

# Flush Toxins Out of the Body with a Combination of Natural Cleansers

## Excessive Environmental Toxins and Metabolic Wastes Can Make the Body Vulnerable to Disease

The human body has a natural ability to neutralize and eliminate toxic substances. The liver and kidneys filter and detoxify pollutants for removal through bodily processes such as elimination, respiration and perspiration. When there are more contaminants than the body's detoxification systems can handle, the body becomes vulnerable to various health disorders.<sup>(1)</sup>

Various types of toxins can accumulate. Some are external pollutants; others are waste products of normal body processes. The body's capacity to rid itself of these toxins is crucial to optimum health.<sup>(1)</sup>

- **Heavy Metals** -- These include nickel, cadmium, arsenic, mercury and lead. Industrial pollution and automobile exhaust fumes are major sources of heavy metal contaminants. Exposure to mercury can come from contaminated fish or dental fillings. Cadmium and lead are components of cigarette smoke. Headaches, indigestion, tremors, anemia, dizziness, coordination problems, fatigue, constipation and learning disorders have all been linked to heavy metal exposure.<sup>(1)</sup>
- **Chemicals** -- These include pesticides, herbicides, solvents (such as cleaning materials, formaldehyde and benzene), food additives and dry cleaning fluids. Adverse effects on the body can

### EX-TOX™ Special Amino Acids, Sodium Alginate Bentonite and Other Factors

Product No.461    Fill Size: 90 Capsules

Each capsule contains:	% Daily Value
Vitamin C ----- 600 mg.	1,000%
DL-Methionine ----- 600 mg.	*
Sodium Alginate ----- 450 mg.	*
Bentonite ----- 300 mg.	*
Fruit Pectin ----- 150 mg.	*
L-Lysine ----- 60 mg.	*
Chlorophyll ----- 60 mg.	*
Garlic Powder ----- 30 mg.	*

Other ingredients: microcrystalline cellulose, gelatin.

\* Daily Value not established.

**Suggested Use:** One or two capsules, three times daily, between meals.

include nervous system impairment, allergies, tumors, headaches and mental confusion.<sup>(1)</sup>

- **Microbial Compounds** -- These toxins produced by bacteria and yeast in the gut can be absorbed into the bloodstream and have been linked to various disorders such as liver disease, ulcerative colitis, thyroid disease, allergies, immune disorders and other health problems.<sup>(1)</sup>
- **Waste Products of Metabolism** -- Waste products such as ammonia and urea are produced by the body when proteins are broken down. The kidneys do most of the work eliminating these substances.<sup>(1)</sup>

## Bentonite Attracts and Absorbs Toxins in the Intestines

**Bentonite**, also known as montmorillonite or smectite, is a medicinal powdered clay derived from deposits of weathered volcanic ash. The clay is inert in the body, meaning it passes through the body undigested; however, in the intestines it attracts and absorbs toxins (heavy metals, free radicals, pesticides) to remove them from the body.<sup>(2)</sup>

Bentonite was formed when volcanic ash fell into the sea. As the ash filtered through the sea water, it collected pure minerals, forming a layer of highly mineralized clay. Since these minerals are negatively charged while toxins tend to be positively charged, the clay works like a magnet to attract and absorb toxins. In addition, when bentonite is combined with water it has a huge surface area. Even a small amount of bentonite has an enormous capacity for absorbing toxins.<sup>(2)</sup>

Bentonite may also reduce allergic reactions by neutralizing allergens and relieve indigestion by absorbing excess stomach acids. However, its primary use in promoting health is as a general detoxification and cleansing agent.<sup>(2)</sup>

### Fiber Cleanses the Colon

Indigestible dietary fiber helps cleanse the colon by moving waste materials out more quickly. Normal function of the intestinal tract depends upon the presence of adequate fiber.<sup>(3)</sup> Gel-forming fibers such as **sodium alginate** and **fruit pectin** are also helpful in removing unwanted metals, pollutants, carcinogens and toxins. Sodium alginate, a salt of alginic acid derived from brown seaweeds, is a water-absorbing hydrocolloid. Alginates have a binding action that absorbs and helps eliminate heavy metals such as radioactive Strontium 90

(over)

which may be present in some foods. Strontium 90 can bind with calcium and damage bone marrow.<sup>(4,5)</sup>

Fruit pectin forms a gel that binds cholesterol and bile acids in the gut and promotes their excre-

## Essential Amino Acids for Detoxification Processes

The essential amino acid **methionine** is a methyl donor and is one of the sulphur-containing amino acids. It is used in the body to form the amino acids cysteine and cystine, all of which act as powerful detoxification agents, being capable of removing toxic levels of heavy metals such as lead from the body. The sulphur amino acids also protect against the effects of radiation. As a methyl donor, it can combine with and neutralize harmful superoxide radicals.<sup>(8)</sup>

Methionine also assists in the breakdown of fats, thus helping to prevent a buildup of fat in the liver and arteries. Proper liver function is essential to detoxification. The liver detoxifies ammonia produced as a byproduct of protein digestion and bacterial fermentation of food in the intestines.<sup>(7)</sup>

**Lysine**, another essential amino acid, is known for its ability to halt viral replication, particularly the herpes simplex virus.<sup>(8)</sup>

### Vitamin C Therapy

The water-soluble antioxidant, **vitamin C**, enhances the body's ability to detoxify naturally. It has been found valuable in minimizing the effects of environmental pollution including carbon monoxide, cadmium, mercury, lead, iron, copper, arsenic, benzene and some pesticides. It also prevents formation of carcinogenic nitrosamines from nitrites and nitrates found in some foods. Pollutants such as cigarette smoke seriously deplete blood levels of vitamin C.<sup>(3)</sup>

### Chlorophyll Neutralizes Toxins

A natural deodorizer commonly used in mouthwash, breath fresheners and deodorants, **chlorophyll** taken internally helps build the blood, stimulate liver function and detoxify chemical pollutants. Research on chlorophyll reports radioprotective, antimutagenic and anticarcinogenic properties.<sup>(9)</sup> Chlorophyll supports healthy liver function and may bind carcinogens, preventing their absorption by the intestines.<sup>(10)</sup>

tion.<sup>(4)</sup> Pectin also exerts antibacterial action against *Staphylococcus aureus*, *Streptococcus faecalis*, *Pseudomonas aeruginosa* and *Escherichia coli* and it reduced the incidence of colon tumors in animal studies.<sup>(6)</sup> It is also valuable in radiation therapy.<sup>(7)</sup>

### Garlic Is Antimicrobial and Antifungal

**Garlic** has been used throughout history and around the world for treatment of a wide variety of conditions, especially infections. Garlic's antibiotic activity was noted by Pasteur in 1858 and garlic was used by Albert Schwietzer in Africa for treatment of dysentery.<sup>(11,12)</sup>

More recent research has shown garlic to have broad-spectrum antimicrobial activity against many types of bacteria, viruses, worms and fungi, particularly *Candida albicans*.<sup>(7,11)</sup>

Several compounds in garlic also appear enable the liver to detoxify cancer-causing chemicals before they can do much harm. Others may work, at least in part, by preventing dietary nitrites from converting to carcinogenic nitrosamines.<sup>(12)</sup>

WARNING: This information is provided for health care professionals only. **This publication and the product contained herein have not been approved or evaluated by the Food and Drug Administration. This publication, and the product contained herein are not intended to diagnose, treat, cure or prevent any disease.** The product relates to nutritional support only.

### References

1. "Detoxification", **A Guide to Alternative Medicine**, Versaware, Inc., 2000.
2. "Cleanse Yourself Internally with Liquid Clay -- The Bentonite Cure", [alternativemedicine.com](http://alternativemedicine.com).
3. Kirschmann J, Dunne L, **Nutrition Almanac Second Edition**, McGraw-Hill, New York, NY, 1984
4. Murray M, Pizzorno J, **Encyclopedia of Natural Medicine**, Prima Publishing, Rocklin, CA, 1991.
5. "Algin: Bulking agent for reflux protection appetite control and pollution protection", *Health Education Library*, [herbaldave.com](http://herbaldave.com), 2000.
6. Tazawa K, Okami H, Yamashita I, Ohnishi Y, Kobashi K, Fujimake M, "Anticarcinogenic action of apple pectin on fecal enzyme activities and mucosal or portal prostaglandin E2 levels in experimental rat colon carcinogenesis", *J Exp Clin Cancer Res*, 1997 Mar;16(1):33-8.
7. Balch J, Balch P, **Prescription for Nutritional Healing**, Avery Publishing Group, Inc. Garden City Park, NY, 1990.
8. Chaitow L, **Amino Acids in Therapy**, Healing Arts Press, Rochester, VT, 1988.
9. Lau B, "Edible Plant Extracts Modulate Macrophage Activity and Bacterial Mutagenesis", *Int J of Clin Nutr*, July 1992;12(3):147-55.
10. Onken M, "Chlorophyll: Absorption in human digestive tract", *Biochemistry*, MadSci Network, 1995-99.
11. Werbach M, Murray M, **Botanical Influences on Illness**, Third Line Press, Tarzana CA, 1994.
12. Hendler S, **The Doctors' Vitamin and Mineral Encyclopedia**, Simon & Schuster, New York, NY, 1990.

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