

## IMD Intestinal Cleanse Powder



**IMD Intestinal Cleanse** optimizes the natural elimination of metals through the intestines.\* This proprietary thiol-functionalized silica delivers insoluble thiol groups to bind and eliminate mercury and other heavy metals accumulated in the intestines, also directly quenching free-radicals.\*<sup>1</sup> IMD's actions enhance **Phase III Detoxification** – that is, the system of transporters leading out of the body.\*

**Active Chemistry of IMD** The Intestinal Metals Detox (IMD) is a proprietary product that consists of highly purified silica with covalently attached thiolic metal-binding groups. Both the silica base and the binding agents are GRAS (Generally Recognized as Safe) for use in food. The specific chemistry of the compound has several benefits over other detoxification remedies, and the active binding groups out-compete other compounds for metals in the intestines.\*

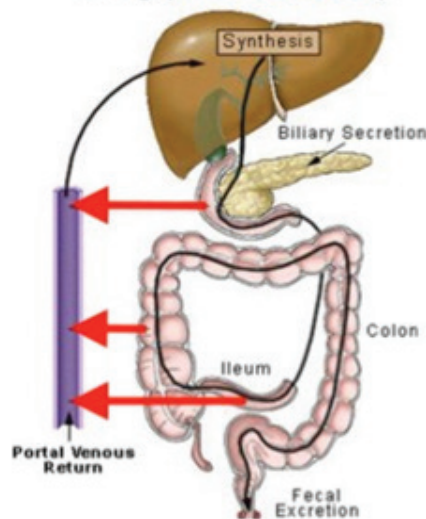
IMD does not enter the bloodstream, and thus it will **not** lead to surges of mobilized metals that can potentially lead to kidney/liver overload. IMD intercepts methylmercury and other metals trapped in enterohepatic circulation, binding them and escorting them out of the intestines. By doing so, organ and tissue-bound mercury is able to safely drain into the blood at a natural rate and subsequently be eliminated via the liver and kidneys.\* The local action of quenching free radicals and elimination of metals supports intestinal health as both of these factors can contribute to intestinal inflammation.\*

### Eliminating Blocked Detoxification Pathways

Intestinal inflammation inhibits elimination of toxins by causing a strong down-regulation of the body's natural detoxification pathways.<sup>2</sup> Ironically, exposure to certain toxins contributes to intestinal inflammation. For example, the corrosion of amalgam mercury results in mercuric mercury (HgII, also called inorganic mercury) release. When swallowed with saliva, HgII contributes to intestinal inflammation which unfortunately further insults the body by blocking detoxification.<sup>3</sup> In addition to inflammation, it has been demonstrated that a build-up of metals alone slows the transport proteins which are critical in protecting the body from toxins.<sup>4</sup> The data suggests that continuous elimination of metals from the intestines is essential for the proper function of natural detoxification processes.\*

**Suggested Use:** Gradually increase to 1 to 2 scoops (100 - 200 mg) by mouth 1 to 3 times daily or as directed by healthcare professional. Mix with soluble vitamin C or phospholipid solution and take before IMD settles. Alternately, may be added to small amount of food. Sensitive individuals may need to start with less than one-half scoop. Use product in cycles of 5-days-on/2-days-off or 10-days-on/4-days-off. If pregnant, consult physician before use.

### Enterohepatic Circulation of Hg (Reabsorption)



!Z bVWjcbU]nYX' g]Mz: b[ fYX]Ybrg]UFY'; F 5Gf[ YbYfU`mfYVz[ b]nYX Uj gLzE Z:cX' UXX]hj Yg'

### FYZfYbWg

1. Clarkson TW, Small H, Norseth T. Archives of Environmental Health: An International Journal. 1973 Apr 1;26(4):173-6.
2. Kalitsky-Szirtes J, et al. Drug Metab Dispos. 2004 Jan;32(1):20-7.
3. Nadarajah V, et al. J Toxicol Environ Health. 1996 Oct 11;49(2):113-25.
4. Wortelboer HM, et al. Environ Toxicol Pharmacol. 2008 Jul;26(1):102-8.