

Protocol for Nutritional **DETOXIFICATION** Support

Practitioner Information - Protocol For Life Balance™ Supplements

Xenobiotics of various sorts are implicated in weight gain, hormone disruption, reduced liver function and so on. The body possesses a number of mechanisms for ridding itself of toxins to reestablish balance and this protocol is designed to support the elements of this natural process. The individual components below can be combined as a protocol for more complete support.

Ortho Detox™

This formula contains a proprietary blend of beet root powder, red clover extract, chlorella, bladderwrack, MSM, dandelion root, Oregon grape, milk thistle, zinc, selenium, copper, and *alpha*-lipoic acid. Some of these traditionally are classified as “blood purifiers” and involve the skin, the immune/lymphatic system and the removal of heavy metals from the tissues. Items that encourage bile flow are combined with elements that increase elimination from the body and others that protect the system from the toxins being removed.

Cautions and interactions

Based on their constituents, red clover extracts may conceivably interfere with hormone treatments, tamoxifen, and anticoagulant drugs. Dandelion root's effect on bile secretion can be significant. Germany's Commission E has recommended that it not be used at all by individuals with obstruction of the bile ducts or other serious diseases of the gallbladder, and only under physician supervision by those with gallstones.

Because Oregon grape contains berberine, which has been reported to cause uterine contractions and to increase levels of bilirubin, oral consumption of Oregon grape should be avoided by pregnant women.

Milk Thistle may be useful as a dietary supplement in conjunction with acetaminophen, butyrophenones (such as haloperidol) and phenothiazines (such as chlorpromazine, fluphenazine, and promethazine), phenytoin, halothane, cisplatin and cyclosporine.

Liver Detox™

Liver Detox™ is a proprietary blend of herbs and nutrients designed to support healthy liver function. Liver Detox™ contains milk thistle extract, which has been shown in clinical and non-clinical studies to support the liver, as measured by standard liver enzyme laboratory tests. In addition, the formula contains N-acetyl cysteine (NAC) and L-methionine, amino acids known to enhance the production of glutathione in the liver. Glutathione, a major cellular antioxidant, plays an essential role in liver detoxification mechanisms. Also included are traditional Chinese herbs (schisandra, bupleurum, and scute) that have been shown in non-clinical studies to support healthy liver function.

Cautions and interactions

Milk thistle may be useful as a dietary supplement in conjunction with acetaminophen, butyrophenones (such as haloperidol) and phenothiazines (such as chlorpromazine, fluphenazine, and promethazine), phenytoin, halothane, cisplatin and cyclosporine. NAC may also be used if taking cisplatin and doxorubicin.

Because artichoke and dandelion root may have an effect on bile secretion, caution must be exercised by individuals with obstruction of the bile ducts, gallstones or other serious diseases of the gallbladder, and physician supervision is advised. Animal studies indicate that scute may interfere with the absorption of cyclosporine.

NAC may affect ACE inhibiting medications and immunosuppressive medications such as azathioprine, cyclophosphamide, prednisolone, or prednisone. In addition, NAC may affect the effectiveness of nitroglycerin and isosorbide and exhibit other drug interactions (for which see Protocol for Life Balance™ NAC).

Ortho Dophilus™

Food affects gastrointestinal health in part through its impact on gut bacteria. Conversely, the health benefits of many foods, such as broccoli, depend upon how components are changed by bacteria in the intestines. Recently, researchers have begun to look more closely at the combination of probiotic bacteria with various prebiotics, which are items ingested to encourage proper bacterial growth and actions in the GI-tract. These synbiotics can exhibit benefits not found with either probiotics or prebiotics taken alone (1 – 3). This tested formulation

is a combination of 8 different species of beneficial bacteria designed to support gastrointestinal health and immune system function. Fructooligosaccharide (FOS) is also included in this product to assist healthy growth of acidophilus and bifidus organisms. Because this capsule is enteric coated, the product delivers microflora directly to the intestine, bypassing the harsh acidic conditions of the stomach. These probiotics are stable at room temperature.

Cautions and interactions

A laboratory study suggests that *L. acidophilus* affects the metabolism of sulfasalazine, a medication used to treat ulcerative colitis. The significance of this information is unknown at this time.

Brocco Immune™

Brocco Immune™ contains sgs™-100 Broccoli Concentrate from seed and supplies chemoprotective sulfur compounds that support the body's natural detoxification mechanisms. Glucoraphanin and sgs™-100 (sulforaphane glucosinolate) are potent modulators of the body's immune defense system through effects on Phase 1 and 2 detoxification enzymes. Phase 1 enzymes make many toxins more water-soluble in preparation for their elimination from the body, but in the process can increase their toxicity. Phase 2 enzymes bind and remove these now soluble toxins. Thus, the Phase 1 and 2 enzyme systems must be in balance to protect health. Broken down during digestion, sulforaphane and glucoraphanin are converted to isothiocyanates (ITCs). These compounds can inhibit the rate at which Phase 1 enzymes make toxins more soluble for elimination — but thereby also more active — while at the same time inducing the detoxification activities of Phase 2 enzymes (4, 5).

Cautions and interactions

None known.

Additional Support

Milk Thistle Extract, ALA, NAC, CoQ10, Fiber

Support for detoxification can include supplementing more aggressively with supports for glutathione synthesis, such as additional Milk Thistle Extract, substrates for production, such as NAC, and glutathione recyclers, such as Alpha Lipoic Acid. CoQ10 provides antioxidant protection. Additional fiber can improve the elimination of toxins via the GI-tract.

References available at www.protocolforlife.com

Ortho Detox™ (Suggested: 1-2 three times daily)	___ X ___
Liver Detox™ (Suggested: 3 daily)	___ X ___
Ortho Dophilus™ (Suggested: 2-4 daily)	___ X ___
Brocco Immune™ (Suggested: 2 daily)	___ X ___
Additional Support Products:	
Milk Thistle Extract (Suggested: 1 daily)	___ X ___
Alpha Lipoic Acid, 250 mg (Suggested: 1 daily)	___ X ___
N-Acetyl Cysteine (NAC) (Suggested: 1 daily)	___ X ___
Coenzyme Q10, 100 mg (Suggested: 1-2 daily)	___ X ___

Other Suggested products:

Fiber: both whole foods and fiber supplements may be useful to improve the elimination of toxins from the digestive tract.

These statements have not been evaluated by the FDA. These products are not intended to diagnose, treat, cure or prevent any disease.

Please note the instructions, cautions and interactions on each product package, and begin each new product separately, in turn. Use only under the supervision of a qualified health practitioner.