to interfere with the synthesis of

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cholesterol in the liver. They vary in potency and side effects. Other drugs work by inhibiting the absorption of cholesterol from the small intestine, and can augment the effect of statins.

Neil Stone, MD

"They have proven to be one of the great advances, in my opinion, in cardiology, because they absolutely lower the cholesterol production in the liver and LDL levels plummet- they can be reduced anywhere from 25 to 60 percent with this group."

Narrator

Statins are generally taken in a single dose with the evening meal or at bedtime. The reason for this is that our bodies make more cholesterol at night than during the day. Statins are well tolerated by most patients and serious side effects are quite rare. However, a statin called Baycol was removed from the market by the FDA in 2001 after reports of a severe adverse reaction in which muscle cells broke down and released a dangerous protein into the blood. The most frequently involved muscle groups included those in the calves and lower back. Unfortunately, all statins may have this side effect, but far less often than Baycol's adverse effect. Anyone using a statin who develops muscle soreness, pain, weakness or brown urine should contact the doctor immediately about stopping the medication.

Narrator

A number of different medications can be used to manage high cholesterol levels.

For instance, a new class of drugs called cholesterol-absorption inhibitors have been shown to lower LDL cholesterol levels by about 20 percent.

An older group of medications - bile acid sequestrants - are often prescribed to younger patients. Three decades of experience with these drugs have proven that their long-term use is safe.

Roger Blumenthal, MD

"They tend to lower the "bad" LDL cholesterol by 15 to 20 percent."

Narrator

Niacin or nicotinic acid -the water- soluble B vitamin - also has proven to be an effective cholesterol medication. Besides raising beneficial HDL cholesterol by as much as 35 percent, it lowers total cholesterol, LDL cholesterol and blood fats known as triglycerides.

Roger Blumenthal, MD

"The main side effects of niacin are itching or flushing. We typically start out with a very low dose of niacin and we make sure the patient is on aspirin, since aspirin tends to decrease the amount of flushing that a person will get. And if you start low and increase slowly, then the vast majority of patients can tolerate niacin well."

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Narrator

A group of drugs called fibrates are used primarily to lower triglyceride levels. Fibrates are usually given in two daily doses 30 minutes prior to the morning and evening meals.

Roger Blumenthal, MD

"These types of medicines may lower triglycerides by 30 to 50 percent and they also raise the "good" HDL cholesterol by about 10 to 20 percent."

Narrator

Gastrointestinal complaints are the most common side effect of fibrates. They also appear to increase the likelihood of developing cholesterol gallstones. Further, fibrates can increase the effect of blood-thinning medications- a situation that physicians need to monitor closely.

Narrator

Recalling his father's two heart attacks, Chicago Restaurateur Rich Melman dutifully had his cholesterol checked as part of every annual checkup. At a time when experts were issuing guidelines touting the merits of lower cholesterol levels, Rich became concerned that his readings were gradually rising year after year.

At his physician's urging, Rich started working with a nutritionist and a physical trainer. His doctor also prescribed a statin.

Richard Safer, MD

Remember, when your doctor gives you a prescription for a medication, be sure to ask your doctor or your pharmacist questions about when the best time of the day to take the medicine is, whether or not you should take it with food and what happens if you miss a dose. It's very important to have information you need about your medication so you can gain the benefits from taking it and avoid any side effects..

Narrator

Rich's doctor went to great pains to address any misgivings that a patient might have about taking a cholesterol-lowering medication.

Rich Melman, Patient

"There's always some concern but he made me feel comfortable. He said, .Look if this doesn't work, we'll change it."

Narrator

Five weeks later, the restaurateur went back to see his doctor. Although Rich was expecting more bad news about his cholesterol, he was pleasantly surprised

Rich Melman, Patient

"It went down dramatically in that short period of time."

Narrator

The positive impact of these various medications have been borne out in studies showing that lowering high levels of cholesterol can lead to a reduction in deaths from heart

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attacks. As a general rule of thumb, for every one percent you lower your blood cholesterol level, you reduce your risk for heart disease by two percent.

But the use of statins and other medications should never overshadow the importance of eating a healthy diet and frequent vigorous exercise.

Narrator

Dr. Blumenthal says that it's only natural for patients to have a desire to eventually be taken off their medication.

Roger Blumenthal, MD

"The only way you can get off of medication for cholesterol or blood pressure is to significantly improve your lifestyle habits, your exercise and dietary habits. If you can make significant changes in those areas then you have a fighting chance of being on a lower dose or potentially on no medication for cholesterol or blood pressure."

People also have to realize that that the medication in this case is their friend because medications can significantly lower one's risk of a heart attack or stroke."

Narrator

At this point, Rich Melman is encouraged by the results that a healthy diet, exercise and his cholesterol-lowering medication are producing.

Rich Melman, Patient

"The thing that I've found about heart disease is that it's manageable."

Narrator

Coming up, we'll focus on some of the latest advances for preventing high cholesterol and heart problems.

Natural Sound

"Hello, how are you doing? Hello doctor."

Narrator

In the future, physicians and their patients may be turning their attention to another measurement in addition to their cholesterol levels.

Two recent studies have indicated that measurements of C-reactive protein in the blood, which gauge the amount of inflammation in the body, may become a vital tool in determining underlying risks for heart attacks and strokes. The studies also showed that cholesterol-lowering statins led to reductions in inflammation, further reducing the risk of artery and heart disease.

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Narrator

While researchers may well achieve new breakthroughs, a healthy diet and exercise will certainly continue to play an important role for patients who are managing high cholesterol.

Richard Safeer, MD

"Even if your cholesterol is only a little bit high, that still puts you at risk. Why would you want to chance having a heart attack or stroke when you can help remedy that problem by making some simple changes in your life?"

Narrator

Maria Johnson is utterly convinced that a better diet, exercise and cholesterol-lowering medication have given her a new lease on life.

Maria Johnson, Patient

"I think I've added 10 more years to my life and in those 10 years I could see my grandchildren and be with my family longer."

Narrator

So if your doctor tells you that you have high cholesterol, the following points are important to remember: Avoid saturated fats in your diet and instead consume ample fiber, fruits, grains, nuts and vegetables; try to exercise for at least 30 minutes every day; and . if taking cholesterol-lowering medications is necessary . carefully follow the directions for these prescriptions and let your doctor know right away if any unexpected side effects occur.

Dip to Black

Narrator

Also airing on The Patient Channel - Preventing High Cholesterol. In this program, you will learn more about the science of cholesterol and the pros and cons of different diet choices.

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This program was reviewed by:

Bruce B. Dan, MD
Managing Editor
The Patient Channel

Robert H. Moser
Executive Vice President Emeritus
American College of Physicians

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For more information on Cholesterol and Heart Disease please visit the American Heart Association website @ www.heart.org

or visit the National Heart Lung and Blood Institute website @ www.nhlbi.nih.gov

For menus specifically designed to reduce cholesterol levels please visit our website @ www.thepatientchannel.com