



Bowel Build

Product Code: 2857 (120 capsules)
Key System Product Intestinal

Bowel Build is a key product for the intestinal system. Each capsule also contains psyllium hulls, and chlorophyll to provide needed bulk, encourage proper flow of waste and detoxify the colon. Althea and ginger have been added for a soothing, effect on the digestive system.

Bowel Build provide antioxidant and immune system support. Furthermore, research indicates that nutrients with antioxidant properties, including vitamins A, C and E, as well as selenium, may play a role in lowering the risks of colorectal cancer.^{1,2}

Take 3 to 4 capsules daily with morning and evening meal.

Each three capsules contain: RDA (Recommended Daily Allowance)

Vitamin A 648µg (from 1080µg beta-carotene)
Vitamin C 30mg,
Vitamin E (d-alpha tocopherol) 4mg,
Zinc (gluconate) 3mg,
Selenium (amino acid chelate) 15µg,
Betaine HCl 24mg,
Pancreatin 108mg,

These nutrients come in a base of psyllium hulls, yellow dock root, algin, bentonite, apple pectin, charcoal, vitamin c, ginger rhizome and sodium copper chlorophyllin.

Take 3 - 4 capsules daily with morning and evening meal (120 capsules).

May cause a reaction in persons allergic to inhaled or ingested psyllium.

Ingredients:

Psyllium hulls, sapsule shell (gelatin, water), yellow dock root, algin, althea root, apple pectin, bentonite, charcoal, vitamin C, ginger rhizome, betaine hydrochloride, zinc gluconate, selenium, sodium copper chlorophyllin, vitamin E, beta-carotene, Excipients: cellulose, magnesium stearate, silicon dioxide. (Herbs dried and powered).

Important Information:

See your health care provider prior to use if you are pregnant or nursing. May course a reaction in persons allergic to inhaled or ingested psyllium.

Betaine HCl, also known as hydrochloric acid, is secreted by the stomach's parietal cells in order to achieve efficient protein digestion. HCl not only aids digestion by denaturing protein, it also kills any ingested bacteria and parasites and makes some minerals (including calcium and iron) more absorbable. Insufficient HCl can lead to anemia and osteoporosis, in spite of iron- and calcium-rich dietary intake. Therefore, supplemental hydrochloric acid not only improves digestion, but also enhances calcium absorption.³⁻⁷

Pancreatin is produced by the pancreas to digest proteins, carbohydrates and fats in alkaline environments. Derived from bovine pancreatic enzymes, pancreatin is commonly used to treat pancreatic insufficiency and associated impaired digestion, malabsorption, nutrient deficiencies, flatulence and abdominal discomfort.^{3,4,9}

Pepsin (contains lactose from milk) is an enzyme that assists the digestion of proteins in the acidic environment of the stomach by converting proteins into short chains of amino acids. Pepsin is also used to remedy a lack of appetite.^{3,4,7}

Psyllium hulls (*Plantago ovata*) are a source of dietary fiber that has been shown to shorten gastrointestinal transit time and increase stool weight and moisture content. Thus, psyllium hulls are effective for restoring and maintaining regular and easy bowel movements. Psyllium hulls also bind with carcinogens and other potential toxins in the colon and have been shown to inhibit the growth of parasitic amoebas, which cause dysentery and ulceration of the colon and liver.¹⁰⁻¹⁴

Algin, a water-absorbing, gelatinous fiber derived from brown seaweed, has been shown to inhibit toxic heavy metal uptake in the bowels. Algin binds heavy metals and other toxins in the gastrointestinal tract and exerts a bulk laxative action that draws these substances out of the body in the feces.¹⁵⁻²¹

Apple pectin, a source of water-soluble dietary fiber, helps soften stools and increases bowel transit time, thus minimizing reuptake of heavy metals from the bowels. Apple pectin binds heavy metals, as well as chemical toxins, in the intestines and expels them from the body.^{15,16,24-26}

Charcoal - For decades, activated charcoal has been the most widely-used antidote for the majority of poisons, due to its ability to prevent the absorption of most toxic substances from the gastrointestinal tract. Activated charcoal also helps enhance the elimination of some toxins after they have been absorbed. In addition, activated charcoal has been shown to reduce intestinal gas and accompanying symptoms, including bloating and abdominal cramps stemming from intestinal gas.^{30,31}

Sodium copper chlorophyllin is a mixture of water-soluble derivatives of chlorophyll, the substance that gives plants their green color. Chlorophyll has been used to eliminate bad breath and reduce the odors of infected wounds, feces and urine. Research also indicates that chlorophyll provides anti-inflammatory, antioxidant and wound-healing properties. In addition, preliminary evidence shows that chlorophyllin hinders the bioavailability of carcinogens (cancer-causing substances) and promotes their elimination in the feces.^{5,35-39}

Bentonite clay is a mineral-rich smectite clay commonly used to detoxify the intestinal tract. Bentonite both absorbs toxins into its internal structure, as well as adsorbs substances to its surface—positively charged toxins are attracted to the negatively charged edges of the clay material. Bentonite also readily absorbs water, yet remains virtually insoluble, which makes it useful as a bulk laxative.⁴⁰⁻⁴²

Ginger (*Zingiber officinale*) root contains various compounds that act as digestive stimulants, enhancing gall bladder activity and encouraging the production of digestive fluids and saliva. Ginger also improves gastric motility (movement through the digestive tract), while exerting antispasmodic (muscle-relaxing) effects to reduce intestinal cramping, thus confirming its use as a gastrointestinal tonic. Ginger is approved by the German Commission E for dyspepsia (indigestion).^{5,10,22,23}

Yellow Dock was used during Medieval times to heal blisters, boils, burns, eczema, psoriasis, scalds, skin rashes and syphilitic lesions. The powdered root, having abrasive and astringent qualities, was used to tighten gums.

In more recent times, yellow dock has become favored as a tonic for the liver and gall bladder, due to its astringent purification of the blood supply to the glands. Compared to other herbs, yellow dock has one of the most prominent reputations for clearing skin problems, relieving glandular inflammation and swelling, and curing a variety of bladder ailments and liver diseases, including jaundice. Many Native American medicine men were quite competent in using yellow dock for treating jaundice. Yellow dock also works as a laxative, encouraging the production of bile and digestive fluids and easing inflammatory bowel conditions.

Yellow dock contains cleansing, laxative substances called anthraquinones and anthraquinone glycosides, thus making this herb helpful for mild constipation and for clearing up skin eruptions associated with intestinal toxicity. Yellow dock also contains tannins which produce an astringent effect, tightening skin tissues when applied externally.

Yellow dock is used topically for itching, such as is associated with chicken pox.

Yellow dock is rich in ascorbic acid (vitamin C), vitamin A and iron, and is often used to improve iron levels in pregnant women and those suffering anemia. Yellow dock also supplies calcium, magnesium, phosphorus, and selenium.

References:

- 1Kune, G. & Watson, L. "Colorectal cancer protective effects and the dietary micronutrients folate, methionine, vitamins B6, B12, C, E, selenium, and lycopene." *Nutrition and Cancer*; 2006, 56(1):11-21.
- 2Chiu, B.C., et. al. "Dietary factors and risk of colon cancer in Shanghai, China." *Cancer Epidemiology, Biomarkers & Prevention*; 2003, 12(3):201-208.
- 3Cichoke DC, A. *Enzymes & Enzyme Therapy, 2nd Ed.* Los Angeles, CA: Keats, 2000.
- 4Dittmar MD, F. & Wellmann, J. *Enzyme Therapy Basics.* NY, NY: Sterling Publishing, 2000.
- 5Lininger Jr, S., et. al. *The Natural Pharmacy, 2nd Ed.* Rocklin, CA: Prima Publishing, 1999.
- 6Mindell PhD, E. & Hopkins, V. *Prescription Alternatives, 2nd Ed.* Los Angeles, CA: Keats, 1999.
- 7Golan MD, R. *Optimal Wellness.* NY, NY: Ballantine Books, 1995.
- 8Murray ND, M. & Pizzorno ND, J. *Encyclopedia of Natural Medicine.* Prima Publishing, 1998.
- 9Whitaker MD, J. *Dr. Whitaker's Guide to Natural Healing.* Rocklin, CA: Prima Publishing, 1996.
- 10*Herbal Medicine: Expanded Commission E Monographs.* Newton, MA: Integrative Medicine, 2000.
- 11"Plantago ovata. (Psyllium)." *Alternative Medicine Review*; 2002, 7(2):155-159.
- 12Fetrow, C. & Avila, J. *Professional's Handbook of Complementary & Alternative Medicines.* Springhouse, 1999.
- 13Jacobs, L.R. "Relationship between dietary fiber and cancer: metabolic, physiologic, and cellular mechanisms." *Proceedings of the Society for Experimental Biology and Medicine*; 1986, 183(3):299-310.
- 14Zaman, V., et. al. "The presence of antiamebic constituents in psyllium husk." *Phytotherapy Research*; 2002, 16(1):78-79.
- 15Bock MD, S. "Diagnosis and Treatment of Heavy Metal Toxicity." *International Journal of Integrative Medicine*; 1999, 1(6):7-12.
- 16Pizzorno, J. & Murray, M. *Textbook of Natural Medicine, 2nd Ed.* London: Churchill Livingstone, 1999.
- 17Rose, H.E. & Quarterman, J. "Dietary fibers and heavy metal retention in the rat." *Environmental Research*; 1987, 42(1):166-175.
- 18Stansbury ND, J. "Cancer Prevention Diet." *Nutrition Science News*; August 1999.
- 19Fremerman, S. "Kelp." *Natural Health*; 1999; 29(9):42.
- 20Seki, H. & Suzuki, A. "Biosorption of Heavy Metal Ions to Brown Algae, *Macrocystis pyrifera*, *Kjellmaniella crassifolia*, and *Undaria pinnatifida*." *Journal of Colloid and Interface Science*; 1998, 206(1):297-301.
- 21Mowrey PhD, D. *The Scientific Validation of Herbal Medicine.* New Canaan, CT: Keats Publ., 1986.
- 22Presser PharmD, A. *Pharmacist's Guide to Medicinal Herbs.* Petaluma, CA: Smart Publications, 2000.
- 23Kirkitadze, M.D., et. al. [Stabilization of the alpha-fetoprotein structure with sucrose]. *Bioorganicheskaja Khimiia*; 1996, 22(6):408-414.
- 24Crinnion ND, W.J. "Environmental Medicine, Part Three: Long-Term Effects of Chronic Low-Dose Mercury Exposure." *Alternative Medicine Review*; 2000, 5(3):209-223.
- 25Fitzgerald, F. "Detoxify for better health." *Nature's Impact*; April/May, 1998.
- 26Kartel, M.T., et. al. "Evaluation of pectin binding of heavy metal ions in aqueous solutions." *Chemosphere*; 1999, 38(11):2591-2596.
- 27Pedersen, M. *Nutritional Herbology.* Warsaw, IN: Wendell W. Whitman Company, 1994.
- 28Stuart PhD, A.G. "Echinacea." *University of Texas at El Paso & University of Texas - Austin.* <<http://www.herbalsafety.utep.edu/medical.asp?pk=7>>. Accessed April 2005.
- 29Foster, S. & Duke, J.A. *A Field Guide to Medicinal Plants and Herbs of Eastern and Central North America.* Boston, MA: Houghton Mifflin, 1990.
- 30Lapus, R.M. "Activated charcoal for pediatric poisonings: the universal antidote?" *Current Opinion in Pediatrics*; 2007, 19(2):216-222.
- 31Jain, N.K., et. al. "Efficacy of activated charcoal in reducing intestinal gas: a double-blind clinical trial." *American Journal of Gastroenterology*; 1986, 81(7):532-535.
- 32Mills, S. & Bone, K. *Principles and Practice of Phytotherapy.* London: Churchill Livingstone, 2000.
- 33Newall, C., et. al. *Herbal Medicines.* London, England: The Pharmaceutical Press, 1996.
- 34Wurges, J. "Marsh Mallow." *Gale Encyclopedia of Alternative Medicine*; 2001. <http://www.findarticles.com/p/articles/mi_g2603/is_0005/ai_2603000509> Accessed August 2005.
- 35Ferruzzi, M.G., et. al. "Sodium copper chlorophyllin: in vitro digestive stability and accumulation by Caco-2 human intestinal cells." *Journal of Agricultural and Food Chemistry*; 2002, 50(7):2173-2179.
- 36Nahata, M.C., et. al. "Effect of chlorophyllin on urinary odor in incontinent geriatric patients." *Drug Intelligence & Clinical Pharmacy*; 1983, 17(10):732-734.
- 37Kumar, S.S., et. al. "Scavenging of reactive oxygen species by chlorophyllin: an ESR study." *Free Radical Research*; 2001, 35(5):563-574
- 38Kensler, T.W., et. al. "Strategies for chemoprevention of liver cancer." *European Journal of Cancer Prevention*; 2002, 11(Suppl 2):S58-64.
- 39Ardelt, B., et. al. "Chlorophyllin protects cells from the cytostatic and cytotoxic effects of quinacrine mustard but not of nitrogen mustard." *International Journal of Oncology*; 2001, 18(4):849-853.
- 40Knishinsky, R. *The Clay Cure.* Rochester, VT: Healing Arts Press, 1998.
- 41"Bentonite." *PDRhealth, 2003.* <http://www.pdrhealth.com/drug_info>. Accessed November 2003.
- 42Madkour, A.A., et. al. "Smectite in acute diarrhea in children: a double-blind placebo-controlled clinical trial." *Journal of Pediatric Gastroenterology and Nutrition*; 1993, 17(2):176-181.