

Nutritional Strategies for Detoxification[®]



Our toxic environment—impact on health

Each year, over 4 billion pounds of toxic chemicals are released into the environment by industry, and over 1.2 billion pounds of pesticides are used in the United States alone. This makes it impossible to avoid exposure to toxins at some level. To make matters worse, it has become increasingly difficult to consume an adequate amount of nutritional factors to help detoxify these environmental assaults that find their way into the body. Over time, an accumulation of toxins can reduce energy levels, as well as negatively impact immune, neurological, and overall health. Fortunately, specialized nutritional support to enhance detoxification capacity can help your patients stay healthy.

Your guide to specialized detoxification support

In this clinical guide, you'll find product descriptions, recommendations, and a quick reference tool explaining how to support various aspects of the body's detoxification process to address:

- Toxicity-related conditions
- Excretion of toxins
- Chronic fatigue syndrome

Metagenics' commitment to excellence

Metagenics is dedicated to providing science-based, premium quality nutraceuticals and medical foods that represent the forefront of natural health science. This commitment is reflected in our use of cutting-edge genetic, cellular, and clinical testing procedures and NPA, NSF, and TGA GMP-certified facilities for production of high-quality formulations.

Safety

Research

Efficacy

A comprehensive family of nutritional support products

Alkalinization Support

UltraClear Plus[®] pH Medical Food



UltraClear Plus pH medical food is designed for those with an altered urinary pH level suffering from chronic fatigue syndrome. It provides the same clinically tested macro- and micronutrient profile as UltraClear PLUS, with added nutrients to promote an alkaline urinary pH status and enhance Phase II activity. Many individuals with compromised hepatic detoxification capacity have an altered urinary pH level, which may negatively influence the body's ability to eliminate toxins.

UltraClear Plus pH is delivered as a powdered beverage mix in Natural Vanilla and Natural Pineapple Banana flavors.

Patient benefits:

In addition to the benefits provided by UltraClear PLUS:

- Delivers additional support for Phase II activity
- May enhance the excretion of toxins out of the body by promoting an alkaline urinary pH status

Recommended uses:

- Patients exhibiting toxicity-related symptoms, with a urinary pH below 6.6
- Individuals who have been exposed to an elevated dietary or environmental toxin load
- Chronic fatigue syndrome patients who routinely consume high protein foods with minimal intake of fruits and vegetables

Enhanced Liver Support

UltraClear PLUS[®] Medical Food



UltraClear PLUS is a medical food designed for those with chronic fatigue syndrome and altered energetic and liver detoxification function, or low Phase II detoxification activity. Altered detoxification function may be due to genetic predisposition, a history of chronic nutrient insufficiency, and/or toxin overload, which can result in a build-up of stored toxins and a subsequent increase in symptoms and/or tissue damage.

Provided in a powdered beverage form in Original, Natural Pineapple Banana, and Natural Berry flavors, UltraClear PLUS provides excellent nutritional support for patients with chronic fatigue syndrome.

Patient benefits:

- Lessens toxin exposure while facilitating toxin elimination
- Enhances Phase II detoxification activities to promote balanced detoxification capacity
- Provides antioxidant protection against reactive oxygen intermediates

Recommended uses:

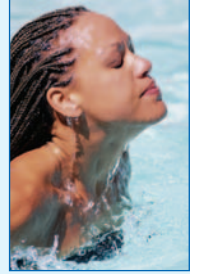
- Patients exhibiting toxicity-related symptoms, with a urinary pH above 6.6
- Patients with an overall decrease in vitality or presenting with symptoms associated with toxin exposure
- Patients who would benefit from support for balanced detoxification enzyme activity

Also available: UltraClear PLUS[®] Medical Food Bars in pleasant-tasting Natural Chai Tea flavor.

Heavy Metal Metabolism

MetalloClear[™]

Support for Heavy Metal Metabolism[♦]



MetalloClear is designed to help people stay healthy by providing specialized support for heavy metal metabolism.[♦]

Patient benefits:

- Preliminary research suggests that curcumin, andrographis, and hops-derived nutrients up-regulate the genetic expression of hemoxygenase and metallothionein, enzymes involved in the metabolism of some heavy metals[♦]
- Helps to modulate oxidative stress associated with the metabolism and detoxification of heavy metals[♦]
- No reported serious adverse effects

Recommended uses:

- Support to aid in the elimination of some heavy metals[♦]
- In conjunction with a comprehensive detoxification program[♦]

Three tablets supply: Zinc (as zinc citrate) 5 mg, Andrographis (*Andrographis paniculata*) 150 mg, Turmeric (*Curcuma longa*) Rhizome Extract [standardized to 95% (150 mg) curcuminoids] 158 mg, Proprietary Blend of Hops (*Humulus lupulus*) 2645 mg, and Luduxin^{®†}.

Other Ingredients: Microcrystalline cellulose, cellulose, stearic acid, croscarmellose sodium, silica, magnesium stearate, and coating (deionized water, microcrystalline cellulose, polyethylene glycol, and carrageenan).

Recommendations: Three tablets twice daily.

Form: 180 Tablet Bottle

[†]Luduxin[®] consists of reduced-iso-alpha acids (from hops extract, *Humulus lupulus*) and magnesium salt produced via a proprietary process.

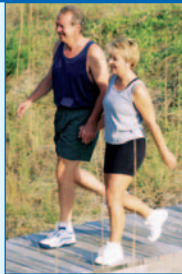


Kidney Function

Renagen™ DTX

Support for Overall Kidney Health*

Renagen DTX promotes healthy kidney detoxification and protects against free radical damage with a specific blend of nutritional factors and traditionally-used herbs.*



Patient benefits:

- Supports healthy kidney function to help optimize detoxification capacity*
- Provides antioxidant protection to help maintain kidney health*
- Provides added support for those with renal stress concerns*

Recommended uses:

- Daily support for healthy kidney function*

Each capsule¹ supplies: Vitamin B₆ (as pyridoxine HCl) 10 mg, Folate (as folic acid, and L-5-methyl tetrahydrofolate^{††}) 0.4 mg, Vitamin B₁₂ (as cyanocobalamin) 125 mcg, Cordyceps Mycelium Extract (*Paecilomyces hepiali**) 200 mg, Chinese Salvia Root (*Salvia miltiorrhiza*) 200 mg, N-Acetylcysteine 200 mg.

Recommendations: One capsule one to two times daily.

Form: 60 Capsule Bottle

[†]Capsules are composed of plant-derived ingredients.

^{††}As Metafolin® U.S. Patent Nos. 5,997,915; 6,254,904.

^{*}An asexual derivation of *Cordyceps sinensis* reported by the Institute of Microbiology, the Chinese Academy of Sciences, Beijing, PRC.

First-Line Defense

ChloroClear™

Daily Protection Against Dietary & Environmental Toxins*

ChloroClear features chlorophyllin, which may help protect the body from various dietary and environmental toxins by inhibiting their absorption and promoting their elimination. Research suggests that chlorophyllin may help protect against:*



- Cigarette smoke
- Airborne particles
- Gas and diesel fumes
- Heterocyclic amines in cooked meats
- Mold aflatoxins

Patient benefits:

- Studies suggest that chlorophyllin binds with certain ingested toxins and interferes with their absorption in the body*
- May help promote the elimination of certain potentially harmful toxins*
- Provides antioxidant protection*

Recommended uses:

- Daily detoxification support*
- In conjunction with other detoxification products*

Two softgels supply: Sodium Copper Chlorophyllin[†] 110 mg. Contains: soy.

Recommendations: Two softgels daily with food.

Form: 120 Softgel Bottle

[†]Derived from one or more of the following sources: mulberry, alfalfa, wheatgrass.

Liver Function

AdvaClear®

Advanced Support for Bifunctional Detoxification*

AdvaClear promotes balance in the body's detoxification activities with a targeted blend of vitamins, minerals, and phytonutrients. Bifunctional support enhances the activities of several liver detoxification enzymes, while promoting balanced activity of the Phase I and Phase II detoxification pathways.*



Patient benefits:

- Promotes overall well-being by supporting balanced detoxification*
- Provides antioxidant protection against reactive oxygen intermediates produced during the detoxification process*

Recommended uses:

- Daily support for liver detoxification*
- In conjunction with a medical food formula or alone as gentle detoxification support*
- As additional support for detoxification*

Two capsules' supply: Vitamin A (as 33% retinyl palmitate, 67% beta-carotene^{††}) 2500 IU, Vitamin C (as ascorbic acid) 133 mg, Vitamin D (as cholecalciferol) 33 IU, Vitamin E (as d-alpha tocopheryl acetate and mixed tocopherols) 66 IU, Thiamin (as thiamin mononitrate) 10 mg, Riboflavin 5 mg, Niacin (as niacinamide and niacin) 23 mg, Vitamin B₆ (as pyridoxine HCl) 17 mg, Folate (as L-5-methyl tetrahydrofolate^{†††}) 267 mcg, Vitamin B₁₂ (as cyanocobalamin) 33 mcg, Biotin 66 mcg, Pantothenic Acid (as D-calcium pantothenate) 33 mg, Zinc (as zinc citrate) 6.5 mg, Selenium (as selenomethionine) 50 mg, Copper (as copper citrate) 0.65 mg, Manganese (as manganese citrate) 1.65 mg, Molybdenum (as molybdenum aspartate) 66 mcg, Silymarin (from milk thistle seed extract, *Silybum marianum*) 50 mg, Catechins (from decaffeinated green tea leaf, *Camellia sinensis*) 34 mg [including 22 mg Epigallocatechin Gallate (EGCG)], Artichoke Leaf Extract (*Cynara scolymus*) 166 mg, Watercress Whole Plant 4:1 Extract (*Nasturtium officinale*) 134 mg, Ellagic Acid (from pomegranate rind extract, *Punica granatum*) 33 mg, N-Acetylcysteine 66 mg, Sodium Sulfate 100 mg, Taurine 117 mg, Choline (as choline bitartrate) 66 mg.

Recommendations: Two capsules one to three times daily.

Form: 42 and 126 Capsule Bottles

[†]Capsules are composed of plant-derived ingredients.

^{††}Betaten® mixed carotenoids.

^{†††}As Metafolin® U.S. Patent Nos. 5,997,915; 6,254,904.

The UltraClear Plus Medical Food Program

This program consists of UltraClear PLUS or UltraClear Plus pH medical food along with a specialized dietary plan. The program is divided into three steps:

Step 1: Initial Clearing (Days 1-6)

During Step 1 the patient should eliminate potentially allergenic foods while slowly increasing intake of nutritional product(s).

Step 2: Detoxification (Days 7-13)

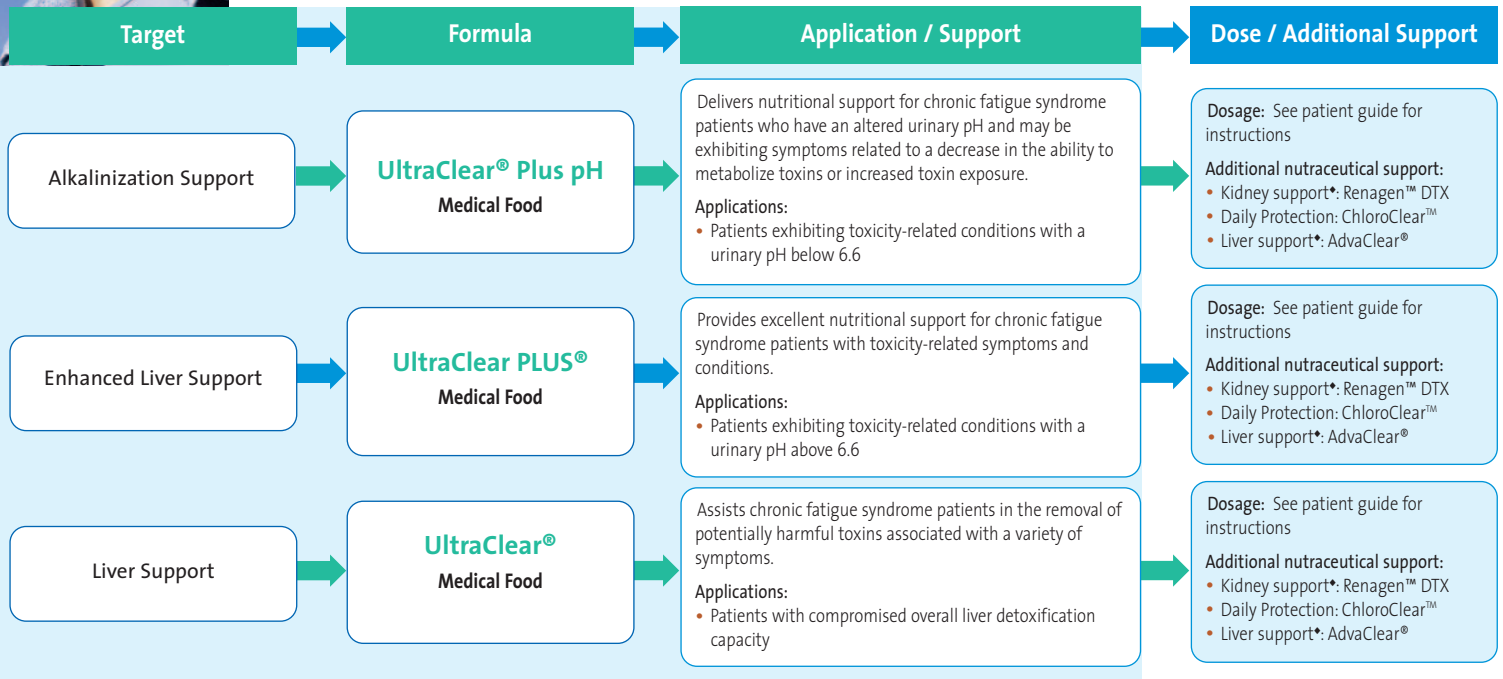
During Step 2 the patient should consume a select number of low-allergy-potential foods along with nutritional support product(s).

Step 3: Reintroduction (Days 14-28)

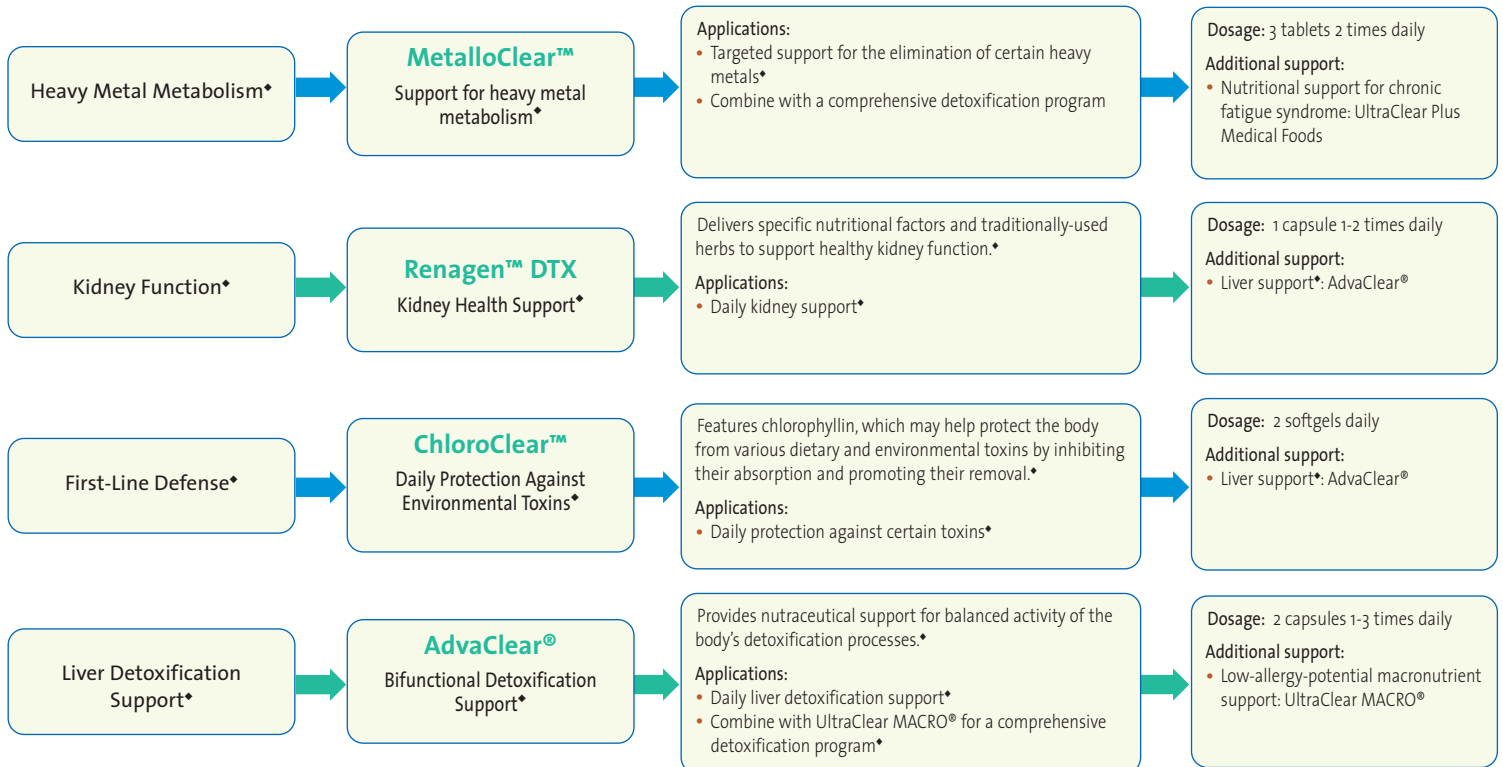
During Step 3 the patient should reintroduce foods eliminated in Step 2 back into the dietary plan and slowly decrease nutritional support product(s).

A patient-specific natural approach to detoxification[♦] from Metagenics

Which should you choose for your patients?



Nutraceutical Support



For more information visit us online at www.metagenics.com or contact our Technical Support Department.

♦ These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.



These certifications for Good Manufacturing Practices demonstrate the Metagenics commitment to purity and quality.

Genetic Potential Through Nutrition
www.metagenics.com
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