

Plant Sterols and Stanols in Food and Supplements

Advice from the National Lipid Association Clinician's Lifestyle Modification Toolbox

What are plant sterols and stanols and why should I eat them?

Plant sterols and stanols (PSS) are in plant foods. Their structure is similar to the cholesterol in animal foods. PSS can block cholesterol from being absorbed in your gut. Eating enough PSS can help lower your LDL-C, the "bad" cholesterol. Even though many plant foods have PSS, you may not eat enough each day to lower your LDL-C. You may need to take a supplement.

How much PSS do I need to take to lower my LDL-C?

Taking 2 grams (2,000 mg) of PSS each day may lower your LDL-C by 7-10%. To get 2 grams of PSS each day, you can eat foods with **added** PSS and take PSS supplements. The PSS will be absorbed better if you eat these foods or supplements with meals or snacks. This will lower your LDL-C.

Foods and Supplements with Plant Sterol and Stanols

t Plant Sterol and Stanol

FOODS

High amounts of PSS are in vegetables and fruits. Other foods with PSS are wheat germ, whole grains, and legumes. Nuts, seeds, and vegetable oils are also high in PSS. Yet, most people only eat 250-500 mg PSS a day from food.

PSS are added to some buttery spreads, juices, yogurt drinks, and nutrition bars. Check the Nutrition Facts labels and ingredient lists for PSS.

Food with PSS have calories just like all food. Be sure to count these calories in your daily meal plan. This will help so you don't eat too many calories each day.

SUPPLEMENTS

PSS Supplements may come as softgels, caplets, or chews.

Only choose supplements that contain PSS. You may see the word "phytosterol" on the supplement label. This is another name for PSS.

Read the label to find out how many pills you need to take for grams (2,000 mg) of PSS.

The amount of PSS in supplements can vary. Buy PSS supplements that have the "USP Verified" mark on the label. This means the supplement has the ingredients in it that are listed on the label.



Label from a PSS Supplement

WHAT ELSE DO I NEED TO THINK ABOUT WHEN TAKING PSS?

- There are not benefits from taking more than 2 grams (2,000 mg) of PSS from supplements a day.
- Taking PSS supplements may keep some vitamins from being absorbed in your gut. Eat at least 5 servings of fruits and vegetables each day to keep your vitamin intake high. Try apricots, cantaloupe, carrots, kale, spinach, and yams.
- If you have sitosterolemia, PSS can build up in your body. This can raise your risk of heart disease. Don't take PSS supplements if you have sitosterolemia.

Talk with your registered dietitian nutritionist to find foods and supplements with PSS that work for you to lower your LDL-C. A RDN can help you make a heart-healthy meal plan that works best for your lifestyle and support you in your nutrition journey.