# **NutriDyn**

# Vitamin C 1000 Complex

Ultra-Potent, Multi-Form Vitamin C Blend for Antioxidant Support\*

### Vitamin C 1000 Complex Supplementation

Vitamin C 1000 Complex is one of the most comprehensive vitamin C formulas available, featuring patented Quali®-C in conjunction with synergistic nutrients.

Vitamin C is an essential micronutrient that has a multiplicity of vital roles throughout the human body. This vitamin must be consumed as part of the diet or through supplementation, as the body cannot produce it endogenously. Recent data suggests that as many as 20% of adults in the U.S. are vitamin C deficient, and as few as 10% consume adequate vitamin C on a daily basis.\*1

A vast body of research demonstrates the importance of vitamin C as a key antioxidant in humans, with many roles throughout virtually every bodily system. • Vitamin C 1000 Complex is formulated with six different forms of bioavailable vitamin C, including patented Quali®-C, to help you meet your daily needs of this key micronutrient.

Benefits of supplementing with Vitamin C 1000 Complex may include:

- Supports healthy oxidative stress and immune function\*
- Supports cognitive function<sup>+</sup>
- Supports healthy neuronal processes\*
- Supports collagen synthesis\*
- Supports healthy cortisol balance\*

## How Vitamin C 1000 Complex Works

Vitamin C has a vast range of biological roles in humans, working as a major antioxidant (electron donor). As such, vitamin C is crucial for supporting oxidative stress, energy production, and immune function.<sup>42</sup> It is also necessary for synthesizing key neurotransmitters (especially norepinephrine and dopamine) and supporting healthy liver function. 43

Research is continually uncovering the many actions of vitamin C throughout the body. Findings thus far suggest that vitamin C is an integral micronutrient for neuronal differentiation and maturation, as studies have shown that supplemental vitamin C increases brain-derived neurotrophic factor (BDNF)—a peptide that supports healthy cell function.<sup>44</sup>

Vitamin C also appears to promote healthy dopamine and norepinephrine levels by acting as a co-substrate.<sup>44,5,6</sup> Further evidence suggests that as little as 250 mg of vitamin C per day can support healthy cortisol levels, thereby supporting stress-related symptoms.<sup>44</sup>



CGMP FACILITY NON-GMO

#### How Vitamin C 1000 Complex Works Continued

One study reported that college students who consumed supplemental vitamin C were 85% more likely to have healthy immune function as compared to students who didn't take a vitamin C supplement.<sup>47</sup>

Lastly, when the body lacks vitamin C, the risk of a collagen-related disease called scurvy increases; this condition can cause symptoms such as lethargy, anemia, and skin issues. Consuming adequate vitamin C, through diet and supplementation, may help protect against scurvy by promoting healthy collagen synthesis.<sup>48</sup>

## Supplement Facts

Serving Size: 1 Tablet Servings Per Container: 90

Amount Per Serving		%DV*
Vitamin C (from calcium ascorbate, ascorbic acid (Quali®-C), niacinamide ascorbate, sodium ascorbate, potassium ascorbate, and magnesium ascorbate)	1,000 mg	1,111%
Niacin (as niacinamide)	70 mg NE	438%
Calcium (from calcium ascorbate)	70 mg	5%
Sodium	12 mg	1%
L-Lysine	33 mg	**
Citrus Bioflavonoid Complex (standardized to 50% (16 mg) full spectrum bioflavonoids)	32 mg	**
Tetra-Sodium Pyrophosphate	14 mg	**
Alpha D-Ribofuranose	13 mg	**
L-Cysteine	8 mg	**
L-Glutathione	5 mg	**

**Other Ingredients:** Microcrystalline cellulose, croscarmellose sodium, purified water, vegetable stearic acid, vegetable magnesium stearate, hydroxypropyl methylcellulose, silica, glycine.

Quali®– C is a registered trademark of DSM Nutritional Products.

**Directions:** Take one tablet up to two times daily or as directed by your healthcare practitioner.

**Caution:** If you are pregnant, nursing, or taking medication, consult your healthcare practitioner before use. Keep out of reach of children.

#### **References:**

- Blumberg, J. B., Frei, B., Fulgoni III, V. L., Weaver, C. M., & Zeisel, S. H. (2016). Vitamin and mineral intake is inadequate for most Americans: what should we advise patients about supplements?. *Journal of Family Practice*, 65(9), S1-S1.
- Figueroa-Méndez, R., & Rivas-Arancibia, S. (2015). Vitamin C in health and disease: its role in the metabolism of cells and redox state in the brain. *Frontiers in physiology*, 6.
- Wei, J., Lei, G. H., Fu, L., Zeng, C., Yang, T., & Peng, S. F. (2016). Association between dietary vitamin C intake and non-alcoholic fatty liver disease: a cross-sectional study among middle-aged and older adults. *PloS one*, 11(1), e0147985.
- Padayatty, S. J., Katz, A., Wang, Y., Eck, P., Kwon, O., Lee, J. H., ... & Levine, M. (2003).
  Vitamin C as an antioxidant: evaluation of its role in disease prevention. *Journal of the American college of Nutrition*, 22(1), 18-35.
- Penninx, B. W., Guralnik, J. M., Ferrucci, L., Fried, L. P., Allen, R. H., & Stabler, S. P. (2000). Vitamin C deficiency and depression in physically disabled older women: epidemiologic evidence from the Women's Health and Aging Study. *American Journal of Psychiatry*, 157(5), 715-721.
- Paleologos, M., Cumming, R. G., & Lazarus, R. (1998). Cohort study of vitamin C intake and cognitive impairment. *American journal of epidemiology*, 148(1), 45-50.
  - Gorton, H. C., & Jarvis, K. (1999). The effectiveness of vitamin C in preventing and relieving the symptoms of virus-induced respiratory infections. *Journal of manipulative and physiological therapeutics*, 22(8), 530-533.
  - Padayatty, S. J., & Levine, M. (2001). New insights into the physiology and pharmacology of vitamin C. Canadian Medical Association Journal, 164(3), 353-355.

• These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

#### For more information, visit: www.nutridyn.com