

Margarines that Help Lower Cholesterol



Take Control, Benecol, and Benecol Light are the brand names of margarines that have been introduced in American grocery stores. Other food products, such as salad dressings, are planned for future release. The Food and Drug Administration approved these specialized margarines for safe use by consumers of all ages in late spring, 1999. Benecol has been used in Finland for several years. Although they contain different ingredients, both brands work similarly to lower one's so-called "bad" low density lipoprotein (LDL) blood cholesterol. They do not affect the beneficial kind of high density lipoprotein (HDL) blood cholesterol.

These margarines contain plant sterols (stanol esters) that have been extracted from soybeans or pine trees. Dietary plant sterols resemble cholesterol but are not absorbed into the body. They help prevent the absorption of cholesterol from the digestive tract and help remove it from the colon. Plant sterols are found in small amounts in other foods such as olives and whole grains, including soy, corn, wheat, rye, and oats. Consumers who do not currently use margarine or butter should not feel pressured to begin to use these new margarine products. It is intended that people would substitute these new margarines containing plant sterols for part of their daily intake of other high fat foods. People who eat low fat, high-fiber diets and plenty of plant-based foods probably would not need extra amounts of these plant sterols.

Consumers who purchase Take Control, Benecol, and Benecol Light will have to pay a premium price for them. They cost three times or more the price of other margarines. Consumers can use these margarines just like they would any margarine to spread on foods they eat. One or two tablespoons every day is the recommended intake to achieve reduction in blood LDL cholesterol. Although these products have a beneficial cholesterol lowering effect, they do contain fat and calories in amounts similar to other brands of margarine. One tablespoon of these margarines provides 6-10 g fat and 50-90 calories. Both brands have only minimal amounts of saturated fat or trans fatty acids. Each brand tastes and melts slightly different from the other and from other margarines.

Cooking and baking with Take Control is not recommended because the cholesterol-lowering plant sterols break down with heat. Benecol Light is also not suited for cooking and baking because of its high water content. Using Benecol for cooking or baking would yield satisfactory results, but it would be expensive and would probably cause consumption to exceed the necessary intake recommendations for a cholesterol-lowering effect. Eating more of these margarines does not help reduce cholesterol levels more.

Eating these margarines at the recommended intake levels results in reduced cholesterol levels within the first two weeks of use. Consumers with LDL cholesterol levels that are high usually see better results than people with lower LDL cholesterol levels. Results vary, with 4-14% reductions in total cholesterol levels reported on average, but not every individual responds favorably. Combining approaches to reduce cholesterol levels by eating one of these margarines, along with choosing a diet low in saturated fat and cholesterol, produces greater reductions in LDL cholesterol levels than just using these

margarines without changing the diet, or just changing the diet without use the specialized margarine. When consumers stop using Take Control or Benecol, and have not changed other aspects of their lifestyle, their cholesterol levels rise to their previous levels within a week.

Compared to medicine that lowers cholesterol, these new margarines are less expensive but not as effective in reducing blood cholesterol. However, expenses for medication are often shared by insurance companies, rather than being exclusively out-of-pocket costs for the consumer. People who prefer not to take prescription medicine to lower their cholesterol levels may find these specialized margarines to be an acceptable alternative . A combination approach of using diet, one of the specialized margarines, and lower doses of a cholesterol-lowering drug has been successful in decreasing LDL cholesterol.

Consult your health care provider about your diet, your risk factors and your current cholesterol level. Discuss the strategies that you can take to reduce your risk of heart disease and improve your health, and then follow up on your plans.

Sources:

1. Hallikainen, M. and M. Uusitupa. *Effects of 2 low-fat stanol ester-containing margarines on serum cholesterol concentrations as part of a low-fat diet in hypercholesterolemic subjects. American J. of Clinical Nutrition.* 1999; 69: 403-410.
2. Gylling, H., Radhakrishnan, R., and T. Miettinen. *Reduction of serum cholesterol in postmenopausal women with previous myocardial infarction and cholesterol malabsorption induced by dietary sitostanol ester margarine. Circulation.* 1997; 96: 4226-4231.
3. *Communicating Food for Health newsletter, July/August 1999, page 74.*
4. *Consumer Reports magazine, September 1999, page 9.*
5. Miettinen, T., Puska, P. Gylling, H. Vanhanen, H., and E. Vartiainen. *Reduction of serum cholesterol with sitostanol-ester margarine in a mildly hypercholesterolemic population. The New England Journal of Medicine.* 1995; 333: 1308-1312.
6. Christine Gorman, "It Sure Ain't Butter", *Time magazine, June 15, 1999.*
7. *University of California, Berkeley Wellness Letter, August 1999, pages 1-2.*

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