# CORE RESTORE® 7-DAY KIT





#### **CLINICAL APPLICATIONS**

- Supports All Three Phases of Detoxification
- Provides the Necessary Energy Cofactors and Key Alkalinizing Factors to Support Toxin Excretion
- Supports Healthy Estrogen Detoxification
- · Promotes Gastrointestinal Health



### DETOX SUPPORT

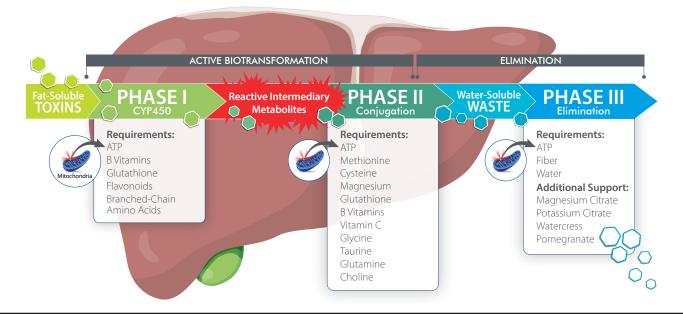
#### What Is the Core Restore® Program?†

The Core Restore® program is a strategic system designed to safely enhance and promote all three pathways of active detoxification. The Core Restore® kit includes three active formulas—Core Support, MitoCORE®, and PhytoCore—which function synergistically to provide the energy and nutritional cofactors critical for active biotransformation. These formulas support both Phase I and Phase II pathways of liver biotransformation while promoting Phase III elimination pathways, aiding in the safe processing and removal of environmental pollutants, hormone disruptors, unhealthy estrogen metabolites, xenoestrogens (synthetic compounds that imitate estrogen) and other harmful toxins from the body. This powerful trio of specialized formulas provides essential micronutrients, phytonutrients and a source of easily digested,

hypoallergenic protein that support the liver and fuel optimal biotransformation. The Core Restore® kit provides an easy-to-follow, 7-day program designed to reduce the incoming burden of toxins to restore optimal health.

#### Overview of Detoxification<sup>†</sup>

The CDC estimates that more than 100,000 chemicals are used by Americans annually, with approximately 1,000 new chemicals introduced each year.<sup>3</sup> Evidence suggests even low-level toxicity is related to a variety of health concerns. If toxins are not processed effectively, they can accumulate in the body, causing fatigue, mental fog, hormone disruption or unexplained weight gain. In addition, the standard American diet, which is high in sugar and caffeine while low in nutrient density and fiber, has been shown to slow detoxification





mechanisms and reduce the elimination of toxins. Therefore, it is important to have a comprehensive, evidence-based detoxification strategy that supports the key phases of detoxification.

The liver is the body's main organ of detoxification and requires vast amounts of energy in the form of adenosine triphosphate (ATP) to properly neutralize toxins. Each hepatocyte houses 1,000 to 2,000 mitochondria, comprising roughly one-fifth of the total liver volume.<sup>4</sup> If liver mitochondria do not produce adequate ATP, it reduces the rate of detoxification and can lead to health challenges. The detoxification process, also known as biotransformation, is a three-phase process where toxins are safely packaged and removed from the body. These detoxification systems are very complex and require energy and essential nutrient cofactors. In Phase I, a specialized

family of enzymes known as the cytochrome P450 enzymes use oxygen to form a reactive site on toxic compounds. This process creates highly reactive compounds that are more harmful and reactive than the initial toxin. These strong free radicals can cause structural damage to lipids, proteins and DNA within the cell. This is why Phase II detoxification is a crucial step that must be ready to bind, package and neutralize these harmful intermediate metabolites so they can be safely excreted from the body. During the final step of detoxification, phase III, neutralized, water-soluble compounds can then be excreted in the urine, bile or stool.<sup>2,5</sup> The Core Restore® program is scientifically formulated to increase mitochondrial energy production and support all three phases of detoxification.

#### Products Included in the Core Restore® Kit

#### Core Support<sup>†</sup>

The ingredients included in Core Support were specifically chosen for their ability to support Phase II detoxification and Phase III elimination to help eliminate toxins during this 7-day detoxification program. Core Support includes five proven alkalinizing factors, six proven Phase II activating nutrients, 8 g of fiber, 15 g of hypoallergenic brown rice protein and 0 g of added sugar. Specific nutrients like N-acetyl cysteine (NAC),6 glycine<sup>7</sup> and taurine<sup>8</sup> are well-known amino acids that enhance liver detoxification. Antioxidants, such as lipoic acid,<sup>9</sup> green tea,<sup>10</sup> ellagic acid<sup>11</sup> and a unique vegetable antioxidant blend, upregulate key Phase II enzymes and protect the liver from oxidative damage. In addition, watercress,<sup>12</sup> pomegranate<sup>13</sup> and potassium citrate<sup>14</sup> provide essential support to the kidneys, facilitating the efficient elimination of toxins through urinary excretion.

#### **Directions**

Mix 2 scoops of Core Support with 8-10 ounces of water or to the desired thickness, 2 times daily or as recommended by your health care professional.

#### **Cautions**

Do not consume this product if you are pregnant or nursing. Consult your physician for further information.

CAUTION: Because glucomannan is a bulk-forming fiber, the drink becomes viscous within 20 minutes of its preparation. Without drinking enough liquid, the product may swell in the throat, causing blockage or choking. Avoid use if you have ever had esophageal narrowing or swallowing difficulties.

#### MitoCORE®†

MitoCORE® provides a multinutrient foundation to ensure the liver has adequate amounts of important trace minerals and vitamins needed for the nutrient and energy intensive process of detoxification. This formulation provides key nutrients, such as vitamin C and B vitamins, that are required for Phase I cytochrome P450 activity and Phase II conjugation pathways. This formulation also includes the powerful antioxidant trio of alpha lipoic acid, NAC and acetyl L-carnitine, all shown to recharge cellular energy production and the primary cellular antioxidant pools of glutathione and vitamins E and C to help scavenge free radicals and protect cells while toxins are removed. This formula also provides key micronutrients and phytonutrients, including green tea, broccoli seed extract and resveratrol, to protect the mitochondria and continually renew the cycle of energy production.

#### **Directions**

4 capsules per day as part of the Core Restore® program, or as recommended by your health care professional.

#### **Cautions**

If you are pregnant or nursing, consult your physician before taking this product.



#### PhytoCore<sup>†</sup>

PhytoCore is added on the third day of the Core Restore® program to stimulate Phase I activity once Phase II has been established. The specialized blend of nutrients in PhytoCore has been shown to stimulate Phase I and II biotransformation and support the body's natural liver cleansing function during detoxification. Each capsule includes silymarin, artichoke extract, the Complete Turmeric Matrix, methionine, choline, inositol, garlic and dandelion root. These botanicals and plant extracts provide phytonutrients, antioxidants and other compounds that protect plants from environmental challenges, including exposure to radiation and toxins, and defend them against pests and other agents. In humans, this array of biologically active compounds has been shown to increase cellular defenses, upregulate detoxification and protect DNA.<sup>18</sup> Silymarin has been found to possess substantial protective effects and free radical scavenging capacity, protecting the liver against oxidative damage while it neutralizes toxic environmental contaminants.<sup>19</sup> Curcumin, in the form of Complete Turmeric Matrix, another compound in PhytoCore, has also been linked with increased expression of the detoxification enzymes glutathione S-transferases, glutathione reductase, epoxide hydrolase, HO-1, catalase and NQO1 in liver, small intestine and kidney tissues.<sup>20</sup> Whole-root turmeric and its active components have been used in traditional Ayurvedic medicine for centuries. In herbal medicine of old, practitioners used teas, tinctures and extracts of all types. In the 21st century, as research grew on the benefits of turmeric, the focus

shifted to identifying and isolating one individual compound, curcumin, rather than delivering the comprehensive benefits of a matrix of turmeric bioactives. As a result, concentrating curcumin led to poor absorption and pharmaceutical methods were applied to bypass the gut and increase its bioavailability. The glaring disadvantage of applying this pharmaceutical model to botanicals is that it misses the benefits of other bioactives present within the turmeric matrix and their positive effects on the microbiome. New research on turmeric shows the additional bioactives in turmeric offer further benefits and enhance bioavailability. The Complete Turmeric Matrix includes compounds from the entire turmeric root, all working together as nature intended to deliver better results. The Complete Turmeric Matrix formulation contains standardized amounts of 45–55% curcuminoids, 2-6% turmerin protein and 3-8% volatile oil, plus other components that make up the whole turmeric root. This matrix of bioactive compounds supports a healthy GI tract, enhances detoxification, creates a healthy microbiome and helps maintain normal inflammatory balance.

#### **Directions**

2-3 capsules two times per day or as recommended by your health care professional.

#### **Cautions**

Do not consume this product if you are pregnant or nursing. Consult your physician for further information.



# Supplement Facts<sup>v4</sup> Serving Size 2 Scoops (33.8 Grams) Servings Per Container About 14

	Amount Per Serving	% Daily Value
Calories	120	
Total Fat	1 g	1%*
Total Carbohydrate	12 g	4%*
Dietary Fiber	8 g	29%*
Total Sugars	1 g	**
Protein	15 g	30%*
Calcium	80 mg	6%
Iron	1.5 mg	8%
Magnesium	110 mg	26%
Sodium	35 mg	2%
Potassium	300 mg	6%
Rice Protein	18.9 g	**
Fiber Blend	6.7 g	
Resistant Tapioca Dextrin		**
Flaxseed Flour		**
Guar Gum Fiber (Sunfiber®)		**
Glucomannan (Amorphophallus konja	ac) (Root)	**
Fig (Fruit)		**
Prune		**
Arabinogalactan Heartwood (from La	rch Tree)	**
Glycine USP	750 mg	**
Magnesium Citrate USP	750 mg	**
Potassium Citrate USP	750 mg	**
Vegetable Antioxidant Blend	500 mg	
Broccoli Sprout Concentrate		**
Onion Extract (Bulb)		**
Broccoli (Herb Top)		**
Tomato (Fruit)		**
Carrot (Root)		**
Spinach (Leaf)		**
Kale (Leaf)		**
Brussels Sprout (Bud)		**
Taurine USP	250 mg	**
Calcium Citrate USP	230 mg	**
Pomegranate Fruit Extract (Pomanox®)	200 mg	**
L-Glutamine USP	150 mg	**
Acetyl L-Carnitine Hydrochloride (MitoCarn	n®) 125 mg	**
N-Acetyl-L-Cysteine USP	125 mg	**
Watercress Extract (Aerial Parts)	100 mg	**
Alpha Lipoic Acid	50 mg	**
Green Tea Leaf Extract (Standardized to contain 45% EGCg (Ep	50 mg	**
Rosemary Leaf Extract	50 mg	**
Schisandra Berry Extract	50 mg	**
Ellagic Acid	25 mg	**
Glucosinolates	23 mg	**
* Percent Daily Values are based on a 2,0	00 calorie die	et.

\*\* Daily Value not established. Other Ingredients: Natural Flavors, Rebaudioside M and Ascorbyl Palmitate.

Core Support Vanilla ID# 680001 NET WT. 1 lb 2.5 oz (18.5 oz) (525 g)

# Supplement Facts Serving Size 2 Scoops (35.3 Grams) Servings Per Container About 14

	Amount Per Serving	% Daily Value
Calories	130	
Total Fat	1.5 g	2%*
Saturated Fat	0.5 g	3%*
Total Carbohydrate	12 g	4%*
Dietary Fiber	8 g	29%*
Total Sugars	1 g	**
Protein	15 g	30%*
Calcium	70 mg	5%
Iron	4 mg	22%
Magnesium	110 mg	26%
Sodium	10 mg	<1%
Potassium	600 mg	13%
Rice Protein	17.4 g	**
Fiber Blend	6.7 g	
Resistant Tapioca Dextrin	0.7 9	**
Flaxseed Flour		**
Guar Gum Fiber (Sunfiber®)		**
Glucomannan (Amorphophallus kon	iac) (Root)	**
Fig (Fruit)	μος (ποσι)	**
Prune		**
Arabinogalactan Heartwood (from La	arch Tree)	**
Glycine USP	750 mg	**
Magnesium Citrate USP	750 mg	**
Potassium Citrate USP	750 mg	**
Vegetable Antioxidant Blend	500 mg	
Broccoli Sprout Concentrate		**
Onion Extract (Bulb)		**
Broccoli (Herb Top)		**
Tomato (Fruit)		**
Carrot (Root)		**
Spinach (Leaf)		**
Kale (Leaf)		**
Brussels Sprout (Bud)		**
Taurine USP	250 mg	**
Calcium Citrate USP	230 mg	**
Pomegranate Fruit Extract (Pomanox®)	200 mg	**
L-Glutamine USP	150 mg	**
Acetyl L-Carnitine Hydrochloride (MitoCar	m®) 125 mg	**
N-Acetyl-L-Cysteine USP	125 mg	**
Watercress Extract (Aerial Parts)	100 mg	**
Alpha Lipoic Acid	50 mg	**
Green Tea Leaf Extract	50 mg	**
(Standardized to contain 45% EGCg (E		n gallate))
Rosemary Leaf Extract	50 mg	**
Schisandra Berry Extract	50 mg	**
Ellagic Acid	25 mg	**
Glucosinolates	1 mg	**
* Percent Daily Values are based on a 2,	000 calorie die	et.

\*\* Daily Value not established.

Other Ingredients: Cocoa processed with alkali, Natural Flavors, Rebaudioside M and Ascorbyl Palmitate.

### NET WT. 1 lb 2.3 oz (18.3 oz) (518 g)

## Supplement Facts Serving Size 4 Capsules Servings Per Container 7

Servings Per Container 7		
	Amount Per Serving	% Daily Value
Vitamin A (from 5,000 IU as Natural Beta Caroten	1,500 mcg e)	167%
Vitamin C (as Ascorbic Acid USP)	250 mg	278%
Vitamin D (D3 as Cholecalciferol)	25 mcg (1,000	) IU) 125%
Thiamin (Vitamin B1) (from Thiamine Hydrochloride USP)	15 mg	1,250%
Riboflavin (Vitamin B2 USP)	15 mg	1,154%
Niacin (as Niacinamide USP)	15 mg	94%
Vitamin B6 (as Pyridoxine Hydrochloride USP)	15 mg	882%
Folate (from 800 mcg as Quatrefolic® (6S)-5-Methyltetrahydrofolic acid glucos	1,360 mcg DFE amine salt)	340%
Vitamin B12 (as Methylcobalamin)	250 mcg	10,417%
Biotin	50 mcg	167%
Pantothenic Acid (as d-Calcium Pantothenate USP)	15 mg	300%
Choline (as Choline Bitartrate)	15 mg	3%
Calcium (as Calcium Citrate USP)	75 mg	6%
Iodine (from Potassium Iodide)	37 mcg	25%
Magnesium (as DiMagnesium Malate)	75 mg	18%
Zinc (as Albion® Zinc Bisglycinate Chelate)	) 5 mg	45%
Selenium (as Albion® Selenium Glycinate Comple	75 mcg x)	136%
Manganese (as Albion® Manganese Bisglycinate Ch		43%
Chromium (as O-polynicotinate) (Chromema	ite®) 50 mcg	143%
Potassium (as Potassium Citrate USP)	30 mg	<1%
N-Acetyl-L-Cysteine USP	600 mg	*
Acetyl L-Carnitine Hydrochloride (MitoCarr	n®) 500 mg	*
Malic Acid (as DiMagnesium Malate)	215 mg	*
Alpha Lipoic Acid	200 mg	*
Mixed Tocopherols	50 mg	*
Green Tea Leaf Extract (Standardized to contain 45% EGCg (E	45 mg pigallocatechin gall	ate)) *
Broccoli Seed Extract (TrueBroc®) (Standardized to contain 13% Glucorap	40 mg hanin)	*
Inositol NF	15 mg	*
trans-Resveratrol (from Polygonum cuspidatum (Roots))	10 mg	*
* Daily Value not established.		

Other Ingredients: Hypromellose (Natural Vegetable Capsules), Magnesium Stearate, Ascorbyl Palmitate and Silicon Dioxide.

#### MitoCORE® Capsules ID# 117028 28 Capsules

#### Supplement Facts

Serving Size 3 Capsules

	Amount Per Serving	% Daily Value
Choline (as Choline Bitartrate)	72 mg	13%
Dandelion Root Extract	225 mg	*
Artichoke Leaf Extract (Standardized to contain 5% Cynarin)	145 mg	*
Inositol NF	140 mg	*
L-Methionine USP	140 mg	*
Milk Thistle Seed Extract (Standardized to contain 58% Silymarin)	130 mg	*
Garlic Bulb	100 mg	*
Turmeric Root Extract (Complete Turmeric Matrix) (Standardized 45-55% Curcuminoids, 3-8% Volatile Oil, 2		*

Other Ingredients: Hypromellose (Natural Vegetable Capsules), Microcrystalline Cellulose, Magnesium Stearate and Silicon Dioxide.

**PhytoCore** ID# 523020 20 Capsules

**Core Support Chocolate ID# 681001** 



#### References

- 1. Raftogianis R, Creveling C, Weinshilboum R, Weisz J. Estrogen metabolism by conjugation. *J Natl Cancer Inst Monogr.* 2000;(27):113-24. doi: 10.1093/oxfordjournals. jncimonographs.a024234. PMID: 10963623.
- 2. Parkinson A, Ogilvie BW. Chapter 6. Biotransformation of Xenobiotics. In: Klaassen CD, Watkins JB, III. eds. Casarett & Doull's Essentials of Toxicology, 2e. McGraw Hill; 2010. Accessed January 04, 2024. https://accesspharmacy.mhmedical.com/content.aspx?bookid=449&sectionid=39910772
- Agency for Toxic Substances and Disease Registry. Chemicals, Cancer, and You. Division of Health Assessment and Consultation. 2011. Accessed January 9, 2024. https:// stacks.cdc.gov/view/cdc/45777
- 4. An P, Wei L, Zhao S, et al. Hepatocyte mitochondriaderived danger signals directly activate hepatic stellate cells and drive progression of liver fibrosis. *Nat Commun.* 2020;11(1):2362.
- Almazroo OA, Miah MK, Venkataramanan R. Drug Metabolism in the Liver. Clin Liver Dis. 2017 Feb;21(1):1-20. doi: 10.1016/j.cld.2016.08.001. Epub 2016 Oct 15. PMID: 27842765.
- 6. Atkuri KR, Mantovani JJ, Herzenberg LA, et al. N-Acetylcysteine—a safe antidote for cysteine/glutathione deficiency. *Curr Opin Pharmacol.* 2007 Aug;7(4):355-9. Review.
- 7. McCarty MF, O'Keefe JH, DiNicolantonio JJ. Dietary Glycine Is Rate-Limiting for Glutathione Synthesis and May Have Broad Potential for Health Protection. *Ochsner J.* 2018 Spring;18(1):81-87. PMID: 29559876; PMCID: PMC5855430.
- 8. Birdsall T C. Therapeutic applications of taurine. *Altern Med Rev.* 1998; 3(2):128-136.
- 9. Shay KP, Moreau RF, et al. Alpha-lipoic acid as a dietary supplement: molecular mechanisms and therapeutic potential. *Biochem Biophys Acta*. 2009; 1790(10):1149-1160.
- 10. Yu R, Jiao JJ, et al. Activation of mitogen-activated protein kinases by green tea polyphenols: potential signaling pathways in the regulation of antioxidantresponsive element-mediated phase II enzyme gene expression. *Carcinogenesis*. 1997; 18(2):451-456.

- 11. Barch DH, Rundhaugen LM. Ellagic acid induces NAD(P) H:quinone reductase through activation of the antioxidant responsive element of the rat NAD(P)H:quinone reductase gene. *Carcinogenesis*. 1994 Sep;15(9):2065-8. doi: 10.1093/carcin/15.9.2065. PMID: 7522986.
- 12. Panahi Kokhdan E, Khodabandehloo H, Ghahremani H, Doustimotlagh AH. A Narrative Review on Therapeutic Potentials of Watercress in Human Disorders. *Evid Based Complement Alternat Med.* 2021 May 7;2021:5516450. doi: 10.1155/2021/5516450. PMID: 34055006; PMCID: PMC8123986.
- 13. Bakır S, Yazgan UC, İbiloğlu İ, Elbey B, Kızıl M, Kelle M. The protective effect of pomegranate extract against cisplatin toxicity in rat liver and kidney tissue. *Arch Physiol Biochem*. 2015;121(4):152-6. doi: 10.3109/13813455.2015.1068336. Epub 2015 Aug 6. PMID: 26247305
- 14. Tanner GA. Potassium citrate/citric acid intake improves renal function in rats with polycystic kidney disease. *J Am Soc Nephrol.* 1998 Jul;9(7):1242-8. doi: 10.1681/ASN. V971242. PMID: 9644634.
- 15. Rui L. Energy metabolism in the liver. *Compr Physiol*. 2014 Jan;4(1):177-97. doi: 10.1002/cphy.c130024. PMID: 24692138; PMCID: PMC4050641.
- 16. Liska, DJ. The detoxification enzyme systems. *Altern Med Rev.* 1998; 3(3):187-198.
- 17. Nair S, P Chacko V, Arnold C, Diehl AM. Hepatic ATP reserve and efficiency of replenishing: comparison between obese and nonobese normal individuals. *Am J Gastroenterol*. 2003 Feb;98(2):466-70. doi: 10.1111/j.1572- 0241.2003.07221.x. PMID: 12591070.
- 18. Huffman MA. Animal self-medication and ethno-medicine: exploration and exploitation of the medicinal properties of plants. *Proc Nutr Soc.* 2003;62:371–381.
- 19. Kiruthiga PV, Shafreen RB, Pandian SK, Devi KP. Silymarin protection against major reactive oxygen species released by environmental toxins: exogenous H2O2 exposure in erythrocytes. *Basic Clin Pharmacol Toxicol*. 2007 Jun;100(6):414-9.
- 20. Shen G, Xu C, Hu R, Jain MR, et al. Modulation of nuclear factor E2-related factor 2-mediated gene expression in mice liver and small intestine by cancer chemopreventive agent curcumin. *Mol Cancer Ther.* 2006;1:39–51.

LT-PDN-072-E

