



*The Health  
Benefits of  
Nussentials'  
products*



# Index

A Guide to Using this Document .....	Page 3
Stabilized Rice Bran and Diabetes.....	Page 5
Stabilized Rice Bran and Cardiovascular Disease.....	Page 7
Stabilized Rice Bran and Cancer .....	Page 10
Stabilized Rice Bran and Joint Health.....	Page 12
Stabilized Rice Bran and Immune Function .....	Page 14
Stabilized Rice Bran and Liver Health.....	Page 16
Stabilized Rice Bran and Gastroenterological Disorders .....	Page 17
Stabilized Rice Bran and Weight Loss.....	Page 19



# A guide to using this document

## **Dear Nussentials Marketing Representative,**

This document provides scientific information about each of Nussentials' products and their potential health benefits. You can use this document to better communicate with your clients, or with your potential downline.

When discussing the health benefits of Nussentials' products, it is important to know that according to the current interpretation of law, only the Food and Drug Administration (FDA) approved products are allowed to treat or cure diseases. Since Nussentials' products are nutraceutical, all-natural products, they are not subject to FDA-trials and you cannot – by law – make claims that suggest that these products can cure or treat diseases.

This document will help you communicate with anyone who wants to know more about the health benefits of Nussentials' products. Please make sure that you point out that anything you say to your clients, is not a substitute for any medical advice. You should make sure your clients understand that by law, you cannot give any advice on medical issues but you will, however, be able to give detailed information about each of the Nussentials' products' active ingredients and their health benefits as they are supported by scientific studies.

If you need more information on the rules and regulations, visit [www.fda.gov](http://www.fda.gov). More importantly, use common sense. Focus only on the health benefits of the ingredients in Nussentials' breakthrough products, and help your clients by introducing Stabilized Rice Bran to them!

Each product introduction is divided into four parts:

## **A) Unsubstantiated claims to be avoided:**

This section gives examples of claims that you CANNOT make. Remember, only FDA-approved products can cure and treat diseases. Nutraceutical products, no matter how well they might work, cannot by law, be described to cure or treat diseases, since they are not subject to FDA studies. In other words, statements that express a link between a product name and a health condition are unsubstantiated and therefore SHOULD NOT be used under any circumstance.

## **B) Substantiated claims:**

This section gives examples of claims that can be made. These claims include:

- 1) Statements about the active ingredients in the product and their scientifically supported health benefits. Please note the difference between the health benefits of the “products” and the health benefits of the “active ingredients of the products”!
- 2) Statements which refer directly to the product CAN ONLY use “may” or “might” in discussing the nutrient-disease relationship. They cannot state the degree of risk reduction. They must state that other factors play a role in that disease.  
For example: “MORE! might help improve cardiovascular disease combined with a diet low in saturated fat and cholesterol.”



- 3) The claims also must be phrased so that consumers can understand the relationship between the nutrient and the disease and the nutrient's importance in relationship to a daily diet.

For example: "The omega-3 fatty acids in MORE! reduce serum cholesterol and LDL cholesterol. While many factors affect heart disease, a diet low in saturated fat and cholesterol may reduce heart disease."

### ***C) Substantiated claims about the ingredients in each product and their role in the management of certain health conditions:***

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This section provides detailed information about each of the major active ingredients of the product as they are backed by scientific studies.

### ***D) Studies:***

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This section provides a list of scientific studies as they relate to the role of each of the major active ingredients of the product.

This document will help you better understand how Nussentials' products, and more specifically, the active ingredients in them, can help your customers. To find out how the active ingredients can help your clients with a specific health challenge, please visit the table of contents, and go directly to the corresponding page.

Remember, Nussentials' products are based on Stabilized Rice Bran, a highly nutritious natural food. For up-to-date information on the most recent scientific findings, please visit the SCIENCE section of [www.nussentials.com](http://www.nussentials.com).

***The Nussentials Management Team***



# Stabilized Rice Bran and Diabetes

Product name:  
**MORE!**

## **Unsubstantiated Claims to be avoided:**

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- MORE! lowers or stabilizes blood sugars levels.
- MORE! increases insulin levels.
- MORE! controls, cures or treats diabetes.

## **Substantiated Claims:**

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- ***The active ingredients in MORE! have been shown to help regulate fasting glucose levels, improve glucose utilization, enhance insulin production, regulate fasting serum glucose, and increase insulin receptor sites.***
- MORE! has at least 107 different antioxidants and very potent phytonutrients, which both help control blood sugar levels.
- MORE! may help promote normal blood sugar levels since it contains the right type of fiber which can slow the rate of sugar absorption into the bloodstream. This reduces the level of insulin required to process carbohydrates at any given time.
- MORE! is not a cure for diabetes. But clinical trials have shown that when combined with a low carbohydrate, high protein and high fiber diet as well as regular exercise, stabilized rice bran in MORE! helps normalize blood sugar levels in diabetics. This could potentially help to eventually reduce the daily dose of medications, such as oral hypoglycemic agents and insulin.

## **Substantiated claims about the ingredients in MORE! and their role in the management of diabetes:**

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### **B-Complex Vitamins**

- Regulate fasting serum glucose.
- Improve glucose utilization.
- Non-starchy polysaccharides improve the immune function and increase insulin release from the pancreas.
- Increase insulin receptor sites.
- Regulate fasting serum glucose.
- Improve peripheral neuropathy.

### **Gamma Oryzanol**

- Enhances immune complex, activates beta-cells and increases insulin production.
- Neuroregulatory effect. Gamma Oryzanol is a powerful phytonutrient and antioxidant which is present only in rice bran products. It improves blood circulation in the extremities and together with pyridoxine (Vit. B6) and riboflavin (Vit. B2). It helps with diabetic neuropathy.

### **Protein**

- Helps to regulate fasting glucose levels, improves glucose utilization and improves energy.
- Helps to activate pancreatic beta-cells and enhances insulin production for improved cellular glucose uptake.

### **Water soluble, non-starchy Polysaccharides**

- Improve immune function.
- Improve insulin synthesis.



### **Fiber**

- Regulates fasting serum glucose levels and improves glucose utilization by producing a high viscosity in the gut resulting in the slow absorption and release of glucose circulation preventing glucose spiking.

### **Antioxidants**

- At least 107 different antioxidants present in MORE!
- Help prevent diabetic complications such as retinopathy, cardiomyopathy and nephropathy.
- Help reduce glucosylated hemoglobin levels (A1C) by minimizing lipid peroxidation in the erythrocyte membrane.

### **Studies:**

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- 1) A. A. Qureshi, S. A. Sami, F. A. Khan. Effects of stabilized rice bran, its soluble and fiber fractions on blood glucose levels and serum lipid parameters in humans with diabetes mellitus Types I and II. *Journal of Nutritional Biochemistry* 13 (2002) 175-187.
- 2) Jain, S. K., McVie, R., Duett, J, Herbst, J.J. (1989). Erythrocyte membrane lipid peroxidation and glycolylated hemoglobin in diabetes. *Diabetes* 38:1539-1543.
- 3) Jariwalla, R.J. (2001). Rice Bran Products: Phytonutrients with potential applications in preventive and clinical medicine. *Drugs Exptl. Clin. Res.* XXVII(1):17-26.
- 4) Nutrastar advances rice bran revolution with a second patent issued for diabetes and cardiovascular health, April 26, 2002. Press release.
- 5) Pagnin, E., Fadini, G., De Toni, R., Tiengo, A., Calo, L. Avogaro, A. Diabetes induces p66shc gene expression in human peripheral blood mononuclear cells: Relationship to oxidative stress. *The Journal of Clinical Endocrinology & Metabolism* Vol.90, No.2:1130-1136.
- 6) The A,B,Cs of Micronutrients in Diabetes. In: *Nutra-ceuticals World*, May 2001.
- 7) Kestin, M. et al. Comparative effects of three cereal brans on plasma lipids, blood pressure, and glucose metabolism in mildly hypercholesterolemic men. *American J Clinical Nutrition* 52(4):661-666 (Oct 1990).
- 8) Hallfrisch, J., Behall, K.M.(2000). Mechanisms of the effects of grains on insulin and glucose responses. *J. Am. Coll. Nutr.*, June 1, 2000; 19(90003):320S-325.
- 9) Gandhi, V.M., Wagh, S.S., Natraj, C.V., Menon, K.K.G. (Sep. 1985). Lipoic acid and diabetes II: Mode of action and sipoic acid. *J. Bioscience*, Vol. 9, Numbers 1&2:pp. 117-127.
- 10) Sreemantula, S., Kilari, E.K., Vardhan, V.A., Jaladi, R. (2005). Influence of antioxidant (L-ascorbic acid) on tolbutamide induced hypoglycaemia/antihyperglycaemia in normal and diabetic rats. *BMC Endocrine Disorders*, 5:2.
- 11) Meier, R., Gassull, M.A. (2004). Consensus recommendations on the effects and benefits of fibre in clinical practice. *Clinical Nutrition Supplements* 1, 73-80.
- 12) Chen, C.W., Cheng, H.H. (Jun 2006). A rice bran oil diet increases LDL-receptor and HMG-CoA reductase mRNA expressions and insulin sensitivity in rats with streptozotocin/nicotinamide-induced type 2 diabetes. *J Nutr.* 136(6):1472-6.
- 13) Gannon, M.C., Nuttall F.Q., Saeed, A., Jordan, K., Hoover, H. (October 2003). An increase in dietary protein improves the blood glucose response in persons with type 2 diabetes. *American Journal of Clinical Nutrition*, Vo. 78, No. 4, 734-741.
- 14) Head, K.A. Type-I Diabetes: Prevention of the Disease and its complications. Review of the research on specific nutrients, botanicals, dietary and lifestyle factors, and their application in type-I diabetes. (*Alt Med Rev* 1997;2(4):256-281).

# Stabilized Rice Bran and Cardiovascular Disease



Product  
name:  
**MORE!**

## **Unsubstantiated Claims to be avoided:**

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- MORE! lowers LDL cholesterol levels.
- MORE! increases HDL cholesterol levels.
- MORE! lowers triglycerides.
- MORE! cures or treats heart disease.

## **Substantiated Claims:**

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- ***The active ingredients in MORE! have been shown to reduce triglycerides, elevate HDL (good) cholesterol, reduce serum and LDL cholesterol, reduce overall lipid levels, regulate blood pressure and inhibit platelet aggregation.***
- MORE! has at least 107 different antioxidants and very potent phytonutrients, which help to maintain normal lipid levels, thus significantly reducing the risk of cardiovascular disease.
- MORE! should be used in conjunction with a low-fat, high fiber diet to support normal blood cholesterol levels. The high quality fiber in MORE!, together with tocopherols, tocotrienols, gamma oryzanol, phytosterols, and inositol synergistically help to promote a healthy cardiovascular system.

## **Substantiated claims about the ingredients in MORE! and their role in the management of cardiovascular disease:**

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### **Tocotrienols**

- Have a hypolipidemic effect.
- Inhibit HMGCoA reductase, which is the key enzyme in biosynthesis of cholesterol.

### **Tocopherols**

- Inhibits LDL cholesterol oxidation.
- Exhibits antioxidant activity.

### **Gamma oryzanol**

- Inhibits platelet aggregation.
- Inhibits aortic fatty streak formation.
- Provides a hypolipidemic effect by lowering serum cholesterol.
- Reduces triglycerides.
- Elevates HDL cholesterol (good).
- Has an anti-inflammatory effect.
- Exhibits antioxidant activity.
- Inhibits ACAT (acyl-coenzymeA:acyl transferase) which esterifies cholesterol for storage within the cell or lipoproteins, thus facilitating cholesterol clearance, increasing HDL cholesterol, lowering VLDL synthesis and impairing intestinal absorption of cholesterol.



### **Fiber**

- Provides a hypolipidemic effect by lowering serum cholesterol.

### **Fat**

- Omega-3 fatty acids reduce serum cholesterol and LDL cholesterol.
- Omega-3 fatty acids elevate HDL cholesterol.
- Omega-3 fatty acids reduce overall lipid levels.

### **Phytosterols**

- Provide a hypolipidemic effect by reducing serum cholesterol levels.
- Improve immune function.

### **Polyphenols**

- Provide a hypolipidemic effect by reducing serum cholesterol levels.
- Exhibit an antioxidant effect.
- Provide an anti-inflammatory effect.
- Regulate blood pressure.

### **Antioxidants**

- Inhibit LDL cholesterol.
- Elevate immune function.
- Control lipid peroxidation at the cellular level.

## **Studies:**

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- 1) Qureshi, N., A. A. Qureshi, (1992), Tocotrienols: Novel Hypocholesterolemic Agents with Antioxidant Properties. In: Vitamin E in Health and Disease. Packer/Fuchs (Ed.) Marcel Dekker, Inc., New York, pp 245-267.
- 2) Pearce B.C., R. A. Parker, M. E. Deason, D. D. Dichino, E. Gillespie, A. A. Qureshi, K. Volk and Kim Wright J. J. 1994, Inhibitors of cholesterol biosynthesis 2. hypocholesterolemic and antioxidant activities of benzopyran and tetrahydronaphthalene analogues of the tocotrienols. Vol. 37:4pp., 526-541.
- 3) Madar, Z., (1983) Effect of brown rice and soybean dietary fiber on the control of glucose and lipid metabolism in diabetic rats. Am. J. Clin. Nutr. 38:388.
- 4) Qureshi, A. A., Sami, S. A., Khan, F.A. (2002) Effect of stabilized rice bran, its soluble and insoluble fraction on blood glucose levels and serum lipid parameters in humans with diabetes mellitus Types 1 and 2, J. Nutritional Biochemistry 13:175-187.
- 5) Cheruvanky, R. and Thummala R.C. (1991).. Nutritional and biochemical aspects of the hypolipidemic action of rice bran oil. Am. Coll. Of Nutrition 10(4):593-601.
- 6) Jariwalla, R. J. (1999). Inositol Hexaphosphate as an Anti-Neoplastic and Lipid-Lowering Agent. Anticancer Research 19:3699-3702.
- 7) Beg, Z.H., Timani, K.A. and Khan, S.Z. 1996. Impact of dietary rice bran oil on cholesterol dynamics in normolipidemic and hyperlipidemic humans and hyperlipidemic rats. FASEB 10(3):A187.
- 8) Gerhardt, A. L. and Gallo, N.B. 1998. Full-fat rice bran and oat bran similarly reduce hypercholesterolemia in humans. The Journal of Nutrition. 128 (5):865-869.
- 9) Raghuram, T.C., Brahmaji Rao, U., and Rukmini, C. 1989. Studies on the hypolipidemic effects of dietary rice bran oil in human subjects. Nutrition Reports International 39:889-895.
- 10) Rong, N., Ausman, L.M. and Nicolosi, R.J. 1997. Gamma-oryzanol decreases cholesterol absorption and aortic streaks in hamsters. Lipids. 32(3):303-309.
- 10) Sugano, M. and Tsuji, E. 1997. Rice bran oil and cholesterol metabolism. J. of Nutrition. 127 (3):521S-524S.



- 11) Hegsted, M, Windhauser, M. M. (1993). Reducing human heart disease risk with rice bran. In: Louisiana Agriculture, Vol. 36, No. 3, Summer 1993.
- 12) Sarkkinen, E.S. Et al., 1998 Fat-modified diets influence serum concentrations of cholesterol precursors and plant sterols in hypercholesterolemic subjects. Metabolism, Vol. 47:6 pp. 744-50.
- 13) Qureshi, A. A., Bradlow, B. A., Salser W. A., Brace L. D. (1997). Novel tocotrienols of rice bran modulate cardiovascular disease risk parameters of hypercholesterolemic humans. Nutritional Biochemistry. 8.
- 14) Minhajuddin, M. Rice bran oil may melt away cholesterol, fight cancer and infection. Food and Chemical Toxicology Journal May 2005.
- 15) Qureshi, A.A., Peterson, D.M., Hasler-Rapacz J.O., Rapacz, J. Novel Tocotrienols of Rice Bran suppress cholesterologenesis in hereditary hypercholesterolemic swine. Journal of Nutrition 2001, 131:223-230.
- 16) Qureshi, A.A., Salser W.A., Parmar, R., Emeson, E.E. Novel Tocotrienols of rice bran inhibit atherosclerotic lesions in C57BL/6 ApoE-deficient mice. Journal of Nutrition 2001, 131:2606-2618.
- 17) Cicero, A.F.G., Derosa, G. (2005). Rice Bran and its main components: Potential role in the management of coronary risk factors. Current Topics in Nutraceutical Research Vol. 3, No. 1, pp. 29-46.
- 18) Kestin, M. et al. Comparative effects of three cereal brans on plasma lipids, blood pressure, and glucose metabolism in mildly hypercholesterolemic men. American J Clinical Nutrition 52(4):661-666 (Oct 1990).
- 19) Truswell, A.S.. Cereal Grains and Coronary Heart Disease. In: Literature Reviews.
- 20) Jariwalla, R.J.(2001). Rice bran products: Phytonutrients with potential applications in preventive and clinical medicine. Drugs Exp Clin Res 27(1):17-26.
- 21) Hegsted, M., Konsik, C.S. (Spring 1994). Rice bran and rice bran oil may lower heart disease risk by decreasing cholesterol synthesis in the body. Louisiana Agriculture, Vol. 37, No.2.
- 22) Godber, J.S., Shin, T.S. (Spring 1994). Rice bran as a viable source of high value chemicals. Louisiana Agriculture, Vol. 37, No.2.
- 23) Nicolosi, R.J., Ausman, L.M., Hegsted, D.M. (1991). Rice bran oil lowers serum total and low density lipoprotein cholesterol and apo B levels in nonhuman primates. Atherosclerosis, 88:133-142.
- 24) Cheruvanky, R. Dietary Fiber from Rice Bran: Role of Dietary Fiber in Health and Disease. From: Nutraceutical Datasheet Services: 8(1-4).
- 25) Phytosterols and health benefits. From: Nutraceutical Datasheet Services:4.
- 26) Diaz, M.N., Frei, B., Vita, J.A., Keaney J.F. (Aug 7, 1997). Antioxidants and Atherosclerotic Heart Disease. The New England Journal of Medicine, No. 6, Vol. 337:408-416.
- 27) Simopoulos A.P. (1991). Omega-3 fatty acids in health and disease and in growth and development. The American Journal of Clinical Nutrition, Vol. 54, 438-463.
- 28) Bidlack, W.R. (1998). New Technologies for Healthy Foods & Nutraceuticals. Journal of the American College of Nutrition, Vol 17, No. 3, 296-297.



# Stabilized Rice Bran and Cancer

Product name:  
**MORE!**

## **Unsubstantiated Claims to be avoided:**

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- MORE! cures or treats cancer.

## **Substantiated Claims:**

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- **The active ingredients in MORE! have been shown to help prevent colon and large bowel cancer and have an anti-carcinogenic effect in cancer of several other organs.**
- MORE! has at least 107 different antioxidants and very potent phytonutrients, which can help to support proper immune function.
- MORE! may help in the prevention of cancer.

## **Substantiated claims about the ingredients in MORE! and their role in the prevention of cancer:**

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### **Ferulic Acid, Gamma-Oryzanol**

- Has an anti-mutagenic and anti-carcinogenic effect.

### **Inositol, IP6**

- Anti-carcinogenic effect in cancer of several organs.

### **Fiber**

- Helps to prevent colon and large bowel cancer.

### **Tocotrienols**

- Have an anti-carcinogenic effect on cancer of the mammary and large intestine.

### **Antioxidants**

- Prevent colon and large bowel cancer.

### **Phytosterols**

- Have an anti-carcinogenic effect.
- Protect against most cancers, such as colon, breast and prostate cancer.

### **Lipoprotein fraction**

- Capable of inducing apoptosis (cell suicide) of cultured human endometrial adenocarcinoma cells.
- Inhibits cell proliferation.
- Helps to suppress cancer progression.

### **Polysaccharides**

- Improve immune function.

### **Polyphenols**

- Acts in chemoprevention.



## Studies:

- 1) Jariwalla, R. J. (2001). Rice-bran products: Phytonutrients with potential applications in preventive and clinical medicine. *Drugs exptl. Clin. Res.* XXVII(1).17-26.
- 2) Awad, A.B., Fink C.S. (2000). Phytosterols as Anticancer Dietary Components: Evidence and Mechanism of Action. *J. Nutr.* 130:2127-2130.
- 3) Qureshi, A.A., Mo H., Packer L, Peterson D.M. (2000). Isolation and Identification of novel tocotrienols from rice bran with hypocholesterolemic, antioxidant and antitumor properties *J. Agric. Food Chem.* 2000, 48, 3130-3140.
- 4) Shamsuddin, A.M., Vucenik I., Cole K.E.. Minireview. IP6: A Novel Cancer Agent. In: *Life Sciences*, Vol. 61 No. 4 pp. 343-354, 1997.
- 5) Bidlack, W.R., Omaye S. T., Meskin M.S., Topham D.K.W. Phytosterols as bioactive agents. Chapter 13, pp. 213-240.
- 6) Nesaretnam, K., Stephen, R. Dils, R., Darbre, P. (1988). Tocotrienols inhibit the growth of human breast cancer cells irrespective of estrogen receptor status. *Lipids*, Vol. 33 no.5.
- 7) Vucenik, V., Sakamoto, K. Bansal, M., Shamsuddin, A.M. (1993). Inhibition of rat mammary carcinogenesis by inositol hexaphosphate (phytic acid) A pilot study. *Cancer Letters* 75, pp. 95-102.
- 8) Awad, A.B., Downie A.C., Fink, C.S. (2000). Inhibition of growth and stimulation of apoptosis by beta-sitosterol treatment of MDA-MB-231 human breast cancer cells in culture. *Int. J. Med.* 5(5):541-555.
- 9) Hudson, A., Dinh, A. Kokubun, T., Simmonds, M., Gescher, A. (2000). Characterization of potentially chemopreventive phenols in extracts of brown rice that inhibit the growth of human breast and colon cells. *Cancer Epidemiology, Biomarkers & Prevention* 2000, Vol. 9, 1163-1170.
- 10) Shoji, Y. Mita, T., Isemura M., Mega T., Sumihiro H., Isemura S., Aoyagi Y. (2001). A fibronectin-binding protein from rice bran with cell adhesion activity for animal tumor cells.
- 11) Young-Joon Surh, (2003). Cancer chemoprevention with dietary phytochemicals. *Nature Reviews-Cancer*, 3:768-780.
- 12) Ghoneum, M, Sastry Gollapudi (2003). Modified Arabinoxylan rice bran (MGN-3/Biobran) sensitizes human T cell leukemia cells to death receptor (CD95)- induced apoptosis. *Cancer Letters* 201:41-49.
- 13) Berges, R.R., Windler, H.J., Trampisch, Th. Senge and the beta-sitosterol study group. (1995). Randomized, placebo-controlled, double-blind clinical trial of beta-sitosterol in patients with benign prostatic hyperplasia. *Lancet* 345:1529-1532.
- 14) Awad, A.B., Fink C.S., Williams H., Kim, U.(2001). In vitro and in vivo (SCID mice) effects of phytosterols on the growth and dissemination of human prostate cancer PC-3 cells. *Eur. J. Cancer. Prev.* 10(6):507-513.
- 15) Von Holtz R.L., Fink C.S., Awad, A.B. (1998). Beta-Sitosterol activates the sphingomyelin cycle and induces apoptosis in LNCaP human prostate cancer cells. *Nutr. Cancer.* 1998, 32(1):8-12.
- 16) Minhajuddin, M. Rice bran oil may melt away cholesterol, fight cancer and infection. *Food and Chemical Toxicology Journal*, May 2005.
- 17) Rice bran products as dietary supplements to patients with breast cancer. In: *NutraStar, Datasheet Services*:7(1-2).
- 18) Cheruvanky, R. Chemopreventative effect of stabilized rice bran. In: *NutraStar, Nourishing the Body to Health*.
- 19) Cheruvanky, R. Rice Bran Products and Prostrate Health. In: *NutraStar, Nourishing the Body to Health*.

# Stabilized Rice Bran and Joint Health



Product name:  
**RUN!**

## **Unsubstantiated Claims to be avoided:**

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- RUN! cures arthritis.

## **Substantiated claims:**

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- ***The active ingredients in RUN! have been shown to have an anti-arthritic effect, provide an anti-inflammatory response, improve the absorption of calcium, reduce pain and inflammation, maintain synovial fluid and lubricated joints.***
- RUN! is a unique formula which may support joint health and enhanced flexibility.
- RUN! has anti-inflammatory properties and may help to reduce pain.
- RUN! May aid in the regeneration and maintenance of healthy cartilage.

## **Substantiated claims about the ingredients in RUN! and their role in joint health:**

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### **Phytosterols**

- Beta-sitosterol and its glucosides have an anti-arthritic effect.
- Act as a potent cox-2 inhibitor.

### **Gamma Oryzanol**

- Exhibits antioxidant activity.
- Provides an anti-inflammatory response.

### **Tocotrienols**

- Inhibit prostaglandin synthetase activity resulting an anti-inflammatory response.

### **Tocopherols**

- Provide antioxidant support.

### **Magnesium and trace minerals**

- Improve the absorption of calcium.

### **Glucosamine**

- Helps to build elastic cartilage.
- Maintains a cushioning fluid around the joints.
- Helps with tissue repair.

### **Methylsulphonylmethane (MSM)**

- Supports collagen synthesis.
- Reduces pain.
- Reduces inflammation.
- Maintains the synovial fluid and lubricates joints.

### **Grape Seed Extract**

- Acts as a potent antioxidant, helping to prevent free radical damage to the joints.
- Has an anti-inflammatory effect.

### **Yucca**

- Has an anti-inflammatory effect.
- Relieves joint pain.
- Improves joint function and mobility.



### **Boswellin**

- Acts a potent Cox-2 inhibitor.
- Suppresses the production of pro-inflammatory cytokines.

### **Curcumin**

- Acts as a Cox-2 inhibitor.
- Reduces the release of arachidonic acid .
- Reduces the production of pro-inflammatory cytokines.

### **Ashwagandha**

- Acts as a Cox-2 inhibitor.
- Inhibits several enzymes and tumor necrosis factor. These enzymes would otherwise dissolve the collagen, hyaluronic acid and elastin that are crucial for proper functioning of the joint cushion.

### **Ginger root powder**

- Acts as a powerful antioxidant.
- Has anti-inflammatory properties.

## **Studies:**

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- 1) Kelly, G.S. The Role of Glucosamine Sulfate and Chondroitin sulfates in the treatment of degenerative joint disease. *Alt Med Rev* 1998;3(1):27-39.
- 2) Gupta, M.B., Nath, R., Srivatsava, N., Shankar, K., Kishor, K and Bhargava, K P. 1980. Anti-inflammatory and anti-Pyretic effect of beta-sitosterol. *J. Medicinal plant Res.* 39:157-163.
- 3) Bucci R.L. Supplements for Joint Health. In: *Nutraceuticals World*, June 2001, pp. 72-84.
- 4) Almada, A. Natural COX-2 inhibitors – The Future of pain relief. In *Nutrition Science News*, August 2000.
- 5) Altman, R.D., Marcussen, K.C. Effects of a ginger extract on knee pain in patients with osteoarthritis. *Arthritis & Rheumatism*, Vol. 44, Issue 11, pp. 2531-2538.
- 6) Mishra, L.C., Singh, B.B., Dagenais, S. (Aug 2000). Scientific basis for the use of *Withania somnifera* (ashwagandha): a review. *Altern Med Rev*, 5(4): 334-346.
- 7) Cheeke P., Piacente, S. Oleszek, W. (Mar 2006). Anti-inflammatory and anti-arthritis effects of *yucca schidigera*: A review. *J Inflamm (Lond)*, 29, 3:6.

# Stabilized Rice Bran and Immune Function



Product name:  
**MORE!**

## **Unsubstantiated Claims to be avoided:**

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- MORE! can treat or cure autoimmune diseases.

## **Substantiated claims:**

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- **The active ingredients in MORE! have been shown to improve immune function and increase natural killer cell activity.**
- MORE!'s unique phytonutrients can support a healthy immune system.
- MORE! may help prevent diseases by increasing the immune response.

## **Substantiated claims about the ingredients in MORE! and their role in supporting the immune system:**

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### **Phytosterols (beta sitosterol) and phytosterol glucosides**

- Have a immunomodulatory effect.
- Stimulate human peripheral blood lymphocyte proliferation.
- Increase natural killer cell activity.

### **Water-soluble non-starchy polysaccharides**

- Stimulate cell wall cytokine production.
- Elevate the anti-inflammatory cascade.
- Improve immune function.

### **Omega-3 Fatty Acids**

- Powerful modulator of the immune system by synthesizing eicosanoids in the body.

### **Tocotrienols**

- Provide antioxidant support.
- Improve immune function by interfering with the cell's cytosol.

### **Ferulic Acid and other polyphenols**

- Elevate liver microsomal detoxification enzymes.
- Inhibit the microsomal carcinogen metabolizing enzymes.
- Protect the liver from toxicity.



## Studies:

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- 1) Patrick, L. Nutrients and HIV: Part Three-N-Acetylcysteine, Alpha-Lipoic Acid, L-Glutamine, and L-Carnitine. *Alternative Medicine Review* 2000,5(4):290-305.
- 2) Kidd, P. Th1/Th2 Balance: The Hypothesis, its limitations, and implications for health and disease. *Alternative Medicine Review* 2003,8(3):223-246.
- 3) Look, M.P., Kraemer K., Rockstroh, J.K., McCord J.M., Packer, L. High-Dose nutraceuticals in human immunodeficiency virus-disease. An understudied option? *Current Topics in Nutraceutical Research* 2003, 1(1):1-16.
- 4) Romeyn, M. Nutrition and HIV: A New Model for treatment. Vitamins, minerals and trace elements. In *BETA*, September 1995.
- 5) Cherukuri, R.S.V. Rice Bran Products and Immune Function. In: *Nutrastar, Nourishing the Body to Health*.
- 6) Allavena, C., Dousset B., May T., Dubois, F., Canton, P., Belleville F. Relationship of trace element, immunological markers, and HIV 1 infection progression. *Biological Trace Element Research* 1995, Vol. 47:133-138.
- 7) Bouic, P.J.D., Etsebeth, S., Liebenberg, R.W., Albrecht, C.F. Beta-sitosterol and beta-sitosterol glucoside stimulate human peripheral blood lymphocyte proliferation: Implications for their use as an immunomodulatory vitamin combination. *Internal Journal of Immunopharmacology* Dec. 1996.Vol.18 (12):693-700.
- 8) Bouic, P.J.D. Sterols/Sterolins, the natural, nontoxic immunomodulators and their role in the control of rheumatoid arthritis. In: *Newsletter of the Arthritis Trust of America*, Summer 1998.
- 9) Simopoulos, A.P. (2002). Omega-3 fatty acids in inflammation and autoimmune diseases. *American College of Nutrition*, Vol. 21, No. 6, 495-505.
- 10) Bouic, P.J.D., Lamprecht, J.H. (1999). Plant Sterols and Sterolins: A Review of their immune-modulating properties. *Altern Med Rev*, 4(3):170-177.

# Stabilized Rice Bran and Liver Health



Product name:  
**MORE!**

## **Unsubstantiated Claims to be avoided:**

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- MORE! can treat or cure liver cirrhosis.

## **Substantiated Claims:**

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- **The active ingredients in MORE! have been shown to improve liver cell regeneration, support liver detoxification, help protect the liver from toxicity and liver cells from damage.**
- MORE!'s unique blend of phytonutrients provides nutritional support for the liver.
- MORE! may help in cell regeneration and detoxification of the liver.
- MORE!'s nutrient content of certain B vitamins, including vitamin B1, niacin, and pantothenic acid together with antioxidants provides excellent liver nutrition.

## **Substantiated claims about the ingredients in MORE! and their role in supporting liver health:**

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### **Inositol, Inositol hexaphosphate and phytates**

- Control liver cirrhosis.
- Improve liver cell regeneration.
- Support effective liver detoxification.

### **B-complex vitamins**

- Help to improve liver cirrhosis.
- Support liver detoxification.

### **Tocotrienols, gamma**

- Control liver cirrhosis.
- Help in effective liver detoxification.

### **Oryzanol, phosphatidyl choline, antioxidants**

- Protect against liver damage.
- Antioxidants enzymes prevent lipid peroxidation.
- Antioxidants help protect the liver cells from damage.
- Antioxidants help protect the liver from toxicity.

## **Studies:**

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- 1) Kidd, P.M. Phosphatidylcholine: A Superior protectant against liver damage. *Al Med Rev* 1996;1(4):258-274.
- 2) Canty D.J., Zeisel, S.H. Lecithin and choline in human health and disease. *Nutrition Reviews*. 52(10):327-39,1994.
- 3) Ghoshal A.K., Farber E. Choline deficiency, lipotrope deficiency and the development of liver disease including liver cancer: a new perspective. *Laboratory Investigation*. 68(3)255-60, 1993.
- 4) Srinivisan M. Rukkumani, R., Sudheer, A.R., Menon, V.P. (Aug 2005). Ferulic acid, a natural protector against carbon tetrachloride-induced toxicity. *Fundamental & Clinical Pharmacology*, Vol. 19, page 491.



Product  
name:  
**MORE!**

# Stabilized Rice Bran and Gastroenterological Disorders

## **Unsubstantiated Claims to be avoided:**

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- MORE! can treat or cure diseases of the digestive tract.
- MORE! can treat or cure bowel problems.
- MORE! can treat or cure gallbladder problems or gallstones.

## **Substantiated claims:**

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- MORE!'s unique blend of insoluble fiber and antioxidants support bowel regularity.
- MORE! may improve gastrointestinal health.
- MORE! may help in alleviating occasional constipation.

## **Substantiated claims about the ingredients in MORE! and their role in supporting a healthy bowel:**

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### **Fiber**

- Adds to the bulk of the diet by assisting in the transit of food in the gastrointestinal tract.
- Holds water, softens stools and allows for easy excretion.

### **Inositolhexaphosphate and phytates**

- Help to manage kidney and gallbladder stones.
- Prevents hypercalcuria.
- Promote gastrointestinal and colon health.

### **Gamma Oryzanol**

- Has an anti-ulcerative action on gastric lesions.



## Studies:

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1. Evans, M.A., Shronts, E.P. Intestinal fuels: Glutamine, short-chain fatty acids, and dietary fiber. *J Am Diet Assoc.* 1992 Oct;92(10):1239-1246, 1249.
2. Folino, M., McIntyre A., Young, G.P. Dietary fibers differ in their effects on large bowel epithelial proliferation and fecal fermentation-dependent events in rats. *J Nutr.* 1995 Jun;125(6):1521-8.
3. Jahnhen, A., Heynck H., Gertz B., Classen A., Hesse A. Dietary fibre: The effectiveness of a high bran intake in reducing renal calcium excretion (1991). *Experimentelle Urologie, Universitaetsklinik Bonn, Bonn, FRG.*
4. Ebisuno S., Morimoto S., Yasukawa S., Ohkawa T. Results of long-terms rice bran treatment on stone recurrence in hypercalciuric patients. *Br. J Urol* 1991 March;67(3):237-40.
5. Ingels, D. Dietary Fiber Improves Bowel Incontinence in Adults. In *Healthnotes, Bastyr Center for Natural Health* 2002.
6. Slavin, J.L. New research on the health effects of dietary fiber: Epidemiological and clinical evidence. Dept. of Food Science & Nutrition, Univ. of Minnesota. Session 66, The fiber conundrum: Fiber requirements and new fiber definitions.
7. Dietary fiber: An essential part of a healthy diet. *MayoClinic.com.* Dec. 16, 2005.
8. Gamma oryzanol. *Www.remedyfind.com.*
9. Ichimaru, Y., Moriyama M., Ichimaru, M., Gomita Y. Effects of gamma-oryzanol on gastric lesions and small intestinal propulsive activity in mice. *Nippon Yakurigaku Zasshi.* 1984 Dec;84(6):537-42.

# Stabilized Rice Bran and Weight Loss



Product name:  
**LESS! and  
INSTEAD!**

## **Unsubstantiated Claims to be avoided:**

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- LESS! is a cure for obesity.
- INSTEAD! makes you lose weight.
- LESS! makes you lose weight.

## **Substantiated Claims:**

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- The unique soluble and insoluble fiber ratio in LESS! and INSTEAD! can support healthy weight loss.
- The unique CHO:PRO ratio in LESS! supports healthy weight loss as part of a healthy diet.
- The adequate protein supply in LESS! helps to preserve lean body tissue while promoting fat loss.
- The unique soluble and insoluble fiber ratio in LESS! helps to reduce hunger.

## **Substantiated claims about the ingredients in LESS! and INSTEAD! and their role in supporting weight loss:**

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### **Fiber**

- Provides prolonged satiety.
- Curbs hunger.

### **Omega-3, omega-6 fatty acids**

- Provide sustained energy.

### **CHO:PRO ratio**

- Helps to provide sufficient energy.
- Helps to preserve lean body tissue.
- A diet high in protein helps to burn fat.
- Helps to curb appetite.
- Protein provides prolonged satiety.



## Studies:

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- 1) Slavin, J. Dietary fiber: Mechanisms or magic on disease prevention? In: Nutrition Today 2004.
- 2) Pasman, W.J., Saris, W.H.M., Wauters, M.A.J., Westerterp-Plantenga, M.S. (1997). Effect of One Week of Fibre Supplementation on Hunger and Satiety and Energy Intake. *Appetite*, 29:77-87.
- 3) Iqbal, S.I., Helge J.W., Heitmann, B.L. (2006). Do Energy Density and Dietary Fiber Influence Subsequent 5-Year Weight Changes in Adult Men and Women? *Obesity* 14:106-114.
- 4) Layman, D.K., Baum, J.I. (2004). Dietary Protein Impact on Glycemic Control during Weight Loss. *J. Nutr* 134:968S-973S.
- 5) Westerwerp-Plantenga, M.S., Jejeune, M.P.G.M., Nijs I., Van Ooijen, M., Kovacs, E.M.R. High protein intake sustains weight maintenance after body weight loss in humans. (Jan 2004). *International Journal of Obesity*, Vol. 28, No.1, pp. 57-64.
- 6) Aziz, A., Anderson, G.H. (July 2003). Extendin-4, a GLP-1 Receptor Agonist, interacts with proteins and their products of digestion to suppress food intake in rats. *J. Nutr.* 133(7):2326-30.
- 7) Bowen, J., Noakes, M., Clifton, P.M. (2006). Appetite regulatory hormone responses to various dietary proteins differ by BMI status despite similar reduction in ad libitum energy intake. *Journal of Clinical Endocrinology & Metabolism*. 10.1210/jc.2006-0609.