

Plant sterols and stanols

Plant sterols are structurally similar to cholesterol and can be divided into (phyto) sterols and phyto (stanols). Their cholesterol lowering effects have been known for some time. Throughout this factsheet we refer to them collectively as plant sterols.

What do they do?

They work by mimicking cholesterol and competing with it for absorption. The result is that less cholesterol and less bile (a cholesterol bi-product) is absorbed from the gut. This results in further breakdown and recycling of cholesterol. Plant sterols can reduce cholesterol levels in 3 weeks and are considered to be the most effective single food that can lower cholesterol as part of a healthy diet and lifestyle.

Where can I find them?

They are found naturally in a wide range of foods such as vegetable oils, nuts, seeds, whole grains, fruits and vegetables. However, for most people, it is not possible to achieve the optimum intake from ordinary foods.

Are they safe for everyone to use?

Plant sterols have been thoroughly researched and approved for use in foods. However they are targeted specifically at people who have raised cholesterol and there are no significant benefits for other groups of the population. Although they can be taken by children who have inherited high cholesterol (under supervision) they should be avoided by other children and women who are pregnant or are breast feeding.

Do they work well with cholesterol lowering medicines?

Because they work in different ways, plant sterols can be used effectively alongside statin therapy and produce an additive benefit. They can also be used alongside fibrates. Patients taking Ezetrol (Ezetimide), a drug which inhibits cholesterol absorption in the small intestine, will receive little additional benefit however. This is because this drug has a similar mechanism of action to plant sterols.

How to achieve 2-3g of plant sterols or stanols per day

CHOOSE either:

3-4 items from list A or 1 item from list B or 1 item from both lists

LIST A - each one contains 0.5-0.75g plant sterols/stanols

Milk

- 250ml Flora ProActiv milk drink

Spreads

- 10g Flora ProActiv spread (2 level teaspoons)
- 10g Benecol spread (2 level teaspoons)
- 10g own label sterol fortified spread

Yoghurt

- 125g Benecol yoghurt
- 125g Flora ProActiv yoghurt

LIST B - Each of these contains 2g of plant sterols/stanols

Yoghurt drinks

- 67.5g Benecol Yoghurt drink
- 100g Flora ProActiv Yoghurt drink
- 1 own label plant sterol fortified mini drink (check plant sterol content)

What amounts should I take?

Scientific studies suggest that eating between 2 and 3g of plant sterols each day can significantly reduce LDL (bad cholesterol) by about 10%.

Why are plant sterols not recommended by some health professionals?

The recent NICE (National Institute for Health and Care Excellence) guidelines on Lipid Modification do not recommend plant sterols as a way of preventing heart attacks.

This is simply because the working party could find no human intervention trails that show a reduction in heart attacks as a result of consumption. There is however substantial evidence to show that both plant sterols and stanols do reduce cholesterol levels which are a significant risk factor for cardiovascular disease.

More information

www.heartuk.org.uk

www.floraproactiv.co.uk

www.benecol.co.uk