THROUGH OUR LENS

SUMMER 2023

HIGH CHOLESTEROL

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SCAN ME

Access this content online. Use your mobile phone camera to activate the QR code.

QUESTIONS TO ASK

Use this guide to better understand your cholesterol status and options.

Can you help me understand my cholesterol profile in more depth?

Should I get advanced lipid testing (fractionated cholesterol testing)?

What are my treatment options beyond statins?

Are there new or emerging treatments for high cholesterol I should know about?

What kind of specific exercises will improve my heart health at my age and fitness level?

Which diet should I try to help improve my cholesterol levels?

Are there nutraceuticals that could help lower my cholesterol or risks like high blood pressure?

If so, should I take these in combination with medications?

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THE LATEST ON **High Cholesterol**



POTENTIALLY DEADLY DUO

High blood pressure and cholesterol make a nasty combination. A certain type of "bad" cholesterol, called lipoprotein (a), may cause a dangerous reaction with high blood pressure. Among 6,674 adults of racially diverse backgrounds, people who had normal blood pressure but high levels of this bad cholesterol had a 1 in 12 chance of heart attack or stroke over 14 years. Those who had both high blood pressure and high lipoprotein (a) had a nearly 1 in 5 chance of these problems. Black people have higher blood pressure than other Americans. This study stresses the need to control both blood pressure and cholesterol.

SOURCE: Hypertension

NEARLY 1 in 2

Number of Black adults who have been diagnosed with cardiovascular disease. High cholesterol is a leading risk factor for this.

SOURCE: Cleveland Clinic

CHOLESTEROL You've got two types of cholesterol coursing through your veins-HDL, the good stuff, and LDL, the bad. What's so good about **HDL?** For one thing, it might protect you from type 2 diabetes Researchers tracked 2,829 Black men and women between the ages of 40 and 65 for 8 years. During that time, the ones with highest HDL cholesterol were least likely to develop type 2 diabetes. It's good to keep HDL at 60 mg/dL or higher. Aerobic exercise done on a regular basis is one way to boost it.

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FAMILY HISTORY AND HEART DISEASE

Have you done a mail-order genetic test to learn about your health and ancestry? Some tests may tell you that you have a gene for heart disease. But what does that mean? The American Heart Association says there are 42 treatable genes that raise heart disease risk. There are others experts don't yet understand. Inherited genes that you get from your parents can explain in part why heart disease runs in some families. Similar lifestyles, including exercise and eating habits, also contribute to a family's shared disease risk. Ask your doctor about how your family history of heart disease affects you.

SOURCE: American Heart Association

Number of White adults who have been diagnosed with cardiovascular disease, which is linked to cholesterol SOURCE: Cleveland Clinic

DIABETES AND "GOOD"



SOURCES: Diabetic Medicine, Mayo Clinic

FIRST PERSON

LIVING WITH HIGH CHOLESTEROL

Here's why I'm facing my family history head-on

By Jessica Mitchell Reviewed by Melinda Ratini, DO, MS, WebMD Medical Reviewer

I became aware of my cholesterol numbers for the first time at age 25. I was newly married and applying for life insurance. After doing the required bloodwork, my agent told me my rate would be increased because of my high cholesterol levels.

Still, I was young and naive, so I didn't pay much attention. I assumed I was mostly healthy because I was thin. Looking back, I'm surprised I didn't think to talk to my parents about it. My dad had his first heart attack when I was 12, and high cholesterol (along with high blood pressure) was the cause.

But about 10 years later, it was time to switch life insurance again, and again my application was flagged for "dangerously high" cholesterol. They asked if I'd spoken with a doctor, but I hadn't. It was time.

TINKERING WITH TREATMENTS

My weight had crept up in the 10 years since my first bloodwork. But although my doctors had been encouraging me to lose 30 pounds both for my overall health and to help my chances of getting pregnant, there wasn't much emphasis on lifestyle changes to help my cholesterol. Plus, my numbers were up in the 300s. So my doctor started me on statins right away.

I tried four different statins over the course of 6 years, and the side effects were debilitating for me. But despite the cramps, muscle pain, and stomachaches. I did also make lifestyle changes and lost 65 pounds. By the time my son was born when I was 37, I was the healthiest I'd ever been. Still my numbers weren't coming down.

UNDERSTANDING THE CAUSE

At my most recent checkup, I found out that I was still in the danger zone: my cholesterol was 394. It brought me to tears. Here I was doing everything-after all, I'm a health coach, I know how to eat and exercise—and still I couldn't get my numbers down.

But when I saw the cardiologist, he explained it was quite literally in my blood. He diagnosed me with a type of hypercholesterolemia caused by a genetic condition. It was time to change interventions and try an injectable medication.

So much clicked into place: my father's three heart attacks and my sister's death from a heart attack at age 40. It also shifted how I started talking to Black women I coach. We think of heart disease as a White man's issue, but it affects so many more groups than that.



JESSICA'S LIFESTYLE TIPS

Start small. Get some movement in every day and don't forget to strength train.

Cut saturated fats. Eat healthy fats instead (and lots of greens).

> Shift your mindset. Regardless of the cause of your high cholesterol, change can happen.



CAN FEEL OVERWHELMING

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IT'S POSSIBLE TO GOFROM STRUGGLE TO **CHOLESTEROL SUCCESS**

PROVEN TO LOWER BAD CHOLESTEROL OVER 50% AND KEEP

*People given LEQVIO lowered their bad cholesterol (LDL-C) more and kept it low during each 6-month dosing interval vs placebo (a substance that doesn't contain any medication)

ASK YOUR DOCTOR ABOUT LEQVIO

statin, need more help lowering their bad cholesterol (LDL-C).

For adults with known heart disease who, along with diet and a

LOWER. LONGER. (inclisiran) ^{injection} 284 mg/1.5 mL

UNOVARTIS

Novartis Pharmaceuticals Corporation East Hanover, New Jersey 07936-1080

WHAT IS LEQVIO?

LEQVIO (inclisiran) is an injectable prescription medicine used along with diet and other lipid-lowering medicines in adults who need additional lowering of "bad" cholesterol (LDL-C) and have known cardiovascular disease and/ or heterozygous familial hypercholesterolemia (HeFH), an inherited condition that causes high levels of LDL-C. It is not known if LEQVIO can decrease problems related to high cholesterol, such as heart attacks or stroke.

IMPORTANT SAFETY INFORMATION

The most common side effects of LEQVIO were: injection site reaction (including pain, redness, and rash), joint pain, urinary tract infection, diarrhea, chest cold, pain in legs or arms and shortness of breath.

These are not all the possible side effects of LEQVIO. Ask your health care provider for medical advice about side effects. You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch or call 1-800-FDA-1088.

Brief Summary of Prescribing Information on adjacent page.

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Printed in USA

5/23

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WITH LEQVIO®





*For commercially insured patients. Limitations apply.

Scan this QR code or go to: LEQVIO.com/cost to see how you can afford LEQVIO.

BRIEF SUMMARY OF FULL PRESCRIBING INFORMATION LEQVIO® (INCLISIRAN) INJECTION, FOR SUBCUTANEOUS USE

What is LEQVIO?

LEQVIO is an injectable prescription medicine used along with diet and other lipid-lowering medicines in adults who need additional lowering of "bad" cholesterol (LDL-C) and have known cardiovascular disease and/or heterozygous familial hypercholesterolemia (HeFH), an inherited condition that causes high levels of LDL-C.

It is not known if LEQVIO can decrease problems related to high cholesterol, such as heart attacks or stroke.

It is not known if LEQVIO is safe and effective in children under 18 years of age.

Before you start taking LEQVIO, tell your health care provider about all your medical conditions, including if you:

- are pregnant. Tell your health care provider right away if you become pregnant while taking LEQVIO. You and your health care provider will decide if you should take LEQVIO while you are pregnant.
- are breastfeeding or plan to breastfeed. It is not known if LEQVIO passes into your breast milk. You and your health care provider should decide if you will take LEQVIO or breastfeed.

Tell your health care provider about all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements.

Know the medicines you take. Keep a list of them to show your health care provider and pharmacist when you get a new medicine.

How should I take LEQVIO?

LEQVIO is an injection under the skin (subcutaneous), given by your health care provider, initially, again at 3 months, and then every 6 months (twice yearly).

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What are possible side effects of LEQVIO?

The most common side effects of LEQVIO include injection site reaction (including pain, redness, and rash), joint pain, urinary tract infection, diarrhea, chest cold, pain in legs or arms and shortness of breath.

These are not all the possible side effects of LEQVIO. Call your health care provider for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

General information about the safe and effective use of LEQVIO.

Medicines are sometimes prescribed for purposes other than indicated. Do not use LEQVIO for a condition for which it was not prescribed.

This Patient Information leaflet summarizes the most important information about LEQVIO. If you would like more information, talk with your doctor. You can ask your doctor or pharmacist for information about LEQVIO that is written for health professionals.

For more information, go to www.LEQVIO.com or call 1-833-LEQVIO2 (1-833-537-8462).

What are the ingredients in LEQVIO?

- active ingredient: inclisiran sodium
- inactive ingredients: water for injection, sodium hydroxide and/or phosphoric acid

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FAMILY HISTORY AND HEART FAILURE

What to know and why

By Rachel Reiff Ellis Reviewed by Melinda Ratini, DO, MS, WebMD Medical Reviewer

When heart disease runs in your family, it's more likely that you'll deal with it, too. But what history is important to gather, and how exactly does it impact you?

WHAT TO KNOW

The data that helps your doctor get a better overall picture of your heart failure risk should include heart health information not just about your parents, aunts, and uncles, but also their parents and beyond. Be sure to share your information with family members, too.

"The Heart Failure Society of America recommends genetic evaluation up to three or four generations back, particularly in young patients that are diagnosed with dilated cardiomyopathy or heart failure," says Kevin Oguayo, MD, interventional cardiologist at Memorial Hermann in Humble, TX.

You'll want to make note of which relatives have had heart disease, related conditions, or heart procedures. Knowing their age at diagnosis, during treatment, or at their death (and being able to identify the specific cause) helps, too. "Doing a deep dive into your family history tells you and your doctor what you're predisposed to," Oguayo says. "And then you can change some habits or even treat

early and aggressively in order to prevent some of the problems."

STARTING THE CONVERSATION

Approaching your loved ones to ask about their health history can be tricky for some families. They may not have all the information or feel uncomfortable sharing.

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In some families and communities, talking about medical issues feels taboo.

"Establishing a good rapport is essential," Oguayo says. "Just talking about little things like 'How've you been doing?' can help transition you into talking about more important things."

In some Black communities, distrust for the medical system, lack of health insurance, and lack of access to care complicates the conversation, too.

"Sometimes you wonder, 'Was there a clear diagnosis?" Oguayo says. That's why it's important to ask not only about symptoms, but the diagnosis-and testing that went into that diagnosis-if possible.

And if you can't access your family history for some reason, what then? Find a doctor you trust and learn where your heart health stands now and go back regularly to watch for changes.

"Establish care with a primary care provider and risk stratify," Oguayo says. "Even if you're healthy, establish a baseline with regular checkups so you can better identify when something is going wrong."



QUESTIONS TO ASK

Kevin Oguayo, MD, suggests talking points for learning more about your family's heart history.

- ★ 🛛 What heart issues run in our family?
- ★ What treatments did family members have for these issues?
- ★ Have any family members had issues with swelling?
- Have any family members had an ICD (implantable cardioverter defibrillator. a device similar to a pacemaker)?

THE IMPACT OF HIGH CHOLESTEROL IN THE BLACK COMMUNITY

How race affects heart health

Bv Rachel Reiff Ellis

Reviewed by Brunilda Nazario. MD. WebMD Chief Physician Editor. Medical Affairs

Even though Black adults have a lower rate of high cholesterol than White adults overall, certain risk factors unique to the Black community increase the impact of high cholesterol on heart health. These factors can be medical or nonmedical.

Nonmedical factors that influence health outcomes are called social determinants of health. These are the conditions that surround you and impact your well-being, such as the food available to you, medical care in your area, and the quality of the air, soil, and water around you.

Economic policies and systems, social policies, racism, climate change, and political systems can all impact these conditions.

ACCESS TO CARE

The Affordable Care Act increased access to health insurance and medical care, but access to health care is still different between the races. For example, U.S. policies that segregated neighborhoods by race with unequal zoning practices impact medical facility availability for Black communities.

"Place matters," says Anthony McFarlane, MD, a cardiologist with Lee Health in Fort Myers, FL. "The truth is, some communities will have higher quality and



more abundant medical care choices than others. And when you lack financial means, you're often limited to using what's immediately around you."

Neighborhoods that are primarily populated by people of color are less likely to have hospitals or even family care doctors.

"Preventative care is crucial in heart health, and in neighborhoods where health services are slim and resources sparse, this type of care is harder to come by," McFarlane says.

GENETIC CONDITIONS

A genetic condition called familial hypercholesterolemia (FH) causes high cholesterol that can't be controlled by lifestyle alone. You get it through genes from your mom or dad (or both). Treatment requires medication along with healthy diet and exercise.

Even though rates of FH are highest in the Black population, many diagnoses are missed.

"Familial hypercholesterolemia is often vastly underdiagnosed and untreated in Black Americans," McFarlane says.

As a result, Black adults are diagnosed with FH at an older age than any other racial or ethnic group in America. This delays treatment and can lead to worse outcomes for heart health.

OTHER HEALTH CONDITIONS

Having type 2 diabetes and being

diagnosed with obesity also increase your risk of having high cholesterol. Research shows that high rates of obesity in the Black population-and diabetes-are directly related to factors such as inequities in stable and affordable housing, income, and access to quality education.

"Type 2 diabetes lowers the amount of 'good' cholesterol you have, your HDL levels, while raising your 'bad,' or LDL levels," McFarlane says. Obesity does the same while also increasing your triglycerides, a type of fat in your blood.

CULTURAL FACTORS IN HEALTH CARE

Black adults are less likely to get a prescription for statins, the primary

medical treatment for high cholesterol, than White adults are. Researchers are still studying the reasons for this, but a few factors include beliefs about the medical system, less frequency of care by a cardiologist, and socioeconomic status.

Research on statins has focused mainly on White men, which means there's less information about how the drugs affect the Black community. Black participants account for less than 10% of enrolled patients in clinical trials across the United States.

"It's critical that we increase the number of Black individuals involved not just in heart health research, but all medical research," McFarlane says.

NEXT STEPS

DIETS TO TRY

DIET	FOODS TO FOCUS ON	FOODS TO AVOID
MEDITERRANEAN		
DASH		
THERAPEUTIC LIFESTYLE CHANGES (TLC)		

OTHER HEART DISEASE RISK FACTORS

RISK FACTOR	NORMAL RISK	TIPS F	TIPS FOR IMPROVING	
BLOOD PRESSURE		 Low salt Magnesium supplements 	3. Cardio exercise 4. Home monitor	
BMI/WAIST CIRCUMFERENCE		 Structured diet Nutritional consultant 		
SEDENTARY LIFESTYLE		1. Trainer 2. Gym membership	3. Mobile apps 4. Home equipment	
LDL		 Prescriptions beyond stat Fractionated LDL 	 Prescriptions beyond statins Fractionated LDL 	
DIABETES		1. Diet 2. Exercise	3. Review medications and other conditions that could worsen control	

High cholesterol is like smoking—it builds up over time.
 We need to keep high cholesterol 'pack-years' to a minimum.
 It is always valuable to monitor diet, exercise, and sleep in patients with high cholesterol, and I routinely ask about this at every clinical visit.

FATIMA RODRIGUEZ, MD, MPH,

AMERICAN HEART ASSOCIATION NATIONAL VOLUNTEER EXPERT; ASSOCIATE PROFESSOR IN CARDIOVASCULAR MEDICINE AND SECTION CHIEF OF PREVENTIVE CARDIOLOGY AT STANFORD UNIVERSITY SCHOOL OF MEDICINE IN CALIFORNIA

What is the purpose of my next visit?

- Blood pressure test
- Cholesterol profile test
- EKG or ECG
- Stress exercise test