# Marna Multi

#### **CLINICAL APPLICATIONS**

- Provides Baseline Nutrition for a Variety of Protocols
- Full-Spectrum Antioxidant Protection
- Builds Metabolic Reserve and Protects Against Dietary Deficiencies
- Protects Against Stress-Induced Nutrient Depletion
- Supports Healthy Metabolism



This product is a comprehensive, hypo-allergenic, multivitamin and mineral blend. As a complete multivitamin, This product provides high-quality nutrients to build a healthy micronutrient reserve. USP\* B vitamins support energy production and folate (as Quatrefolic™ - 100% 5-MTHF), the biologically active form of folic acid, improves methylation. Albion® TRAACS® chelated mineral complexes enhance bioavailability. This product includes an optimal 2:1 magnesium to calcium ratio. Key antioxidant vitamin C, natural vitamin E mixed tocopherols and carotenoids protect cells from free radical damage. This product also contains the synergistic blend of vitamin K2 (as MK-7) and D3 which are critical for supporting bone strength and cardiovascular health.

#### **Overview**

It is well-established that good nutrition promotes health, while nutritional deficiencies can lead to many health challenges. Yet, many people underestimate the importance of achieving proper levels of micronutrients each day. For the human body to complete vital daily tasks, it must be given a wide and complex variety of key micronutrients. Micronutrients play a role in strengthening immune function and converting food into energy. They detoxify chemicals and medications, and manufacture neurotransmitters, hormones and other key signaling molecules in the body. Micronutrients also maintain tissue repair and cell regeneration. Becoming deficient in any one of these essential vitamins or minerals can create a breakdown metabolic processes that safeguard health.

Comprehensive studies conducted by the United States Department of Agriculture have revealed the average American diet lacks micronutrients. Nutritional deficiencies may be caused by poor nutrient levels in the soil, food transport and storage methods, and food processing techniques. In

addition, deficiencies can also be caused by highly processed and refined foods, food additives, medications, alcohol consumption, smoking, heavy metal exposure and high stress levels. Whatever the reason, nutrient deficiencies exist in a substantial portion of the U.S. population and, for select nutrients, more than 80% of Americans consume less than the recommended daily allowance (RDA). 1,2 Although recommended nutrient intakes (e.g., %DV, DRIs, EARs, RDAs) have been established as minimum guidelines for healthy individuals, these guidelines were not designed to address the micronutrient needs of all individuals, especially those with chronic health concerns. While these guidelines can help prevent a severe nutrient deficiency, standards such as the RDA are not a reflection of optimal daily intake. For these reasons, a daily multivitamin is a prudent choice for most individuals. This product is a superior multivitamin designed to support the ideal daily intake of vitamins and minerals by providing a high-quality source of nutrients in the most bioavailable form.

### Bioavailability<sup>†</sup>

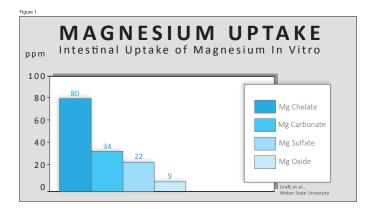
The importance of bioavailability is obvious. If consuming a multivitamin has little effect on improving the body's nutrient balance, there is no reason to ingest it. Inferior multivitamin supplements often contain synthetic vitamin E in a dl-tocopherol form. This product contains natural d-alpha tocopherol, as well as mixed tocopherols, to enhance vitamin E availability and its free radical scavenging potential.<sup>3</sup> Another sign of an inferior multivitamin is the use of cheap, poorly-absorbed, rock-salt minerals like calcium carbonate and magnesium oxide. These mineral forms have slow and limited absorption relying on adequate stomach acid to promote passive diffusion into the body.

What's more, because they remain in the intestines longer, these forms can cause intestinal distress such as constipation (calcium carbonate) or diarrhea (magnesium oxide).

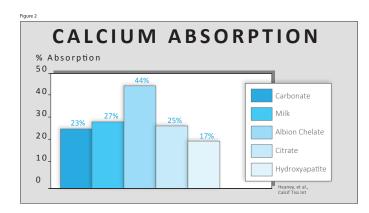
This product provides a full spectrum of highly absorbed, Albion® mineral chelates. Albion® is the world leader in manufacturing highly bioavailable mineral chelates, a specialized form of minerals bound to amino acids. This patented process creates natural mineral compounds which use active absorption mechanisms in the gastrointestinal tract to significantly enhance mineral absorption. Comparison studies show significantly superior absorption of mineral chelates over other forms of minerals.

In a magnesium comparison study reported by Graff et al. at Weber State University, Albion's® magnesium amino acid chelate had (See Figure 1): <sup>3</sup>

- 8.8 times greater absorption than magnesium oxide
- 5.6 times greater absorption than magnesium sulfate
- 2.3 times greater absorption than magnesium carbonate



In a clinical study comparing calcium absorption in humans, Albion's® patented calcium chelate delivered the greatest absorption of all calcium sources tested (44% Absorption - See Figure 2).4



In addition, mineral chelates are gentle, gut-friendly minerals that do not cause the constipation that often accompanies calcium carbonate and other mineral forms. Albion's® mineral chelates have extensive clinical research proving their superior bioavailability, biologic activity, stability and tolerance.

# Metabolism & Energy Production<sup>†</sup>

Converting food into cellular energy is a nutrient-intensive process. This product provides substantial levels of B vitamins, which are prime coenzymes for the Kreb's cycle, the biochemical pathway responsible for maintaining energy production in the form of ATP (adenosine triphosphate). This product exclusively uses high-quality, USP\* grade B vitamins ideal for those looking to boost their energy levels and support stressful lifestyles. This product also contains the bioavailable form of folate (Quatrefolic™ - 100% 5-MTHF). 5-MTHF helps promote DNA repair, homocysteine balance, neurotransmitter production, hormone balance and healthy detoxification.

# **Broad Spectrum Antioxidant Support<sup>†</sup>**

The body is constantly exposed to free radicals and relies heavily on its antioxidant reserve for protection. Free radicals are generated by metabolic by-products and environmental exposure such as UV rays from the sun, air pollution and radiation. This product contains a balanced spectrum of antioxidant vitamins such as vitamin C, mixed carotenoids, trace elements and nutrients that up-regulate antioxidant-supporting pathways in the body. They work synergistically to regenerate each other and maintain adequate levels of protective antioxidants throughout the body.

\*The USP is a scientific organization that sets standards for the identity, strength, quality and purity of medicines, food ingredients and dietary supplements, manufactured, distributed and consumed worldwide.

#### **Directions**

4 capsules per day with food or as recommended by your health care professional.

## **Does Not Contain**

Gluten, yeast, artificial colors and flavors.

#### **Cautions**

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

# Supplement Facts

Serving Size 4 Capsules Servings Per Container 60

4 capsules contain	Amount Per Serving	% Daily Value
Vitamin A	2,250 mcg	250%
(from 7,500 IU as Natural Beta Carotene, Palmitate)		
Vitamin C	500 mg	556%
(as Calcium Ascorbate USP, Ascorbic Acid USP)		
Vitamin D (D3 as Cholecalciferol)	25 mcg (1,000 IU)	125%
Vitamin E (from 100 IU as d-Alpha Tocopherol Succinate USP)	67 mg	447%
Vitamin K (K1 as Phytonadione, K2 as Menaquinone-7 (MK-7, MenaQ7®PF	62.5 mcg	52%
Thiamin (Vitamin B1)(from Thiamine Hydrochloride USP)	25 mg	2,083%
Riboflavin (Vitamin B2 USP)	25 mg	1.923%
Niacin (as Niacin USP, Niacinamide USP)	25 mg	156%
Vitamin B6 (as Pyridoxine Hydrochloride USP)	37 mg	2.176%
Folate	680 mcg DFE	170%
from 400 mcg as Quatrefolic® (6S)-5-Methyltetrahydrofolic acid (		170%
Vitamin B12 (as Methylcobalamin)	500 mcg	20,833%
Biotin	200 mcg	667%
Pantothenic Acid (as d-Calcium Pantothenate USP)	150 mg	3,000%
Choline (as Choline Bitartrate)	19 mg	3%
Calcium (as DimaCal® Dicalcium Malate, Calcium Ascorbate USP, d-Calci	100 mg um Pantothenate USP)	8%
Iron (as Ferrochel® Ferrous Bisglycinate Chelate)	15 mg	83%
lodine (from Kelp)	112 mcg	75%
Magnesium (as DiMagnesium Malate,TRAACS® Magnesium Lysinate Glycina	200 mg	48%
Zinc (as TRAACS® Zinc Bisglycinate Chelate)	10 mg	91%
Selenium (as Selenium Glycinate Complex)	100 mcg	182%
Copper (as TRAACS® Copper Bisglycinate Chelate)	1 mg	111%
Manganese (as TRAACS® Manganese Bisglycinate Chelate)	2 mg	87%
Chromium (as O-polynicotinate)‡	200 mcg	571%
Molybdenum (as TRAACS® Molybdenum Glycinate Chelate)	25 mcg	56%
Potassium (as Potassium Citrate USP)	50 mg	1%
Inositol NF	50 mg	*
Mixed Tocopherols	50 mg	*
Rutin	25 mg	*
Boron (as Bororganic™ Glycine)	1.5 mg	*
Vanadyl Sulfate Hydrate	1 mg	*
* Daily Value not established		

#### References

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- 2. National Research Council, *Diet and Health: Implications for Reducing Chronic Disease Risk* (Washington, DC: National Academy Press, 1989).
- 3. Devaraj S, Leonard S, Traber MG, et al. Gammatocopherol supplementation alone or in combination with alpha-tocopherol alters biomarkers of oxidative stress and inflammation in subjects with metabolic syndrome. *Free Radica Biol Med* 2008;44:1203-1208.
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- 5. Calcium: Heaney RP, Recker RR, Weaver CM.
  Absorbability of calcium sources: the limited role of solubility. *Calcif Tissue Int* 1990 May;46(5):300-4.