

Plant Sterols

Functional ingredients are used in manufactured foods to provide other benefits in addition to nutrition or product quality.

Name:

Plant sterols, for example, Sitostanol, a natural plant alcohol.

Brand name:

Products that contain it include Benecol $^{\rm TM}$, Taking Control $^{\rm TM}$, and Phytrol $^{\rm TM}$.

FDA approved use:

Margarine or vegetable oil spreads and salad dressings. Generally recognized as safe, or "GRAS." Can be used in many products containing fat.

Calories:

Very few as an ingredient. It is poorly absorbed by the digestive tract.

Content:

BenecolTM contains sitostanol ester, made from sterols in pine oil, a waste product of the wood-pulp processing industry. Taking ControlTM contains a sterol from soybeans. PhytrolTM contains phytosterols from wood pulp.

Possible benefits:

Inhibits the absorption of dietary cholesterol. Can reduce blood cholesterol levels if eaten in the same meal as foods that contain cholesterol.

Side effects:

None reported.

Rules for use in foods:

The food manufacturer must list the plant sterol in the ingredient list. Lipton is marketing Taking Control™, which carries a health claim stating "Helps promote healthy cholesterol levels as part of a diet low in saturated fat and cholesterol."

Points to consider:

- The spreads in which the plant sterol is used do contain calories.
- The effect on blood cholesterol ends if you stop using the spread.
- To get the most benefit, you need to replace regular margarine and butter with the spread containing plant sterol in most meals and eat a low-fat diet. The makers of Benecol™ recommend three

- servings of their product a day, while two servings a day are recommended for Taking Control $^{\text{TM}}$.
- In a yearlong study, people using a plant sterol margarine in place of ordinary margarine lowered their blood cholesterol from 235 to 210 mg/dl.
- Long-term studies of use are just beginning.
- These spreads can be used like ordinary margarine on bread, for baking, and for cooking.
- They keep like other margarines and can be frozen for up to three months.
- The plant sterol is totally tasteless, so the margarine containing it may not be as flavorful as ordinary margarines.
- The plant sterol margarines and spreads cost more than ordinary margarine or spreads. Benecol[™] margarine is selling for about \$12 per pound and Taking Control[™] sells for about \$5 per pound. In contrast, generic soft margarine sells for less than \$1 per pound.

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Are margarines and spreads made from plant sterols for you? To help you make your decision, answer these questions:

1. Do you have a medical reason (like high blood cholesterol) to reduce your blood cholesterol level?
yes no
2. How often do you use margarine or butter each day?
times
If your answers to questions 1 and 2 were
1. yes
2. two or more times
then these plant sterol margarines and spreads might be beneficial for you

Complete question 3 to see if you can afford to buy these products regularly.

- 3. a) How many containers or packages of margarine do you buy and eat monthly?
 - b) What is the difference in price between the plant sterol product and the margarine you usually buy?
 - c) How much extra would you spend in a month buying the plant sterol product in place of your regular product? (Multiply the number of packages of containers by the difference in price.)

You may also want to visit the Web sites for these products.

Taking Control: http://www.takecontrol.com

Benecol: http://www.benecol.com or http://www.benecolnewsbureau.com

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