- Cholesterol

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THE BIG QUESTION

How can I reduce my cholesterol without statins?

You don't need medication to improve cholesterol levels. A few simple dietary tweaks can make a serious difference

by HATTY WILLMOTH

High cholesterol is, unfortunately, very common. The British charity Heart UK estimates that nearly half of all adults in England have above-average cholesterol levels, while the US Centers for Disease Control and Prevention estimate that 1 in 10 Americans – that's 34 million people – have cholesterol levels exceeding the high-mark of 240mg/dL (milligrams per decilitre).

These people are all at high risk for heart attacks and might not even know it. High cholesterol doesn't come with any obvious symptoms and, unless a person has recently had their blood tested or experienced a medical issue, it's likely that the cholesterol in their blood is a mystery to them.

If you're worried about your levels, it's a good idea to have a chat with your doctor. If there's cause for concern, they may recommend a cholesterol-lowering medication, such as a statin. There's a good chance that you know somebody who takes one: 8 million people take a statin daily in the UK, with the number being closer to 40 million in the US.

"Cholesterol is not inherently bad. We need it to survive"

Here's an easy pill to swallow, however: you don't *need* statins. Unless your levels are very high or there's a specific medical reason to take them, there are plenty of ways you can lower your cholesterol level naturally.

The first, you won't be surprised to hear, is exercise. A 2013 paper reported that aerobic activities, such as running or cycling, can lower 'bad' cholesterol and raise 'good' cholesterol, both by approximately five per cent.

Quitting smoking is also advisable. It's well known that cigarette smoke increases 'bad' cholesterol and raises the risks to our health, but a 2019 paper suggested that vaping might also have a similar effect.

Yet the very best thing to improve cholesterol levels is to change our diets, that's according to NHS doctor and University College London academic cardiologist, Dr Riyaz Patel. You can probably guess some of the big food no-nos, with an ever-growing pile of research pointing the finger at the usual suspects of pastries, processed meats and lard. Best to leave those out of the

ALAMY



Oats are a good source of soluble fibre. Consuming 5–10g (about 0.5oz) or more of soluble fibre a day can decrease your levels of LDL 'bad' cholesterol

shopping trolley for the good of healthier cholesterol levels. Other suggested food swaps, however, might surprise you.

THE GOOD AND BAD OF CHOLESTEROL

Before delving deeper into the possible changes to our eating habits, it should be clarified that cholesterol is not inherently bad. We need it to survive.

The waxy substance is found throughout the body and is a key component of cell membranes, helping to produce hormones such as testosterone and oestrogen. It also plays an important role in the body's vitamin D and bile acids, which break down foods.

The problem lies in when we have too much of a specific type of cholesterol called low-density lipoprotein (LDL), the 'bad' cholesterol.

"It's important to understand which part of your cholesterol is high," says Patel. "Fat-like cholesterol can't float freely in the blood. It needs to be packaged in particles called cholesterol lipoproteins."

We can think of these lipoproteins as tiny delivery vans that cart cholesterol around the body, with LDL delivering from the liver to the bloodstream and high-density lipoprotein (HDL) – the 'good' cholesterol – delivering from the bloodstream to the liver.

LDL cholesterol is a pretty bad driver, though: while zipping about in the bloodstream, it has a habit of crashing into the lining of our arteries, the endothelium.

That shouldn't be a problem for healthy arteries, but if they've been damaged – from high blood pressure, smoking, pollution, ageing, inflammation or a number of other factors – then the LDL can get trapped inside.

When that happens, plaque then builds on top of it. "Heart attacks happen when a bit of plaque cracks and causes a clot on top and blocks an artery," says Patel. "So, having plaque is a problem."

THE FOODS TO ADD TO YOUR DIET

Now that we know the basics of cholesterol (and why we should never get into a car when LDL cholesterol is behind the wheel), which foods can help keep it at healthy levels?

"Oats are a really good way of naturally reducing cholesterol," Patel says. "It's to do with the fibre. The oats contain soluble fibre that lowers cholesterol."

Soluble fibre – also found in wholegrains, lentils, beans, vegetables, fruit, nuts and seeds – can bind to dietary cholesterol in the small intestine, which then prevents the cholesterol from entering the bloodstream.

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"The other thing is sterols and stanols," adds Patel. These are plant-based compounds – found in fortified yoghurts and spreads, or supplements – that our bodies confuse with cholesterol.

When we eat food containing cholesterol, receptors in the gut identify it to be absorbed into the bloodstream. Sterols and stanols can trick those receptors and get absorbed instead. The result is that more cholesterol will be removed through bodily excretions and less of it ends up in our bloodstream.

"They are probably the best non-pharmaceutical way of lowering your cholesterol, typically by about 10 per cent or so," says Patel. "They're quite effective."

WHAT TO CUT OUT

That's the good stuff that we can be putting into our bodies. What about the 'bad' foods that increase cholesterol? Should they be taken out of our diets?

There used to be a time when the humble egg yolk could strike fear into the hearts of cholesterol-phobes. And while it's true that eggs contain quite a lot of dietary cholesterol, there's no need to panic over a couple of poachies on toast.

"Dietary cholesterol doesn't equal circulating cholesterol. That's very clear," says Patel. "In the old days, we used to say that foods high in cholesterol are bad for you because they increase it. That's not true."

In fact, around 80 per cent of the cholesterol circulating around the body is made by the liver; not absorbed directly from food.

That's not to say, though, that food doesn't impact our LDL cholesterol indirectly. For instance, it can interfere with the liver's ability to regulate cholesterol levels in the blood.

Similar to statins, certain foods act like a drug that changes how the liver works. Take saturated fat, for instance. Found in fatty or processed meat, butter, cheese, pastries, deep-fried food and coconut oil, eating more saturated fat is associated with having more LDL cholesterol in your bloodstream.

"Let's say you're having lots and lots of pastries with a lot of saturated fats in them," says Patel. "As those saturated fats get absorbed, they interfere with the liver's ability to get rid of LDL cholesterol, so the LDL levels build up."

Sugar can also impact cholesterol levels by encouraging the liver to produce more LDL and less HDL.

Do we therefore have to swear off pastries and sugar for good and eat nothing but oats for every meal? Well, no. Swinging too far in any direction can have adverse and unpredictable effects on your health. The answer, according to Patel, is to have a healthy, well-rounded and balanced diet.

"When it comes to advising my patients, I recommend eating a mixed, balanced diet – one that's not too heavy in carbs, not too heavy in saturated fats – and to minimise ultra-processed foods as much as you possibly can."

Ultra-processed foods, along with the saturated fats and sugar, might lead to inflammatory damage to the arteries. They can also increase the risk of developing metabolic conditions, such as type 2 diabetes, which in turn makes heart disease more likely.

"Just eating everything in moderation is probably the optimal position to be in," Patel concludes.

"A balanced diet is driven partly by what you want to eat when you're hungry. Your body is quite good at knowing what it needs." **SF**

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by **HATTY WILLMOTH**
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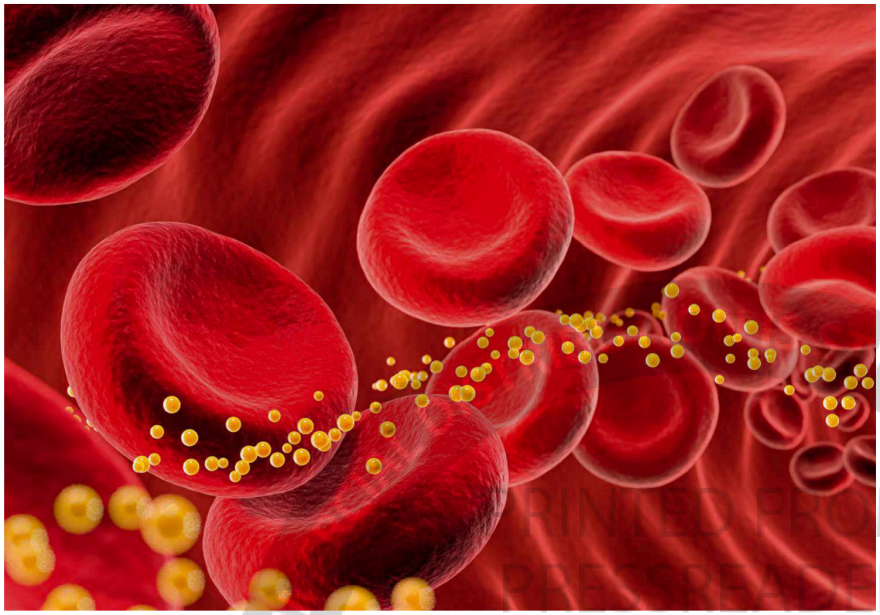

GETTY IMAGES

Fat-like cholesterol (in yellow) is packaged in lipoproteins in order to be transported within the bloodstream