#### **QRISK and Statin Decision aid.**

This decision aid is intended to help patients in whom treatment with a statin is being considered, for primary or secondary prevention of cardiovascular disease (CVD).

Primary prevention means they have never had a stroke or heart attack and Secondary Prevention means they have.

Whether you decide to take a statin or not we always advice eating a whole food diet, rich in vegetables and healthy fats such as oily fish and olive oil. Minimise processed foods such as bread, pasta and ready meals and where possible try to cook from scratch.

Staying active by walking, gardening, swimming, playing sports or going to the gym all help us mentally and physically to feel better.

Make sure you prioritise sleep and try to spend time outside every day. Most importantly spend time with the people you love.

The charts included below show how much taking a statin reduce your chance of cardiovascular events. These are purely statistical. Your statistical risk is calculated using a QRisk calculator which takes into account your age, sex, blood pressure, medical history and cholesterol profile.

There are side effects of statins and if you are worried about these or have them please discuss them with your nurse, doctor or pharmacist. The most well-established side effects of statins are their effects on muscle and on liver enzymes. Although widely believed, there is no clear evidence from randomised clinical trials that statins cause myalgia (muscle pain, tenderness or weakness without creatine kinase levels >10 times the upper limit of normal [ULN]). However, many statin studies included a run-in period therefore people who were very sensitive to statin side effects may not have been included in the trial follow-up. The risk of myopathy (muscle symptoms with creatine kinase levels >10 times ULN) is very low at standard doses (typically <1 in 10 000 patient-years) and the risk of rhabdomyolysis (severe muscle breakdown) is about one-third of that. The risk increases with higher doses, in patients with certain risk factors such as renal impairment, and when statins are used in combination with drugs such as fibrates.

Statins can increase liver enzymes (especially transaminases) but do not seem to be dangerous to the liver. NICE advises that baseline liver enzymes should be measured before starting a statin and repeated again at three and twelve months.

Less well-known side effects of statins as a class include depression, sleep disturbances, memory loss, diabetes and sexual dysfunction. The incidence of peripheral neuropathy (typically pins & needles or pain in feet or hands) during statin therapy is similar to that of myopathy. Cardiovascular risk 10% over 10 years: no treatment



If 100 people at this level of risk take no statin, over 10 years on average:

- 90 people will not develop CHD or have a stroke (the green faces)
- 10 people will develop CHD or have a stroke (the red faces).

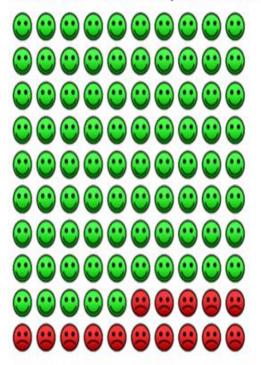
Cardiovascular risk 10% over 10 years: taking atorvastatin

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## If all 100 people take atorvastatin for 10 years, over that time on average:

- 4 people will be saved from developing CHD or having a stroke (the yellow faces)
- 90 people will not develop CHD or have a stroke, but would not have done anyway (the green faces)
- 6 people will still develop CHD or have a stroke (the red faces).

Cardiovascular risk 15% over 10 years: no treatment



If 100 people at this level of risk take no statin, over 10 years on average:

- 85 people will not develop CHD or have a stroke (the green faces)
- 15 people will develop CHD or have a stroke (the red faces).

Cardiovascular risk 15% over 10 years: taking atorvastatin

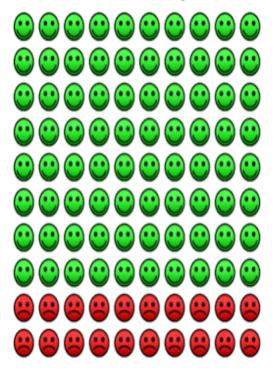


If all 100 people take atorvastatin for 10 years, over that time on average:

- 6 people will be saved from developing CHD or having a stroke (the yellow faces)
- 85 people will not develop CHD or have a stroke, but would not have done anyway (the green faces)
- 9 people will still develop CHD or have a stroke (the red faces).

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#### Cardiovascular risk 20% over 10 years: no treatment



If 100 people at this level of risk take no statin, over 10 years on average:

- 80 people will not develop CHD or have a stroke (the green faces)
- 20 people will develop CHD or have a stroke (the red faces).

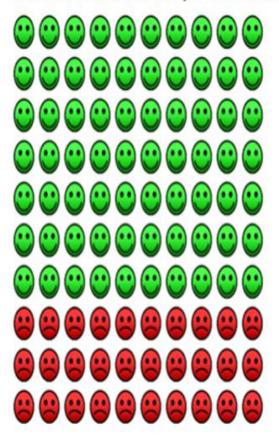
Cardiovascular risk 20% over 10 years: taking atorvastatin

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If all 100 people take atorvastatin for 10 years, over that time on average:

- 7 people will be saved from developing CHD or having a stroke (the yellow faces)
- 80 people will not develop CHD or have a stroke, but would not have done anyway (the green faces)
- 13 people will still develop CHD or have a stroke (the red faces).

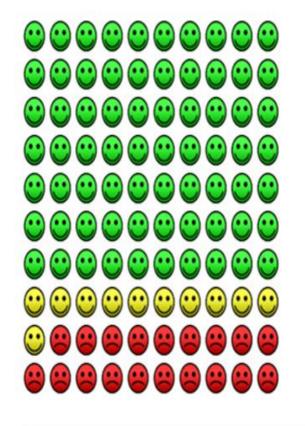
## Cardiovascular risk 30% over 10 years: no treatment



If 100 people at this level of risk take no statin, over 10 years on average:

- 70 people will not develop CHD or have a stroke (the green faces)
- 30 people will develop CHD or have a stroke (the red faces).

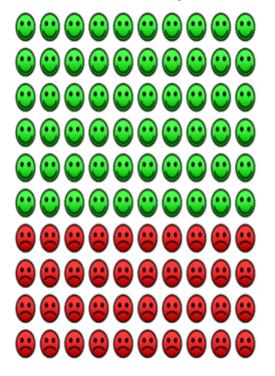
Cardiovascular risk 30% over 10 years: taking atorvastatin



If all 100 people take atorvastatin for 10 years, over that time on average: • 11 people will be saved from developing CHD or having a stroke (the yellow faces) • 70 people will not develop CHD or have a stroke, but

- would not have done anyway (the green faces)19 people will still develop
  - CHD or have a stroke (the red faces).

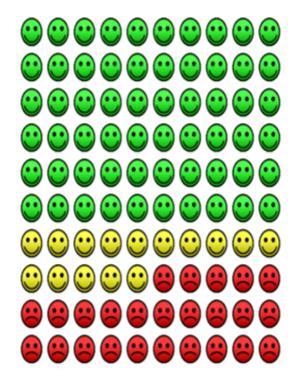
## Cardiovascular risk 40% over 10 years: no treatment



If 100 people at this level of risk take no statin, over 10 years on average:

- 60 people will not develop CHD or have a stroke (the green faces)
- 40 people will develop CHD or have a stroke (the red faces).

## Cardiovascular risk 40% over 10 years: taking atorvastatin



If all 100 people take atorvastatin for 10 years, over that time on average:

- 15 people will be saved from developing CHD or having a stroke (the yellow faces)
- 60 people will not develop CHD or have a stroke, but would not have done anyway (the green faces)
- 25 people will still develop CHD or have a stroke (the red faces).