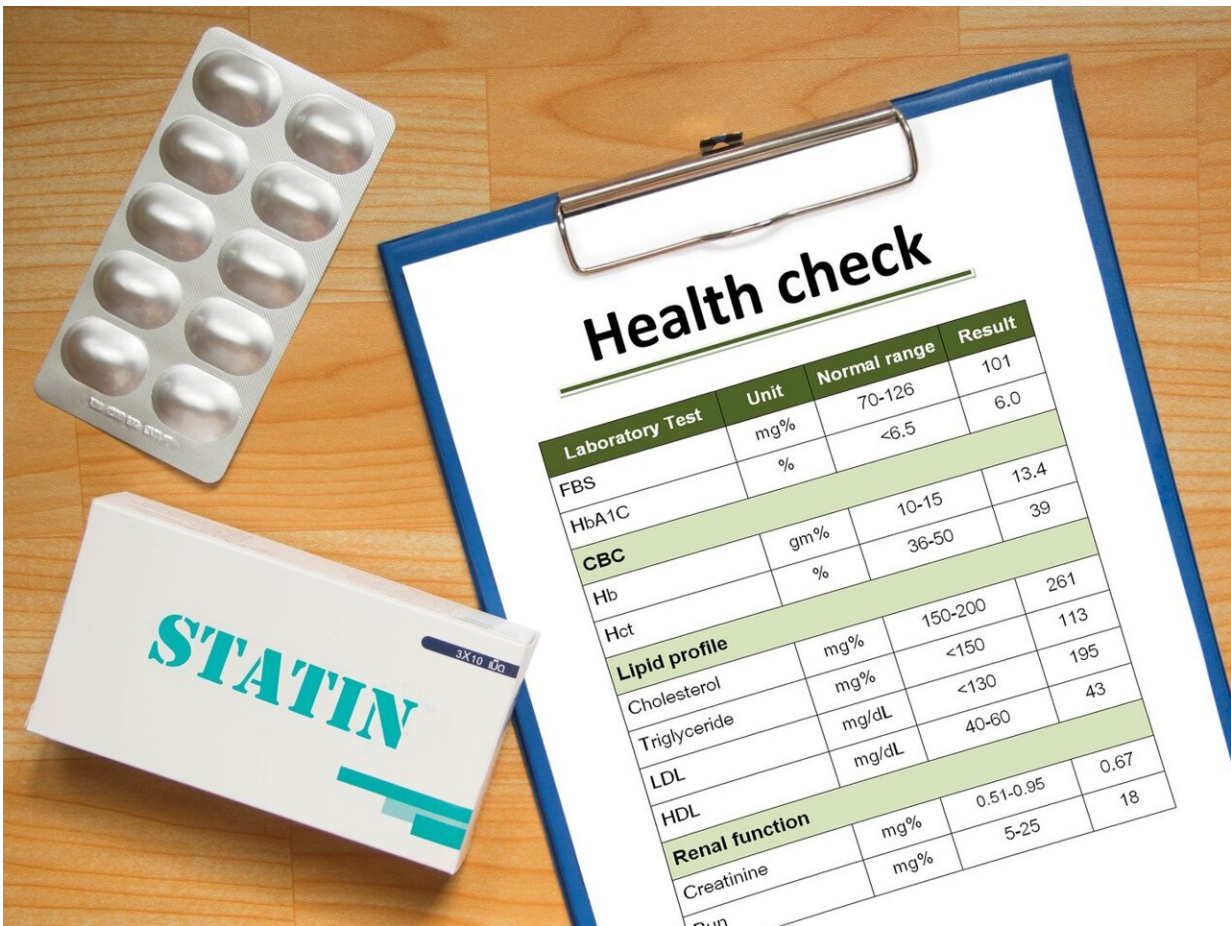


# Statin meds and cholesterol: What you need to know

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Statins have become the miracle medicine of modern heart care,

lowering cholesterol levels and guarding against heart attacks in millions of Americans.

In fact, a running joke among doctors holds that statins are so helpful they should be put in the water supply.

However, they aren't right for all patients, and some rare side effects can crop up with the meds, said Dr. Melissa Tracy, a cardiologist with Rush University Medical Center in Chicago.

Here is a primer on what statins are, who should use them and what dangers they can pose to some patients.

## **What are statins?**

Statins are medications that reduce blood levels of "bad" LDL cholesterol that can accumulate into plaques that clog arteries. Statins can also reduce inflammation in patients, and might help [lower blood pressure](#).

People need a prescription to take statins, and most will take them for life once they start—even if their LDL [cholesterol levels](#) go down.

"I have had some patients that I can get off of a statin, but it tends to be one of those agents that we use lifelong," Dr. Tracy said in a Rush news release.

Still, folks on statins may need to stop taking them if they experience changes in [liver function](#), become pregnant, start menopause or have other health changes, Dr. Tracy added.

There are many different types of statins, and they are available both in generic and brand-name versions.

The most common include atorvastatin, sold as Lipitor, and rosuvastatin, sold as Crestor.

"The more recent statins, atorvastatin and rosuvastatin, tend to be more efficacious than early statins," Dr. Tracy noted.

## Who should take statins?

There are two main groups who should be taking statins, Dr. Tracy said.

The first group is folks who've already had a stroke or heart attack. For those patients, statins could prevent another heart-related health crisis from occurring, Dr. Tracy explained. The second group is folks who've not had any problems with heart disease or clogged arteries, but are at elevated risk for developing a heart-related condition.

Patients in the second group might have a family history of heart disease, high cholesterol or other factors that put them at higher risk for heart issues, Dr. Tracy said, adding, "Patients who have familial [high cholesterol](#) or those who have an LDL cholesterol greater than 160 and have not had a heart attack would be examples."

A coronary calcium scan is a good way for otherwise healthy people to determine their heart health risk, Dr. Tracy continued. It's a simple imaging test that measures the cholesterol plaques in arteries that have built up and calcified.

It's very important that people with calcified plaques in their arteries control their LDL cholesterol, Dr. Tracy said. "We look to see if their coronary calcium score is zero. That's what we want. Any score above zero indicates increasing risk for a heart attack."

Hospitals and clinics offer coronary calcium screenings for as little as

\$49, Dr. Tracy noted.

## **At what age should I start statins?**

Most folks start taking statins in their 40s and 50s, but it really depends on a person's individual risks, Dr. Tracy said: "I would say in our 40s and 50s, we start to respect our mortality and we want to get on the bandwagon of being healthier. And most studies on statins are also in that age group."

A person's doctor might recommend they start earlier if they are at higher risk for heart health problems.

"I actually have patients in their 20s who have family members who have had strokes," said Dr. Tracy. "One young lady is a junior in college, and her mother has elevated cholesterol. But her mother's brother has elevated cholesterol and had a stroke in his 40s. And this young lady has an abnormal lipid panel, despite her very healthy lifestyle. So, now she takes a statin."

Screenings for heart health risk, like calcium coronary scans, can help younger people figure out if they need to start statins earlier in life.

## **What tests are required before starting statins?**

Doctors likely will want to prescribe statins based on test results, starting with a blood test to check a person's cholesterol levels.

The blood test will report a person's levels of "bad" LDL cholesterol, "good" HDL cholesterol and triglycerides. Triglycerides are fats that come from the food a person eats, and a high number could mean greater risk.

A blood test for statin use also should measure blood levels of creatine kinase (CK). CK is a muscle enzyme, and statins can cause its levels to spike and lead to muscles breaking down too quickly. A CK test taken before a person starts statins can help doctors detect such a spike.

Another important [blood test](#) before starting statins is a liver function test. Statins can cause liver irritation and might not be a good choice for people who already have liver problems.

Patients likely will need to repeat some of these tests about a month after starting statins, to monitor any changes. They'll also need to take the tests again if their dosage changes, as well as annual check-up tests.

## **If I'm on statins, do I still need to work out and eat right?**

Statins are not wonder drugs that allow a person to skip exercise and gorge on junk food, Dr. Tracy explained. The drugs can help prevent heart problems, but they are only one piece of the larger puzzle.

"I urge patients to implement diet, exercise and weight loss," Dr. Tracy said. "We know that by aggressive diet, exercise and weight loss, we can lower LDL cholesterol by about 20%."

But lowering LDL cholesterol by that much takes a very strict diet and an intense exercise regimen, Dr. Tracy acknowledged.

"So, I still couple starting a statin with diet and exercise and weight loss. Absolutely," Dr. Tracy said. "To me, that has to be a happy marriage of two partners."

## **Who shouldn't take statins?**

Statins tend to be fairly harmless and helpful, but they aren't for everyone. People who should not take statins, or who at least should discuss it with their doctor, include:

- Women who are pregnant or trying to become pregnant
- Folks with liver disease or poor liver function
- People who have diseases that cause muscle breakdown
- Elderly patients

## **Are there any health risks for statins?**

The most common side effects are muscle aches, joint aches and fatigue. Others include liver irritation or rare conditions that trigger muscle breakdown.

Some have claimed that statins cause dementia, but Dr. Tracy said this connection has so far only been anecdotal. Studies have not yet found any significant link between statins and dementia, despite individual cases reporting such an association.

A more substantial concern involves a link between statins and diabetes, Dr. Tracy noted.

"The connection of statins with diabetes is a bit stronger," Dr. Tracy explained. "But for those patients that we have on statins, we have to do the risk versus benefit for the very low chance of developing diabetes and the high positive benefit on their coronary or cerebral circulation."

People on statins should talk to their doctor about any side effects they think they are experiencing. Doctors can adjust the dosage, try a different statin or even prescribe an alternative to statins.

## What are the alternatives to statins?

Some alternative drugs that can be prescribed instead of statins include:

- Ezetimibe. This drug lowers LDL cholesterol without any effect on the liver. However, it doesn't control inflammation like statins, and it hasn't been shown to reduce heart-related deaths as much as statins.
- Bempedoic acid. This new medication is considered the "non-statin statin," Dr. Tracy said. It's often prescribed alongside a statin, but it can be used as an alternative for patients who can't use statins.
- PCSK9 inhibitors. These are injectable drugs people take twice a month. They can cause a dramatic reduction in LDL cholesterol levels and reduce the risk of serious [heart disease](#) and heart-related death. However, they are much more expensive than [statins](#).

Any of these alternative drugs will require the same level of monitoring and regular blood tests, Tracy said. They also will need to be combined with diet and exercise.

**More information:** The Cleveland Clinic has more on [statins](#).

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