



## C + BIOFIZZ

VITAMIN C COMBINED WITH BIOFLAVONOIDS

144 G POWDER | NPN80045352 | CBF144-CN

**C + BioFizz™** is a unique effervescent, orange-flavoured powder that contains vitamin C as ascorbic acid, calcium ascorbate, and magnesium ascorbate, along with the bioflavonoids quercetin, hesperidin, and rutin. These flavonoids help support the integrity and regulate the permeability of capillaries, while working in synergy with vitamin C to maintain collagen viability.

The bioflavonoids in C + BioFizz™ also help the body properly absorb and use vitamin C and prevent vitamin C from being destroyed by oxidation. With a generous amount of vitamin C plus the three powerful bioflavonoids, C + BioFizz™ simplifies getting optimal doses of these crucial vitamins in a convenient, delicious orange-flavoured powder.

### HIGHLIGHTS

#### **Vitamin C: The Wonder Nutrient<sup>1-6</sup>**

Perhaps more than any other nutrient, vitamin C (ascorbic acid) benefits an encyclopedic range of conditions. The body needs adequate amounts of vitamin C for immunity, bone maintenance, collagen crosslinking, enzymatic reactions, central nervous system function, and reducing inflammation, along with a broad range of biological functions in order to maintain physiologic homeostasis.<sup>1-7</sup> Recently, research has focused on the significant role that vitamin C plays in epigenetics, neurodegenerative diseases, and cancer.<sup>8-13</sup> The level of ascorbic acid in the body naturally declines during the aging process.<sup>14-16</sup> Other factors that reduce vitamin C levels include chronic stress (vitamin C helps support healthy adrenal function), smoking, illness, injury, and multiple medications such as oral contraceptives, estrogen replacement, corticosteroids, and aspirin.<sup>1,17-19</sup>

Dr. Linus Pauling, who pioneered extensive research on vitamin C, believed optimal amounts exceed 2,000 mg daily.<sup>1</sup> C + BioFizz™ offers 2,569 mg of vitamin C in the combined form of ascorbic acid, calcium ascorbate, and magnesium ascorbate. Mineral ascorbates, which are buffered and therefore less acidic, can be beneficial for people who experience gastrointestinal problems such as abdominal pain and diarrhea with plain ascorbic acid.

#### **Bioflavonoids Support Optimal Health**

Bioflavonoids are the most abundant group of polyphenols. Scientists have identified several thousand bioflavonoids, which provide much of the flavour and colour in fruits and vegetables. Research has focused on bioflavonoids' impact on cardiovascular disease, cancer, and osteoporosis.<sup>55-58</sup> As a group, they have demonstrated antioxidant, antibacterial, antiviral, anti-inflammatory, and anti-allergenic properties.<sup>20</sup>

## C + BioFizz™ Provides Three Well-Researched and Highly Beneficial Bioflavonoids

Quercetin is a highly concentrated bioflavonoid found in citrus fruits, red wine, and tea.<sup>21</sup> This powerful antioxidant reinforces the immune system, accelerates detoxifying-enzyme production, and may help reduce inflammation. A 2016 study concluded quercetin can reduce susceptibility to viral illnesses and protect the immune system against stress.<sup>22</sup> Quercetin may also provide valuable support in allergies, heart disease, hypertension, and cancer.<sup>23-27</sup>

Hesperidin, another powerful but lesser-known bioflavonoid, can be found in oranges and grapefruit. Studies show hesperidin, combined with vitamin C, offers anti-inflammatory and vasoprotective benefits. Hesperidin deficiencies can result in abnormal capillary leakiness and pain in the extremities that creates aches, weakness, and nighttime leg cramps.<sup>28-30</sup>

Rutin, found in apples, buckwheat, and other plants, is a potent flavonoid with anti-inflammatory properties that helps to protect blood vessels, improve circulation, and prevent blood clots.<sup>31-33</sup> Studies demonstrate that rutin can significantly reduce leg swelling, relieve leg pain, and reduce leg cramps, heaviness, and itching.<sup>34</sup> Rutin's antioxidant properties have been shown to be cardioprotective and boost heart health, help ameliorate symptoms associated with arthritis, protect against metabolic diseases, promote brain health and protect against brain injury, as well as attenuate gut dysbiosis and ameliorate renal fibrosis.<sup>32,35-51</sup>

## Bioflavonoids and Vitamin C Make a Powerful Nutrient Team<sup>20-23</sup>

Bioflavonoids work synergistically with vitamin C.<sup>52</sup> For example, bioflavonoids and vitamin C work together to protect and preserve the structure of blood capillaries.<sup>53</sup> Bioflavonoids also protect the vitamin itself by inhibiting the breakdown of ascorbic acid and by preventing oxidation.<sup>20</sup> Nature often combines vitamin C and bioflavonoids, since they work synergistically. For instance, oranges are rich in vitamin C and hesperidin, which when combined, boost antioxidant protection.<sup>54</sup>

### Medicinal Ingredients (per 2 g/half teaspoon):

|  |           |
|--|-----------|
| Vitamin C (Ascorbic acid, calcium ascorbate, magnesium ascorbate)..... | 1284.5 mg |
| Hesperidin.....  | 10 mg     |
| Quercetin.....   | 10 mg     |
| Rutin.....   | 5 mg      |

**Non-Medicinal Ingredients:** Natural flavour, certified organic stevia leaf extract powder, natural orange flavour, citric acid, silicon dioxide, sunflower lecithin. **Recommended Dose:** Adults: Take 2 g (approx. 1/2 teaspoon) per day, or as directed by your health care practitioner.

Dosing recommendations are given for typical use based on an average 150 pound healthy adult. Healthcare practitioners are encouraged to use clinical judgement with case-specific dosing based on intended goals, subject body weight, medical history, and concomitant medication and supplement usage.

## REFERENCES

For a list of references cited in this document, please visit: [http://catalog.designsforhealth.com/assets/itemresources/C+BioFizz\\_References.pdf](http://catalog.designsforhealth.com/assets/itemresources/C+BioFizz_References.pdf)