

Nutrim[®] Overview

Nutrim[®] was developed over 10 years ago by Dr. George Inglett at the USDA. Over 50 years of research has shown oats to be beneficial for lowering cholesterol. Oat and oat extracts have also been shown to help maintain healthy blood sugar levels. Nutrim[®] is concentrated for the most beneficial portion of oats called beta glucans.

The Nutrim[®] product and dosing qualifies for the FDA heart health claim. Nutrim[®] is a concentrated whole food oat product, so it is well tolerated and accepted at high doses.

Active Constituent:

Beta Glucan

Mechanisms of Action:

Oat beta glucans have been shown to increase bile synthesis and excretion. Bile is the main way in which the body disposes of cholesterol. Beta glucans have been shown to bind to bile and carry it out of the body, keeping it from being reabsorbed.¹

Oat beta glucans have been shown to bind to dietary fats, such as saturated and trans fatty acids, and carry them out of the body.² Dietary saturated and trans fatty acids have been associated with elevated cholesterol levels.

Oat beta glucans are broken down by good bacteria, which creates beneficial compounds that have been shown to block the production of cholesterol. Oats and oat beta glucan concentrates have also been shown to have beneficial effects on blood sugar balance^{3,4,5}, blood pressure^{6,7}, and satiety⁸.

FDA Heart Health claim:

Nutrim[®] qualifies for the FDA heart health claim, "Soluble fiber from foods such as Nutrim[®] oat

bran, as a part of a diet low in saturated fats and cholesterol, may reduce the risk of coronary heart disease."

Nutrim[®] Safety:

Nutrim[®] has no other added ingredients in the powder besides concentrated oat bran. It has acquired a GRAS (Generally Recognized As Safe) status by the FDA. "A GRAS substance, therefore, is one that has a long, safe history of common use in foods, or that is determined to be safe based on proven science." A GRAS substance is one which also "...has a proven track record of safety based either on a history of use before 1958 or on published scientific evidence, and that need not be approved by the FDA prior to being used." [<http://www.fda.gov>]

There are no known contraindications. There have been no reports of overdose. Flatulence is occasionally reported with the use of oat beta glucans.

One study utilized Nutrim[®] at high doses [8 scoops/day] and stated it was well accepted and tolerated.⁹ This same study also showed Nutrim[®], along with moderate exercise and a diet low in saturated fat and high in monounsaturated fat, produced a significant increase in HDL cholesterol [27.8%] and a decrease in LDL cholesterol [27.3%] compared to the placebo group. The Nutrim[®] group also experienced an improvement in their blood sugar and weight loss.

Another study using oat beta glucans incorporated into a fruit drink not only showed it to be effective for lowering cholesterol, but it did not seem to have a negative effect on the plasma levels of fat soluble antioxidants.¹⁰

References:

1. Kerckhoffs D, Brouns F, Hornstra G, Mensink R. "Effects on the Human Serum Lipoprotein Profile of B-Glucans, Soy Protein and Isoflavones, Plant Sterols and Stanols, Garlic and Tocotrienols." *J. Nutr.* 132 (2002): 2494-2505.
2. Drozdowski LA, Reimer RA, Temelli F, Bell RC, Vasanthan T, Thomson AB. "Beta-Glucan extracts inhibit the in vitro intestinal uptake of long-chain fatty acids and cholesterol and down-regulate genes involved in lipogenesis and lipid transport in rats." *J Nutr Biochem* 21.8 (August 2010): 695-701.
3. Lammert A, et al. "Clinical Benefit of a short term dietary oatmeal intervention in patients with type 2 diabetes and severe insulin resistance: a pilot study" *Exp Clin Endocrinol Diabetes* 116.2 (20 Dec 2007): 132-4. Abstract.
4. Hallfrisch J, Scholfield D, Behall K. "Diets containing soluble oat extracts improve glucose and insulin responses of moderately hypercholesterolemic men and women." *Am J Clin Nutr* 61 (1995): 379-84.
5. Reyna-Villasmil N, et al. "Oat-derived B-Glucan Significantly Improves HDLC and Diminishes LDLC and Non-HDL Cholesterol in Overweight Individuals with Mild Hypercholesterolemia." *American Journal of Therapeutics* 14 (2007): 203-212.
6. Keenan JM, Pins JJ, Frazel C, Moran A, Turnquist L. "Oat ingestion reduces systolic and diastolic blood pressure in patients with mild and borderline hypertension: a pilot trial." *J Fam Pract* 51.4 (April 2002): 369.
7. Pins JJ, Geleva D, Keenan JM, Frazel C, O'Conner PJ, Cherney LM. "Do whole-grain oat cereals reduce the need for antihypertensive medications and improve blood pressure control?" 51.4 (April 2002): 353-9.
8. Beck EJ, Tosh SM, Batterham MJ, Tasell LC, Huang XF. "Oat Beta-glucan increases postprandial cholecystokinin levels, decreases insulin response and extents subjective satiety in overweight subjects." 53.10 (Oct 2009): 1343-51.
9. Reyna-Villasmil N, et al. "Oat-derived B-Glucan Significantly Improves HDLC and Diminishes LDLC and Non-HDL Cholesterol in Overweight Individuals with Mild Hypercholesterolemia." *American Journal of Therapeutics* 14 (2007): 203-212.
10. Naumann E, et al. "B-Glucan incorporated into a fruit drink effectively lowers serum LDL-cholesterol concentrations." *Am J Clin Nutr* 83 (2006): 601-5.

Contact Us:

If you have any further questions or concerns, feel free to call us at 1-800-862-0438.

To talk with a product specialist directly, call 1-800-862-0438 extension **9**.

You can also find us online at <http://www.oathealth.com>.