

BECEL PRO.ACTIV FOODS ARE SAFE

Plant sterols are natural components of a normal diet.

The safety of consuming high intakes of plant sterols to lower cholesterol has been studied extensively since the 1950s and reviewed by independent experts and regulatory authorities internationally.

The complete Becel pro.activ range has European Union Novel Foods approval.

Unilever's continuing post-launch monitoring programme confirms that Becel pro.activ is being consumed by the correct target group and there is no evidence of over-consumption or adverse health effects¹⁴.

REFERENCES

1. National Cholesterol Education Program. Executive summary of the third report of the National Cholesterol Education Program (NCEP) expert panel on detection, evaluation and treatment of high blood cholesterol in adults (adult treatment panel III). *JAMA* 2001; 285: 2486-2497.
2. Katan MB, Grundy SM, Jones P, Law M, Miettinen T, Paoletti R; Stresa Workshop Participants. Efficacy and safety of plant stanols and sterols in the management of blood cholesterol levels. *Mayo Clin Proc* 2003 Aug; 78(8): 965-978. Review.
3. Recommendations from the International Atherosclerosis Society, 2003, and NCEP ATP III, *Circulation*, 2002 (except for soya protein: FDA recommendation, federal register, 1999)
4. Federal Drug Administration. Food labelling: Health Claims; Soya Protein and Coronary heart Disease; Final Rule. Federal register 1999; 64(206):57699-57733
5. Jenkins DJA, Kendall CWC, Axelson M, Augustin LSA, Vuksan V. Viscous and nonviscous fibres, nonabsorbable and low glycaemic index carbohydrates, blood lipids and coronary heart disease. *Curr Opin Lipidol* 2000;11:49-56.
6. Harland JJ, Haffner TA. Systematic review, meta analysis and regression of randomised controlled trials reporting an association between an intake of circa 25g soya protein per day and blood cholesterol. *Atherosclerosis* 2008; doi:10.1016/j.atherosclerosis. 2008/04.006.
7. Mensink RP, Zock PL, Kester ADM, Katan B. Effects of dietary fatty acids and carbohydrates on the ratio of serum total to HDL-cholesterol and on serum lipids and apolipoproteins: a meta-analysis of 60 controlled trials. *Am J Clin Nutr* 2003;77:1146-55.
8. Tikkanen MJ, Hogstrom P, Tuomilehto J et al. Effect of a diet based on low-fat foods enriched with nonesterified plant sterols and mineral nutrients on serum cholesterol. *Am J Cardiol* 2001; 88:1157-1162.
9. International Atherosclerosis Society Executive Board, Harmonised Clinical Guidelines on Prevention of Atherosclerotic Vascular Disease. March 2003.
10. Simons LA. Additive effect of plant sterol-ester margarine and cerivastatin in lowering low-density lipoprotein cholesterol in primary hypercholesterolemia. *Am J Cardiol* 2002; 90:737-740.
11. Nigon F, Serfaty-Lacroisniere C, Beucler I, Chauvois D, Neveu C, Giral P, Chapman MJ, Bruckert E. Plant sterol-enriched margarine lowers plasma LDL in hyperlipidemic subjects with low cholesterol intake: Effect of fibrate treatment. *Clin Chem Lab Med* 2001; 39: 634-640.
12. Lau VW, Journoud M, Jones PJ. Plant sterols are efficacious in lowering plasma LDL and non-HDL cholesterol in hypercholesterolemic type 2 diabetic and nondiabetic persons. *Am J Clin Nutr* 2005; 81(6): 1351-1358.
13. Amundsen Å &, Ntanios F, Put N V.d, Ose L. Long-term compliance and changes in plasma lipids, plant sterols and carotenoids in children and parents with FH consuming plant sterol ester-enriched spread. *Eur J Clin Nutr* 2004; 58(12): 1612-1620.
14. Lea LJ & Hepburn PA. Safety evaluation of phytosterol-esters. Part 9: Results of a European post-launch monitoring programme. *Food Chem Toxicol* 2006;44(8):1213-1222.

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DECEMBER 2008

BECEL PRO.ACTIV FOODS

CLINICALLY PROVEN TO LOWER CHOLESTEROL

SUMMARY INFORMATION FOR
HEALTH CARE PROFESSIONALS



Becel
pro.activ

WHAT IS BECEL PRO.ACTIV?

A range of everyday foods enriched with plant sterols, clinically proven to significantly lower LDL-cholesterol.

Developed for people who want to actively lower their LDL-cholesterol through dietary change.

Recommended as part of a healthy diet and lifestyle.

Figure 1. Diet and lifestyle factors and their effect on LDL-cholesterol levels

Component	Dose or change in intake/habit	Approximate reduction in LDL-cholesterol levels	Recommendation in case of elevated LDL-C levels/ increased CVD risk ^{3,4}
Saturated fatty acids (SAFA) (reduction in intake)	-5% of total energy intake	-5%*	reduce intake to <7% of total energy
Dietary cholesterol (reduction in intake)	Reduce intake to <200mg per day	-5% ⁵	reduce intake to <200mg per day
Body weight (loss)**	-5 kg	-5%**	lose ~10% body weight**
Plant sterols	~2g per day	-10% ²	consume 2g per day
Viscous dietary fibres	5-10g per day	-5% ⁵	Increase intake to 10g per day
Soya protein	25-50g per day	-up to 6% ^{5,6}	consume at least 25g per day
PUFA energy intake	+5% of total	-3%***	consume up to 10% of total energy

Raised LDL-cholesterol: a key risk factor for heart disease

Elevated LDL-cholesterol is widely accepted as a key modifiable risk factor for CHD.

Yet more than 50% of the population in most Western countries has cholesterol levels higher than desirable.

Epidemiological and intervention studies estimate that on average, lowering LDL-cholesterol by 10% will reduce the risk of CHD by up to 20%¹.

Lowering cholesterol with dietary change

Making positive dietary changes including replacing saturated fats with polyunsaturates and keeping the intake of trans fats to a minimum are well known to lower LDL-cholesterol (Figure 1).

However, the single most effective way to lower LDL-cholesterol with dietary change is to include plant sterols or stanols².

WHY PLANT STEROLS?

Plant sterols are found naturally in everyday foods like vegetable oils, nuts, seeds, grain products, fruit and vegetables.

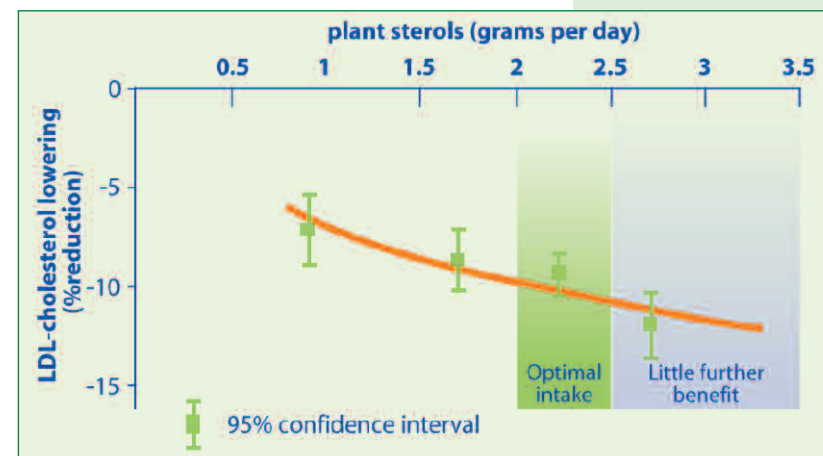
The cholesterol lowering effect of plant sterols has been known since the 1950s. A large body of scientific evidence of more than 170 studies has proven that plant sterols and stanols significantly lower LDL-cholesterol.

Plant sterols and cholesterol

There is a direct dose-response relationship between plant sterol intake and LDL-cholesterol lowering. The more plant sterol consumed, the greater the reduction in LDL-cholesterol up to about 2-2.5g plant sterol per day. Intakes above 2.5g/day provide little additional benefit (Figure 2).



Figure 2. The dose-response relationship between plant sterol intake and LDL-cholesterol lowering effect²



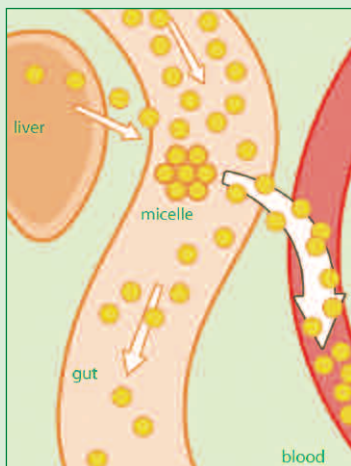
* Calculated assuming a baseline LDL-cholesterol level of 3.5 mmol/L and assuming that 5 energy% from saturated fatty acids are replaced by an isocaloric amount of carbohydrates (Mensink et al, Am J Clin Nutr 2003)⁷

** In case of overweight or obesity

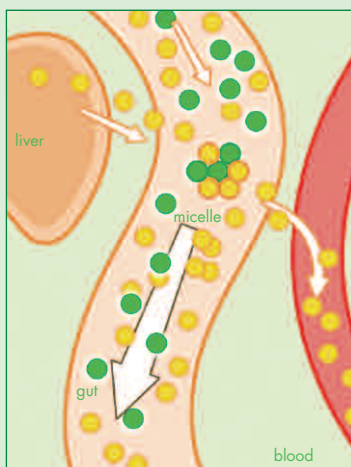
*** Calculated assuming a baseline LDL-cholesterol level of 3.5 mmol/L and assuming that 5 energy% from carbohydrates are replaced by an isocaloric amount of polyunsaturated fatty acids (Mensink et al, Am J Clin Nutr 2003)⁷

THE EFFECT OF PLANT STEROLS ON CHOLESTEROL ABSORPTION

WITHOUT PLANT STEROLS



WITH PLANT STEROLS



● Cholesterol ● Plant Sterols
More cholesterol absorbed = **higher** blood cholesterol levels
Less cholesterol absorbed = **lower** cholesterol levels

Plant sterols reduce cholesterol absorption

Consuming 2g of plant sterols daily can reduce the absorption of cholesterol from the gut by 30-40%, significantly lowering blood cholesterol levels⁸.

International dietary guidelines include plant sterols

The International Atherosclerosis Society⁹, the US National Cholesterol Education Program (NCEP)¹, and many national organisations including American Heart Association, Heart Foundation Australia, Dutch Heart Foundation, Finnish Nutrition Association, Finnish Medical Society, Spanish Atherosclerosis Society and Nutrition Foundation of Italy have all included plant sterols in their dietary recommendations for cholesterol management.

International and national guidelines for cholesterol management now recommend considering the inclusion of 2g of plant sterols/day.

What's the difference between plant sterols and plant stanols?

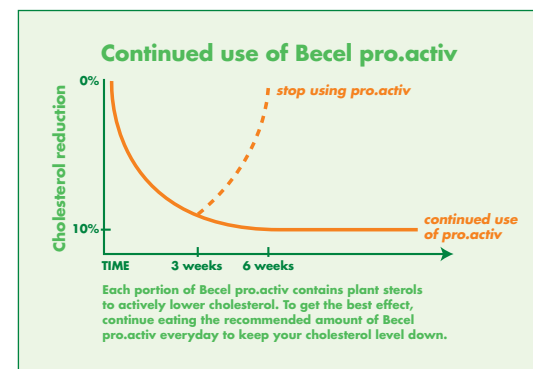
Plant sterols differ from plant stanols in their chemical structure. Comparison studies have shown that plant sterols and stanols have a similar effect on reducing cholesterol absorption and therefore blood cholesterol levels.

BECEL PRO.ACTIV FOODS

40 clinical studies have proven the LDL-cholesterol lowering effect of Becel pro.activ. In fact no food is more effective for lowering cholesterol.

The Becel pro.activ range includes spreads, yoghurts, a milk drink and yoghurt mini-drinks.

Three portions of Becel pro.activ a day provide the optimal intake of plant sterols to significantly lower LDL-cholesterol by up to 15% when combined with the move to a healthy diet and lifestyle – a level that cannot be beaten by any other food or ingredient.



What happens if people stop taking Becel pro.activ?

Becel pro.activ should be consumed consistently, on a daily basis, to ensure that the optimum cholesterol lowering effect is achieved. If consumption stops cholesterol will return to its original levels within 3-4 weeks.



Portion guide

Choose 3 portions from a combination of:

1 PORTION

1 medium glass of Becel pro.activ milk drink (250ml)

0.75 plant sterols

1 PORTION

Enough Becel pro.activ spread for 1-2 slices of bread (10g / 2 teaspoons)

0.75 plant sterols

1 PORTION

1 pot Becel pro.activ yoghurt (125g)

0.75 plant sterols

OR 3 PORTIONS IN 1

1 Becel pro.activ yoghurt mini-drink

2g plant sterols

Becel pro.activ foods should always be consumed as part of a heart healthy diet and lifestyle, and are more effective when consumed as part of a meal.

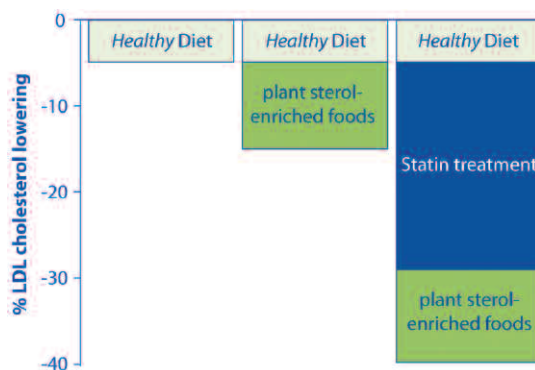


PLANT STEROLS: A USEFUL ADJUNCT TO CHOLESTEROL LOWERING MEDICATION

Becel pro.activ foods are not designed to be an alternative to medication. They can be used in conjunction with lipid lowering medication.

The effect of plant sterols is additive to that of a healthy cholesterol-lowering diet and cholesterol lowering medication like statins¹⁰ or fibrates¹¹ (Figure 3).

Figure 3. Cholesterol lowering effect of plant sterols is additive to a healthy diet and to lipid-lowering medication (statins)



Who would benefit from Becel pro.activ foods?

- People who want to lower their cholesterol through diet and lifestyle changes
- Patients with diabetes and familial hypercholesterolaemia
- Useful adjunct for those on lipid lowering medication.

WHY RECOMMEND BECEL PRO.ACTIV FOODS TO YOUR PATIENTS WITH RAISED CHOLESTEROL?

- Becel pro.activ foods contain plant sterols, which are clinically proven to lower LDL-cholesterol by 10% in 3 weeks.
- Consuming 3 portions of Becel pro.activ spread, milk drink or yoghurt or one (3 portions in one) yoghurt mini-drink per day provides the optimal daily intake of 2-2.5g plant sterols.
- The LDL-cholesterol lowering effect of Becel pro.activ is an additional 10%, on top of the 5% lowering achieved through consuming a varied balanced diet and healthy lifestyle.
- The cholesterol lowering effect of Becel pro.activ is additional to that of taking medication like statins or fibrates.
- No other food is more effective for lowering cholesterol than Becel pro.activ
- Becel pro.activ foods are tasty and easy to incorporate into a healthy diet.
- Becel pro.activ is also effective in people with diabetes¹² and familial hypercholesterolaemia¹³.

SUMMARY

Becel pro.activ foods are a range of plant sterol-enriched foods designed to be consumed as part of a healthy diet and lifestyle. 40 clinical studies have proven that Becel pro.activ foods lower LDL-cholesterol by up to 15% when combined with the move to a healthy diet and lifestyle.



Motivate your patients towards a healthier heart

Becel Heart Age Tool (based on CVD risk models developed by the Framingham Heart Study investigators) calculates a “cardiovascular risk adjusted age” based on traditional risk factors such as age, sex, weight, total and HDL cholesterol, blood pressure levels, diabetes and smoking. The tool is not designed to guide treatment decisions but can be used by health care professionals to help communicate and motivate patients to adopt heart healthy diet and lifestyle choices in order to lower their lifetime risk of developing CVD.

Visit [insert website] for more information and to check your own Heart Age.