

# Ask Dr. Tastebud



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*Dear Dr. Tastebud,  
My best friend Nancy read in Glitter  
magazine that eating plant sterols could  
help lower her cholesterol. Is this true?  
Sincerely,  
Cholesterol 276*

Dear Cholesterol 276,

Excellent question C! Recent studies have shown that plant sterols and stanols along with a healthy diet and exercise routine can help lower your cholesterol and your overall risk of CHD (Coronary Heart Disease).

Plant sterols and stanols belong to a class of compounds known as phytosterols - compounds that are similar structures and function to animal cholesterol. They may only be obtained through dietary sources such as fruits, vegetables, nuts, seeds, and vegetable oils (plant sterols occur naturally in greater quantities than plant stanols). Some recently developed foods have added phytosterols to help you lower your cholesterol without taking medication

## **Benefits of plant sterols**

Scientific studies show that 1.3 grams of plant sterols or 3.4 grams of plant stanols per day are needed to show a significant effect in lowering your cholesterol. You can accomplish this by consuming the foods natural in phytosterols or by consuming foods that have added phytosterols to them such as Benecol spreads or Smart Chews, Take Control margarine, Promise Activ Super Shots, Minute Maid Heart Wise orange juice, Nature Valley Healthy Heart granola bars, and Kroger Active Lifestyles fat free milk.

## **How do they work?**

There are two main types of cholesterol, HDL (the good cholesterol) and LDL (the bad cholesterol). Plant sterols/stanols help lower your LDL cholesterol by blocking the absorption of cholesterol in your food. They compete with cholesterol in your digestive tract and cause a decrease in the amount of cholesterol that is absorbed and transported back to your liver. The National Cholesterol Education Program recommends daily intakes of two to three grams per day of plant sterol/stanols to reduce LDL cholesterol by 6 to 15 percent.

## **Other health benefits**

Research also shows additional benefits to adding phytosterols to your diet. Some studies show a reduction in the risk of cancer, mainly colon, breast, prostate, and stomach cancers. Many new studies are still being done, and the research is very promising.

## **Safety issues**

Few adverse effects associated with short-term or long-term use of phytosterols have been reported. A few studies have shown that the use of phytosterols can significantly lower the beta-carotene level in your blood over long periods of time. To counteract this, you can increase your consumption of foods high in beta-carotene such as carrots, sweet potatoes, spinach, peaches, nectarines, pumpkin – basically fruits and vegetables that are deep orange or dark green. Children and women who are pregnant or breastfeeding should not add phytosterols to their foods due to the lack of research done on these populations.

Presented by the Dietetics and Dietetic Internship Programs, School of Family and Consumer Sciences.

### Cooking with plant stanols/sterols

Cooking with phytosterols could take some creativity depending on whether you are using a plant sterol like Take Control® or a plant stanol like BENECOL®. While Benecol is heat stable, Take Control is not, so that it will lose its cholesterol lowering benefit when cooking.

Both product websites have great recipes for you to try out and give great tips for using these products in your everyday cooking.

Just as in everything, moderation is always a good rule of thumb. No health benefits have been found with “over-consuming” plant sterols, and to try to do that would be a little impractical.

Maranda Quiroga and Breanna Oberlin  
BGSU Dietetic Students

*Do you have a question for Dr. Tastebud? Send it to [chaar@bgsu.edu](mailto:chaar@bgsu.edu)*



### No-Bake Cookies

#### Ingredients:

½ cup BENECOL® Regular Spread  
1 cup SPLENDA® Sugar Blend for Baking  
½ cup skim milk  
¾ cup crunchy reduced-fat peanut butter  
3 cups quick oats  
6 tablespoons cocoa powder  
1 teaspoon pure vanilla extract

#### Directions:

1. **BRING** BENECOL® Regular Spread, SPLENDA® Sugar Blend for Baking and skim milk to a boil. Cook 4 minutes, stirring constantly. BENECOL® Regular Spread.
2. **REMOVE** from heat. Stir in remaining ingredients.
3. **PLACE** 24 spoonfuls of the cookie mixture onto waxed paper.

*Each serving (2 cookies) contains 1/2 serving of BENECOL® Spread 290 calories, 13 grams of fat*

**Exchanges per serving:** 2 ½ starches, 2 fats

<http://www.benecol.com>

#### References:

Normen L, Dutta P., Lia A, Andersson H. Soy sterol esters and beta-sitosterol ester as inhibitors of cholesterol absorption in human small bowel. *Am J Clin Nutr.* 2000;71:908-913.

Best MM, Duncan CH, Van Loon OJ, et al. The effects of sitosterol on serum lipids. *Am J Med.* 1995;19:61-70.

Temme, EH, Van Hoydonck PG, Schouten EG, et al. Effects of plant sterol enriched spread on serum lipids and lipoproteins in mildly hypercholesterolaemic subjects. *Acta Cardiol.* 2002;57:111-115