

The pros and cons of taking statins

This information sheet will help you understand more about the effects of taking medicines called statins. It is not a substitute for talking with your doctor, nurse or pharmacist.

What are statins?

Statins are medicines that stop your liver from making cholesterol. Cholesterol (a fat) is needed by your body, for example, to make hormones. Too much cholesterol causes atherosclerosis (see below).

Cholesterol is measured in mmol/L. Total cholesterol above 4 mmol/L makes atherosclerosis more likely.

When are statins used?

Statins may be used:

- after a heart attack or stroke to lower the risk of another heart attack or stroke (secondary prevention)
- in people at high risk of having a heart attack or stroke (primary prevention).

Statins lower your risk of a heart attack or stroke by lowering your cholesterol.

Statin treatment is described as low, medium or high intensity (Table 1).

What is atherosclerosis?

Atherosclerosis is the build-up of cholesterol in your blood vessels. Cholesterol build-up can block blood vessels and cause health problems such as a heart attack or stroke.

What is my risk of having a heart attack or stroke?

Your doctor or nurse can check your risk of having a heart attack or stroke for you. You can also do a heart check at www.myheartcheck.org.nz

Your risk is increased by lifestyle and other health problems:

- smoking
- high blood pressure
- high cholesterol
- diabetes (and pre-diabetes)
- obesity.

What are the benefits of taking statins?

Taking a statin reduces your risk of having a heart attack or stroke.

Statins help prevent another heart attack or stroke

If you have already had a heart attack or stroke, you have a high risk of having another heart attack or stroke in your lifetime (around 20% or one person in every five).

A further heart attack or stroke is prevented in one of every eight people who take high intensity statin treatment for 10 years.

Table 1: Intensity of statin treatment (amount per day)

Medicine	Low intensity	Moderate intensity	High intensity
Pravastatin	10 mg	40 to 80 mg	Not possible
Simvastatin	10 mg	20 to 40 mg	Not recommended
Atorvastatin	5 mg	10 to 20 mg	40 to 80 mg
Rosuvastatin	Not possible	5 to 10 mg	20 mg
Statin plus ezetimibe	Not possible	Simvastatin 10 mg and ezetimibe 10 mg	Simvastatin 40mg and ezetimibe 10 mg
Expected cholesterol lowering	20–25%	30–45%	More than 45%

Statins help prevent a first heart attack or stroke in people at risk

If your risk of having a heart attack or stroke is 10%, for example, a heart attack or stroke is prevented for 1 in every 20 people who take high intensity statin treatment.

In general

Every 1 mmol/L reduction in cholesterol reduces your risk of a heart attack or stroke by 20%. The longer you take a statin, the more you reduce your risk of a heart attack or stroke.

Remember that taking a statin is only one way of reducing your risk of having a heart attack or stroke. Talk to your doctor or nurse about other steps you can take as well.

What are the side effects of taking statins?

Muscle effects are the main concern for people taking statins. One or two people out of every 10 people taking statins get muscle symptoms, usually pain or weakness.

Abnormal muscle breakdown which can lead to kidney problems (rhabdomyolysis) occurs in one or two patients of every 100,000 patients who take statins each year. The factors that make this more likely are shown in Table 2.

Some people find that statins affect the way they think, or cause forgetfulness or confusion.

Diabetes is newly found in 1 of every 250 people who take statins.

It is dangerous to take some medicines with some statins. Make sure your doctor, nurse and

pharmacist know you are taking a statin before you start a new medicine.

Check the Consumer Medicine Information (CMI) for your medicine www.medsafe.govt.nz/consumers/cmi/cmiform.asp

If you think you are having a side effect from your medicines talk to your doctor as soon as possible.

What about older people?

Older people have a higher risk of heart attacks and strokes from atherosclerosis, but statins may be less effective. Older people may be more likely to get muscle effects too.

It is important to talk to your doctor or nurse before deciding whether to take statins.

What about women?

If you have had a heart attack or stroke, taking a statin will help prevent *another* heart attack or stroke.

The benefits of taking statins to help prevent a *first* heart attack or stroke are less clear. Talk to your doctor or nurse to decide if statins are right for you.

Where can I find out more?

Talk to your doctor, nurse or pharmacist.

Look at the heart foundation website. www.heartfoundation.org.nz/

Read the CMI for your medicine at www.medsafe.govt.nz/consumers/cmi/cmiform.asp

Table 2: Factors that increase your risk of severe muscle problems when taking statins

Risk	More information		
Age	Especially those over 80 years and more often in women		
Small body frame and frail	Some people's genes make them more likely to get achy muscles		
Other conditions	For example kidney or liver problems		
Surgery			
Taking other medicines Check with your doctor, pharmacist or the CMI. This is not a complete list	Amiodarone (Cordarone/Aratac)	Amlodipine (Norvasc)	Ciclosporin (Neoral/Sandimmun)
	Clarithromycin (Clarac/Klacid)	Diltiazem (Cardizem/Dilzem)	Erythromycin (E-Mycin/ERA)
	Fluconazole (Diflucan /Ozole)	Gemfibrozil (Lipazil)	Itraconazole (Itcozol/Sporanox)
	Nicotinic acid	Ritonavir (Norvir)	Verapamil (Isoptin)
Food and drink	Grapefruit juice	Large amounts of alcohol	