



Bowel Detox

Stock #3020-8 (120 capsules)

Bowel Detox is designed as an intestinal cleansing and maintenance formula, containing a variety of vitamins, enzymes and herbs that promote intestinal health and provide dietary fiber. Bowel Detox supplies bulking agents and nutrients that stimulate peristaltic action in the colon and improve intestinal transit time to promote regular elimination of waste material. In addition, Bowel Detox contains substances that help improve digestion, absorb toxins from the gastrointestinal tract, and 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}

Each serving of Bowel Detox contains vitamin A, vitamin C, vitamin E, zinc and selenium in a base of:

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

Bile salts emulsifies dietary fats to allow for their absorption by way of the intestinal mucosa into the lymphatic vessels for transportation through the body. Supplemental bile salts also increase the output of bile and help promote a mild laxative effect.^{3,6-8}

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

Cascara sagrada (*Rhamnus purshiana*) contains substances that increase the tone of the smooth muscle in the wall of the large intestine and promote peristalsis. The German Commission E has approved the use of cascara for constipation. Cascara is also helpful in situations where a soft stool is desirable, as in the case of hemorrhoids, anal fissures, or post rectal-anal surgery. Cascara is not recommended during pregnancy or while breast-feeding, as it can increase the risk of diarrhea in breast-fed infants.^{10,12,22}

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}

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}

Parthenium (*Parthenium integrifolium*), a close relative of echinacea, has traditionally been used to treat colds and other respiratory infections, as well as general debility and fatigue, and gastrointestinal infections. Parthenium is reported to be a good source of vitamin A and zinc, both of which are important nutrients for healthy immune system

function.²⁷⁻²⁹

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}

Marshmallow (*Althaea officinalis*) is well-known for its ability to soothe inflamed mucous membranes and aid in the healing of minor wounds and abrasions. Marshmallow's healing effect is due in large part to its mucilage content. Mucilage coats the internal mucosa, protecting them from local irritations and inflammation. According to the German Commission E, marshmallow also stimulates phagocytosis—the ingestion of bacteria or other foreign bodies by phagocytes (a type of white blood cell). Such anti-inflammatory, anti-irritant and immune-stimulant properties support the use of mucilages, like marshmallow, for the treatment of inflammation of the gastrointestinal tract.^{5,10,12,32-34}

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

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 antiameobic 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.