

### Twice Daily Multi

FOUNDATIONAL MULTIVITAMIN & MINERAL FORMULA 120 VEGETARIAN CAPSULES | NPN80050926 | TDM120-CN

A healthy diet of whole, unprocessed foods can provide the body with a broad spectrum of vitamins and minerals. However, even the best diets are sometimes unable to keep up with our needs, especially during times of occasional stress, intense exercise, suboptimal digestion, or any other circumstances that increase our demand for nutrients. A high-quality daily multivitamin helps ensure a good foundation for key nutrients that support overall health and wellbeing.

Twice Daily Multi™ contains a blend of vitamins and minerals that are difficult to obtain from food alone. This specially designed product includes select minerals in chelated form. Chelation is the bonding of minerals to amino acids, which results in molecules that are more bioavailable and better absorbed and assimilated by the body. The old saying—"you are what you eat"—is only half true. You are what you eat and absorb. Chelated minerals are better absorbed, retained and used in the body.

#### **PRODUCT HIGHLIGHTS**

In addition to foundational vitamins and minerals, Twice Daily Multi™ provides nutrients not commonly found in commercially available multivitamin/mineral products:

- B Vitamins: Provided in their natural and/or activated forms for superior bioavailability.
- Vitamin C: Provided as ascorbic acid, at higher levels than in most multivitamins. Average vitamin C intake from food is well below what healthy humans historically consumed and the typically recommended amount is intended only to prevent deficiency; it does not provide for optimal health. The higher amount in this product may help support numerous roles for vitamin C such as immune health, synthesis of collagen, aiding in iron absorption and metabolism of catecholamines such as dopamine and adrenaline.
- Folate: Provided in an easily absorbed form that helps to support healthy plasma folate levels. (Most mass-marketed supplements contain folic acid, which may have undesirable effects.)
- **Vitamin A:** Provided as pre-formed vitamin A as well as mixed carotenoids, which the body converts to vitamin A. This combination mimics the types of vitamin A found in whole foods.
- Vitamin K: Provided as vitamin K1 and vitamin K2 (as MK-4 and MenaQ7® Full Spectrum as MK-6, MK-7, MK-9).
- **Vitamin E Isomers:** Provided as tocotrienols from annatto extract. Tocotrienols have higher antioxidant activity and unique benefits not observed with tocopherols, the form of vitamin E in most commercially available supplements.
- **lodine and Selenium:** Minerals needed for the synthesis of thyroid hormones, which help maintain optimal energy levels and an efficient metabolic rate.
- Boron: A trace element that is low in the modern food supply but may support healthy bones.

Twice Daily Multi™ does not include calcium, magnesium, iron or copper. The amount of these minerals people get from their diet varies, so it's best to individualize supplementation based on age, sex, health status, genetic factors and other variables. Work with your health care practitioner to customize dosages for your individual needs.

**Recommended Use:** Take 2 capsules per day with meals a few hours before or after taking other medications, or as directed by your health care practitioner. Take with calcium.

Consult with your healthcare practitioner about your specific circumstances, particularly if you are taking a blood-thinning medication, and any questions you may have.

# Twice Daily Multi™



A multi-vitamin/mineral for the maintenance of good health

According to Health Canada, most Canadians are not achieving their required daily amounts of vitamins and minerals. Designs for Health's two a day multivitamin was designed to provide effective dosages of nutrients that are difficult to obtain in the typical daily diet, such as 158 mg of mixed tocopherols, 200 mcg of selenium, 400 mcg of chromium, 500 mg vitamin C and 400 mcg folates. Calcium and magnesium were purposely left out since they should be taken separately at therapeutic doses.

Twice Daily Multi utilizes the most efficiently absorbed mineral forms available: true Albion chelates. These minerals are sourced from our raw materials supplier Albion Advanced Nutrition with the best mineral technology in the industry.

### Twice Daily Multi Unique Features:

- Rich in immune enhancing antioxidant nutrients vitamins C, E, and lipoic acid.
- High in B-6, folates and B-12, all of which help lower serum homocysteine. Elevated homocysteine is increasingly recognized as a risk factor for heart disease and birth defects.
- High in chromium, a trace mineral essential for healthy sugar and fat metabolism. Most diets contain less than 60% of the
  minimum suggested intake of chromium. Insufficient intakes of chromium lead to signs and symptoms of diabetes and
  cardiovascular disease. Supplemental chromium given to those with impaired glucose tolerance or diabetes leads to improved
  blood glucose, insulin, and lipid variables. Chromium also improves lean body mass.
- Contains NatureFolate<sup>™</sup>, our blend of active, naturally-occurring folates.
- Balanced in iodine and selenium content. Both trace minerals must be present in the correct proportion in order to support the health of the thyroid. Imbalanced intake of iodine and selenium should be avoided as this may impair thyroid function.
- Rich in boron, which is essential for bone health and optimal mental energy.
- Contains sufficient biotin for healthy fat and blood sugar metabolism, and healthy nails.
- Rich in zinc, needed for immune function, protein synthesis, and appetite control.
- Free of calcium and magnesium, which require dosing according to individual needs.

Twice Daily Multi: NPN80050926	
Medicinal Ingredients (per capsule):	
	15 ma
Vitamin B3 (Niacinamide)	150 mcg
Boron (Boron glycinate)	1 mg
Chromium (Chromium nicotinate, Chromium bisglycinate)	200 mcg
Pantothenic acid (Calcium-d-pantothenate)	25 mg
Pantothenic acid (Calcium-d-pantothenate)	10 mg
Folate (Brassica oleracea var. italica-herb top)	
Iodine (Potassium iodide)	37.5 mcg
Manganese (Manganese bisglycinate)	1.5 mg
Tocopherols (Mixed tocopherol concentrate) (d-alpha Tocopherol, gamma-Tocopherol, delta-Tocopherol).	
Molybdenum (Molybdenum bisglycinate)	
Vitamin B2 (Riboflavin)	
Selenium (Selenium glycinate)	
Thiamine (Thiamine hydrochloride)	25 mg
Vitamin A (Vitamin A palmitate)	
Vitamin B12 (Methylcobalamin)	
Vitamin B6 (Pyridoxine hydrochloride)	
Vitamin C (Ascorbic acid)	250 mg
Vitamin D (Cholecalciferol)	6.25 mcg (250 IU)
Zinc (Zinc bisglycinate)	7.5 mg
<b>Non-Medicinal Ingredients:</b> Microcrystalline cellulose, silicon dioxide, vegetable stearate.	

For minerals to properly form coordinate covalent bonds with amino acids, they must be mixed in liquid solution. These bonds cannot form in a dry environment or in powdered form. True chelates need to be small enough in molecular weight to be absorbed by the body, are absorbed better than mineral salts and are better retained in body tissue. Additionally, chelated minerals are better tolerated than non-bound mineral salts. Since they are better tolerated and absorbed, chelates are less likely to cause loose stools or other gastrointestinal discomfort.



## WHAT ARE

### TRUE

### CHELATES?

These ligands are important as the chelated compound will remain chelated throughout the

gut and into the bloodstream. Mineral salts from non-true chelates often break apart in the stomach, leaving the body with ionized mineral and extra compound to deal with. Ionic minerals can interfere with the absorption of other minerals such as iron and zinc whereas chelated minerals do not.

Albion minerals are mainly chelated with glycine due to its low molecular weight. Glycine helps to slow the degeneration of muscle tissue by aiding the synthesis of creatine. Glycine is involved in energy production, formation of amino acids for the immune system, CNS function, and prostate health.

### **Additional Multivitamins Available From Designs for Health**

### DFH Complete Multi™

This classic 6-per-day full-spectrum multivitamin includes Albion chelated minerals for maximum bioavailability, high gamma tocopherol vitamin E, natural mixed carotenoids from palm tree fruit—the best source of preformed vitamin A—and additional supportive nutrients not typically found in multivitamins such as alpha lipoic acid, TMG, fruit bioflavonoids, even choline and inositol. It contains a hefty dose of all the B vitamins easily depleted by stress: B-12 in the ideal methylcobalamin form, 500 IU of vitamin D, and calcium and magnesium in a 1:2 ratio. This copper and iron free formula has been designed for those with high oxidative stress or elevated metals, men receiving adequate iron in their diets, and menopausal women. Two capsules with each meal is recommended.

### DFH Complete Multi™ with Copper and Iron

This formula is appropriate for teenagers, menstruating females, lactating women, and those who avoid eating red meat.

### DFH Complete Multi™ with Copper

This version contains 2 mg of copper as copper glycinate chelate, a stabilized mineral chelate from Albion Minerals that reduces the risk of free copper in the body, which could cause oxidative stress. This multi is iron free.

#### References

- 1. Vojdani A, Bazargan M, Vojdani E, Wright J. New evidence for antioxidant properties of vitamin C. Cancer Detect Prev 2000; 24:508-23.
- 2. Bron D, Asmis R. Vitamin E and the prevention of atherosclerosis. Int J Vitam Nutr Res 2001; 71:18-24.
- 3. Alvarez S, Boveris A. Antioxidant adaptive response of human mononuclear cells to UV-B: effect of lipoic acid. J Photochem Photobiol B 2000; 55:113-9.
- Brouwer DA, Welten HT, van Doormaal JJ, Reijngoud DJ, Muskiet FA. [Recommended dietary allowance of folic acid is insufficient for optimal homocysteine levels]. Ned Tijdschr Geneeskd 1998; 142:782-6.
- 5. Kaplan LN, Mamer OA, Hoffer LJ. Parenteral vitamin B-12 reduces hyperhomocysteinemia in end-stage renal disease. Clin Invest Med 2001; 24:5-11.
- 6. Simon J, Mayer O, Jr., Rosolova H. [Effect of folates, vitamin B-12 and life style factors on mild hyperhomocysteinemia in a population sample]. Cas Lek Cesk 1999; 138:650-3.
- 7. Anderson RA. Chromium as an essential nutrient for humans. Regul Toxicol Pharmacol 1997; 26:S35-41.
- 8. Hotz CS, Fitzpatrick DW, Trick KD, L'Abbe MR. Dietary Iodine and selenium interact to affect thyroid hormone metabolism of rats. J Nutr 1997; 127:1214-8.
- 9. Arthur JR, Nicol F, Beckett GJ. The role of selenium in thyroid hormone metabolism and effects of selenium deficiency on thyroid hormone and iodine metabolism. Biol Trace Elem Res 1992; 33:37-42.
- Penland JG. The importance of boron nutrition for brain and psychological function. Biol Trace Elem Res 1998; 66:299-317.
- 11. Zhang H, Osada K, Maebashi M, Ito M, Komai M, Furukawa Y. A high biotin diet improves the impaired glucose tolerance of long-term spontaneously hyperglycemic rats with non-insulin-dependent diabetes mellitus. J Nutr Sci Vitaminol (Tokyo) 1996; 42:517-26.
- 12. Shay NF, Mangian HF. Neurobiology of zinc-influenced eating behavior. J Nutr 2000; 130:1493S-9S.