**TOTAL SYSTEMIC D-TOX**

**Ingredients:** Each 6 Capsules Supplies: Vitamin A Palmitate 2,000i.u, Vitamin C 750mg, Vitamin B-1 20mg, Niacin 25mg, Vitamin B-12 50mcg, Folic Acid 300mcg, Calcium Aspartate 75mg, Magnesium Glycinate 200mg, Magnesium Aspartate 100mg, Chromium Picolinate 50mcg, Zinc Picolinate 20mg, N-Acetyl Cysteine 30mg, L-Glutamine 200mg, Silymarin Extract 5mg, Quercetin 25mg, L-Taurine 50mg, L-Ornithine 20mg, L-Glutamic Acid 20mg, L-Carnitine 20mg, Choline 50mg, Propolis 20mg, Yellow Dock 25mg, Beta Carotene 7,500i.u., Vitamin E Succinate Natural 200i.u., Vitamin B-2 20mg, Pyridoxal-5-Phosphate 20mg, Pantothenic Acid 50mg, Biotin 200mcg, Calcium Gluconate 75mg, Magnesium Citrate 100mg, Selenomethionine 150mcg, Manganese Aspartate 5mg, Molybdenum Citrate 50mcg, Reduced Glutathione 20mg, Milk Thistle 50mg, Beet Root 50mg, Glucuronic Acid 5mg, L-Glycine 50mg, L-Methionine 50mg, L-Arginine 20mg, L-Tyrosine 20mg, Inositol 50mg, Curcumin 5mg, Chlorophyll 10mg, Asparagus 15mg, Dandelion Root 25mg, Eleuthero 30mg, Broccoli 15mg, Mullein 25mg, Co-Enzyme Q-10 1mg.

**Supportive Function:** A new, technologically advanced product utilizes the latest research in the development of a scientific formula designed to optimize support of all the detoxification pathways. Nutrients help mobilize, bind, and remove toxins. From the liver and colon to the skin, lymph, lungs, blood and kidney, every eliminative organ system is addressed in an effort to contribute to a homeostatic, smooth-running system. The comprehensive formula provides maintenance support when caloric intake has been reduced, and the formula is boosted with high levels of conjugating agents, antioxidants and supporting herbs, from cleansing garlic to balancing chlorophyll. This is an ideal nutritional supplement and may be chosen by those undergoing a whole, systemic approach to detoxification and those who are predisposed to toxin buildup.

**When is systemic detoxification helpful?** Any condition arising from toxin buildup; especially indicated in food allergies, asthma, gastrointestinal complaints, multiple sclerosis, cancer, arthritis, multiple-chemical sensitivity, candida and heavy metal toxicity.

**Clinical Applications/Research: Detoxing:** Reducing caloric intake can facilitate the process and rest the liver, but fasting can release the toxins from the fatty tissue too quickly. If detox pathways are not running efficiently, released toxins are left to recirculate and redeposit in body tissues, causing pain, inflammation and disease. For best results, adding a good detox supplementation product to the regimen can assure efficient removal of toxins. It is important to remember that there are seven detox pathways in the body - liver, bowel, blood, lungs, lymph, skin and kidney. All of these pathways should be addressed, and the proper nutrients should be provided to ensure a slow, efficient, healthy removal of stored toxins, both environmental and internal. **Multi-vitamin/Mineral/Nutrient Approach:** Chelators bind heavy metals, antioxidants and nutrients facilitate detox pathways, and multi-vitamin/mineral support provides energy and balance when caloric intake has decreased to rest the liver and optimize detox functioning. Eleuthero contributes to energy and support of the adrenal glands, which
provide blood sugar support. Combined with a healthy diet and plenty of filtered water, a good detox regimen can allow disease-causing toxins to be flushed from the system.

The Liver: The liver gets first crack at our nutrients, but it also gets a crack at all those toxins that get in, which can put stress on the liver. Continued overload on the liver interferes with the enzymes of detoxification and can result in pancreatic insufficiency and digestive problems. The liver uses nutrients such as glutathione to hook onto the toxins (conjugate them), make them water soluble, and eliminate them. Other important conjugating agents include taurine, Glycine, and methionine. One of the reasons the cruciferous vegetables, like broccoli, have a reputation for being anticarcinogenic is because they have beneficial effects on the liver’s detox paths. As part of the detoxification process, free radicals are generated. It is imperative to have adequate antioxidant protection. Antioxidants include vitamin C, vitamin E, beta-carotene, quercetin, selenium, Co-enzyme Q-10, taurine and curcumin. Zinc, selenium and glutathione are necessary for antioxidant enzymes in the body. When glutathione is taken in the reduced, active form, it saves the body the energy it takes to reduce it to its active form. N-acetyl cysteine has specific antioxidant action in the liver and is known to protect cells. Red beets are very cleansing and have a target action on the liver.

Chlorophyll helps with liver detox and reduces carcinogen binding to DNA (J Nat Canc Inst Jan 4 1995; 871): 11). Dandelion has been traditionally used to treat liver congestion and inflammation of liver and gallbladder (Hoffman D. The New Holistic Herbal, 1992, Element, Rockport, Ma.), and yellow dock also helps in liver detoxification.

The Bowels: Our colon is sometimes called, “the final elimination pathway.” Since it is an elimination pathway for toxins, it is important that this pathway is not obstructed. Inefficient colon elimination results in toxin storage instead of removal. There are many nutrients, which can facilitate the optimal functioning of the bowels. Many plant substances are high in fiber, such as beetroot, asparagus, and broccoli. Additionally, there are many phytochemicals in these plants that favorably influence detox pathways. Yellow dock stimulates bile and can relieve constipation (Tierra L. The Herbs of Life. The Crossing Press, Freedom, Ca. 1992 pp. 82-83). Dandelion can also relieve constipation.

Blood: Chlorophyll is the main component of the plant's blood, just as hemoglobin is the main component in human blood. Chlorophyll even resembles hemoglobin in structure. Chlorophyll has long been used for its blood-cleansing and medicinal properties (J Nat Prod 1992; 55:1241-44). Chlorophyll has been known to correct bacteria-scavenging activity in the blood (Vestn-Dermatol-Venerol 1990; (8): 67-9). Dandelion purifies the blood, mainly by straining and filtering toxins and wastes from the bloodstream. Yellow dock is so well known for its blood-cleansing properties, it is used synonymously with the term, “blood purifier” (Tyler V. The Honest Herbal. PPP, NY, NY 1993).

Lungs/Lymph: Mullein is important in the detox pathway of the lungs and the lymph; it tones mucous membranes, reduces inflammation, and facilitates expectoration (Hoffman D. The New Holistic Herbal. Element Publ. Rockport, Mass. 1990). One of the flavonoids contained in mullein is Hesperidin, which inhibits histamine release from mast cells (histamine can cause sneezing, itching, watery eyes, etc.) and has proven to have effective anti-allergic action (Yakugaku-Zasshi, 111:193-98). Additionally, mullein possesses antibacterial properties to prevent toxic invasion.

Skin: Yellow dock is helpful in skin conditions, especially those caused by blood-borne toxins; it has a natural iron content which builds the blood (Mowry DB. Scientific Validation of Herbal Medicine. Keats Publ. New Canaan, Conn. 1986). Robyn Landis advises that skin conditions
that are the result of accumulated wastes can temporarily appear worse after yellow dock administration, because backed-up wastes are released into the blood; the more aggressive the liver detox, the more that is unleashed (Landis, R. Herbal Defense. Warner books, NY, NY 1997). (This is why a gentle, non-fasting, nutrient-supported detox regimen is recommended!)

**Kidney:** Dandelion works on four of the major detox pathways: kidney, blood, liver, and colon (Mowry DB. Scientific Validation of Herbal Medicine. Keats Publ. New Canaan, Conn. 1986). It has the power to stimulate kidney function and the urea detox path, while preserving potassium status. "This herb is a most valuable general tonic and perhaps the best widely applicable diuretic and liver tonic" (Hoffman D. The New Holistic Herbal, Element Publ. Rockport, Mass. 1990 p. 196).

**Testimonials/Nutrient Tidbits:** Use as a multi-vitamin and mineral: Six Total Systemic Detox are roughly equivalent to taking three Core Level Health Reserve, the top-selling multi-vitamin and mineral (with the exception of vitamin D, which is in a daily capsule of F-complex). The wide array of vitamins and minerals addresses deficiencies and shortages, and at the same time, works on removing toxic buildup.

**Constipation:** This product has worked very well for some people in regards to constipation. It really moves the bowels.

**A doctor reports . . .** This is my standard de-tox formula. It works great.

See: “Hi-Pro” for protein shake ideas utilizing Total Systemic Detox for a health building, detoxifying drink without the added sugars of most drinks (excellent for candida patients). Also, making the shake eliminates the fillers, binders, and emulsifiers that are present in most pre-made drink mixes. Compare the ingredients, and the Total Systemic Detox – Hi-Pro shake comes out ahead – more powerful nutritional ingredients, more effective, and more cost efficient.

**Suggested Dosage:** 1-2 tablets 3 times daily or as directed

**Size:** 60 tablets

**Vegetarian:** Yes

**Contraindications:** High dosages of vitamin C (>1000 mg.) should not be taken by gout patients or by kidney stone formers. Vitamin C is contraindicated in iron overload disease. Vitamin E does not involve contraindications at amounts up to 80 times the RDA (800 IU/day). Since vitamin E is an anticoagulant, large amounts of vitamin E (800 IU or greater) can potentiate blood-thinning drugs such as coumadin and should not be used concurrently. Large doses of vitamin E are contraindicated in hypertension. Eleuthero in large quantities is contraindicated in hypertension (only a small amount is used in this synergistic formula). Use caution in pregnancy.