

ALLERGEN-FREE FORMULAS

PRODUCT INFORMATION

Product Name:

HM Dtox

NPN:

80010791

Galenic Form:

Vegetable Capsules

Format:

Available in bottles of 120 vegetable capsules.

Ingredients:

Each capsule contains:

Chlorella (<i>Chlorella pyrenoidosa</i>) whole plant.....	250 mg
N-Acetyl L-Cysteine.....	200 mg
DL-Alpha lipoic acid.....	80 mg
R-Alpha lipoic acid.....	20 mg
Magnesium (glycinate, malate).....	30 mg
Selenium (L-selenomethionine).....	25 mcg

Non-medicinal ingredients:

Hypromellose, stearic acid, silicon dioxide.

This product does not contain corn, dairy, egg, gluten, shellfish, soy, sulfites, animal derivatives or artificial colours, flavours or preservatives.

Formula Rationale:

RxBalance™ HM Dtox protects the body from oxidative damage due to toxic metal exposure in the environment and promotes the production of glutathione. The primary goal of this formula is to safely eliminate toxins (especially heavy metals) from the body through optimizing nutrient support for efficient detoxification. This product also contains potent antioxidants that neutralize the damaging effects of ROS (reactive oxygen species) generated by heavy metals. During times of environmental stress, ROS can increase dramatically and can result in significant damage to cell structures.

Chlorella is an alga which is rich in valuable nutrients such as chlorophyll, antioxidants, vitamins and minerals, used as a food supplement and source of nutrients, including protein, nucleic acids, fiber, vitamins, and minerals. It has also been shown to possess detoxification activities, as well as the ability to increase the number of polymorphonuclear leukocytes and macrophages. The increased number of macrophages in the liver aids in clearing the liver of toxic materials including heavy metals. It is used to protect the body from the effects of radiation (e.g. during cancer therapy), to protect the body from toxic metals such as lead and mercury, and to slow aging. It is also used orally to increase beneficial flora in the gastrointestinal tract in order to improve digestion, and to help treat ulcers, colitis, Crohn's disease, and diverticulosis. Chlorella is also promoted for treatment of constipation, bad breath, and hypertension, to reduce serum cholesterol; to increase energy; to detoxify the body; and as a source of magnesium to promote mental health.

N-acetyl cysteine is used as an antidote for acetaminophen and carbon monoxide poisoning, preventing sports injury complications; radiation therapy; increasing immunity to flu; and for detoxifying heavy metals such as mercury, lead, and cadmium. It is also used orally for preventing alcoholic liver damage; for protecting against environmental pollutants including carbon monoxide, chloroform, urethanes and certain herbicides; for reducing toxicity of ifosfamide and doxorubicin; and for human immunodeficiency virus (HIV). It is the direct precursor of glutathione, one of the most important anti-oxidants in the body. The cysteine-glutathione pool is reduced by heavy metals, potentiating

the oxidative damage done to organs.

Alpha-lipoic acid is both water and fat soluble and can regenerate endogenous antioxidants, such as vitamin E, vitamin C, and glutathione, and prevent oxidative damage. It has also been found to increase intracellular glutathione and coenzyme Q10 levels. It also chelates certain toxic metals such as copper, manganese, mercury, cadmium and zinc. All of these properties play an important part in preventing oxidative damage due to metal exposure.

R-Alpha-lipoic acid is the active isomer of Lipoic Acid. It is easily synthesized and metabolized by the body and is more effective than regular Alpha Lipoic Acid.

Magnesium is the second most plentiful cation in the intracellular fluid and the most plentiful cation in the body. Magnesium is involved with more than 350 enzyme systems, required for the formation of cyclic AMP (cAMP). It is involved in ion movements across cell membranes, protein synthesis and carbohydrate metabolism. Magnesium malate is used in this formulation as a laxative. It aids in the movement of fecal material out of the gastro-intestinal tract. Excessive delay of fecal movement in the intestine prolongs the time of exposure of the intestinal epithelium to the fecal material, prolonging the time of absorption of toxic substances into the blood stream and thus to the organism as a whole.

Selenium is used for treating HIV/AIDS, cardiovascular disease, hypothyroidism, osteoarthritis, rheumatoid arthritis (RA), stroke, and atherosclerosis. Selenium is also used for preventing bird flu, macular degeneration, allergic rhinitis, infertility, cataracts, grey hair, abnormal pap smears, chronic fatigue syndrome (CFS), arsenic poisoning, Osgood-Schlatter disease, Keshan disease, mood disorders, colorectal cancer, esophageal cancer, prostate cancer, lung cancer, skin cancer, and preventing miscarriage. Selenium is a strong anti-oxidant in the body and an excellent chelator of arsenic and other toxic metals. It also shows some anti-tumor properties.

Primary indication(s):

Helps ensure effective and safe detoxification of heavy metals.

Secondary indication(s):

Promotes the production of glutathione, an important antioxidant in the body. An antioxidant for the maintenance of good health. Helps to prevent selenium deficiency.

Recommended dosage:

Adults: Take 2 capsules twice daily. Consult a health care practitioner for use beyond four weeks.

Complements:

Kyolic, Liv-Tox.

Caution:

Consult a health care practitioner prior to use if you are taking any medication or undergoing chemotherapy. Do not use if pregnant or breastfeeding.



Dr. Crisafi's comments:

The impact of chronic heavy metal exposure on human health can no longer be dismissed. Chronic exposure is the exposure that takes place in minute amounts over long periods of time. More and more research is highlighting the insidious effects of this long term, gradual exposure to heavy metals. Unfortunately, chronic exposure is seldom detected because blood tests only assess the levels of heavy metals found in the blood. The body, however, will ensure that the heavy metals are quickly removed from the blood and deposited in soft tissue.

One of the problems we have found at our clinic is that symptoms of chronic toxicity are often similar to many common conditions and may not be readily recognized. Furthermore, the level of a specific metal may not be enough to justify symptoms directly, but it may actually have an indirect role to play. Methyl mercury is a good case in point. The methyl mercury produced from the mercury in amalgams (tooth fillings) can actually stimulate the activity of yeast (candida) thereby playing an indirect role in accrued symptoms.

Symptoms of chronic heavy metal toxicity include:

ARSENIC: Progressive peripheral and central nervous changes, numbness and tingling, and muscle tenderness. A symptom typically described is a burning sensation in hands and feet. Neuropathy (inflammation and wasting of the nerves) is usually gradual and occurs over several years.

LEAD: Birth defects, mental retardation, autism, psychosis, allergies, dyslexia, hyperactivity, shaky hands, muscular weakness, and paralysis (beginning in the forearms), arthritis, colic, mood swings, nausea, numbness, lack of concentration, seizures, and weight loss.

MERCURY: Damage to the central nervous system and kidneys, mental retardation, brain damage, cerebral palsy, blindness, seizures, and inability to speak. Less dramatic but more frequent symptoms could include tremors, anxiety, forgetfulness, emotional instability, insomnia, fatigue, weakness, anorexia, cognitive and motor dysfunction.

CADMIUM: Anemia, arthritis, learning disorders, migraines, growth impairment, emphysema, osteoporosis, loss of taste and smell, poor appetite, and cardiovascular disease.

ALUMINIUM: Though not a heavy metal per se, its effects are very similar. These include memory loss, learning difficulty, loss of coordination, disorientation, mental confusion, colic, heartburn, flatulence, and headaches.

Unfortunately, even health conscious individuals may be "contaminated" by heavy metals. Just think of the National Geographic journalist's blood mercury levels that jumped from 5 micrograms per liter to 12 in 24 hours by simply eating a normal portion of halibut and swordfish during that period.

Because of the insidious presence of heavy metals in our environment, and the difficulty in assessing their presence and roles in human disease, HM Dtox could be used not only by those with definite heavy metal toxicity, but also periodically by anyone who wishes to "clear" heavy metals from the body on a preventative basis.

A patient of mine who is very sensitive to mercury will give herself the luxury of occasionally eating tuna steak. In order to minimize her symptoms she will use HM Dtox with the tuna meal and the following day. I find that a good idea!

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