

# Serrapeptase

**Doctor's  
BEST**

Science-Based Nutrition™



## Serrapeptase 90VC & 270VC

### Supplement Facts

Serving Size 1 capsule  
Servings per container 90 servings & 270 Servings

|   | Amount per serving | % Daily Value |
|---|--------------------|---------------|
| Calcium (from Serrateric™)                                | 24.5 mg            | 2 %           |
| Serrapeptase enzyme<br>(serratiopeptidase activity units) | 40,000 SPU         | †             |

† Daily Value not established.

**Other Ingredients:** Cellulose, Serrateric™, modified cellulose (vegetarian capsule).

**Suggested Adult Use:** Take 1 capsule up to 3 times daily without food, or as recommended by a nutritionally-informed physician.

**Non-GMO / Gluten Free / Vegan**

Store in a cool dry place.

### INGREDIENTS

Serrapeptase is a proteolytic enzyme first isolated from the non-pathogenic *Serratia* bacteria species strain E15 by Japanese researchers in 1966.<sup>1</sup> Proteolytic enzymes, as the term implies, break down proteins. *Serratia* E15 was discovered in the Japanese silkworm, which harnesses serrapeptase enzyme activity to break down its cocoon walls.<sup>1,2</sup> Each vegetarian capsule of Doctor's Best Serrapeptase and High Potency Serrapeptase contains pure serrapeptase designed for optimal absorption in the intestinal tract.

### BENEFITS

**Promotes & Maintains Healthy Sinus and Airway Function\***

**Supports Healthy Immune Response\***

The mucous membranes are a thin tissue layer or epithelium that lines the body's hollow structures (cavities) opening to the exterior, such as the upper respiratory system. They secrete a slightly viscous fluid called mucus, which is actually a complex viscoelastic gel that lubricates and moistens the cavity surfaces. As a part of normal, healthy physiology, mucus is the first line of defense in the nose and lungs to trap and filter inhaled dust, pollutants, and other potentially damaging agents. Proteolytic enzymes such as serrapeptase can break down inappropriate protein complexes in the mucus, thereby favorably influencing its properties and helping to support the healthy balance between adequate mucous viscosity/elasticity and airway comfort levels associated with the mucous membranes of the respiratory system.<sup>3-5</sup>

Research with serrapeptase for maintenance of healthy sinus function began decades ago in Japan. Studies thus far indicate that serrapeptase is a safe and useful supplement to promote favorable viscosity of nasal and bronchial mucus. Two of the earliest human trials found that serrapeptase had favorable effects on upper airway viscosity.<sup>3,4</sup> In these assessments, mucus was collected from participants after a 4-week supplementation period and evaluated using a rheometer to determine its viscoelastic properties. The enzyme's action most likely involves the breakdown of mucus protein structures, consequently allowing the cilia (microscopic hairlike projections in the mucosal epithelium of the upper respiratory tract) to helpfully transport mucus in the airway.

## High Potency Serrapeptase, 90VC & 270VC

### Supplement Facts

Serving Size 1 veggie capsule  
Servings per container 90 servings & 270 Servings

|   | Amount per serving | % Daily Value |
|---|--------------------|---------------|
| Calcium (from Serrateric™)                                | 36 mg              | 3 %           |
| Serrapeptase enzyme<br>(serratiopeptidase activity units) | 120,000 SPU        | †             |

† Daily Value not established.

**Other Ingredients:** Cellulose, Serrateric™, modified cellulose (vegetarian capsule).

**Suggested Adult Use:** Take 1 capsule daily away from food, or as recommended by a nutritionally-informed physician.

**Non-GMO / Gluten Free / Vegan**

Store in a cool dry place.

\* 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.

Serrapeptase can also significantly affect sputum viscoelasticity.<sup>5,6</sup> In an investigation of forty individuals who were randomly assigned to one of five groups, six participants were given serrapeptase for one week. Sputum viscoelasticity was analyzed using a rheometer and researchers concluded that serrapeptase altered the “relaxation behavior” of sputum—meaning that serrapeptase helped support airway clearance.<sup>5</sup>

In a subsequent larger double blind trial, 193 participants were randomized into two groups and were instructed to take either serrapeptase or placebo 3 times daily after meals for one week.<sup>7</sup> After 4 days and at the end of the 7–8 day period, mucus secretion, airway freedom, and measures of immune response were significantly favorable in the serrapeptase group compared with the placebo group. A recent study in which the immune system of rats was challenged further confirms human data that serrapeptase can be used for supporting the immune system.<sup>8</sup>

In a controlled and randomized open-label study of 29 subjects, researchers again observed the effects of serrapeptase supplementation on sputum. After 4 weeks, subjects taking serrapeptase had significantly less morning sputum with favorable viscoelasticity; furthermore, the serrapeptase group had fewer neutrophils in their sputum, signifying a more balanced immune response to maintain airway health.<sup>9</sup>

## POTENCY

Doctor's Best discloses the potency details of Serrapeptase so you know exactly what you're getting. Enzyme strength is measured in terms of activity rather than weight, because an enzyme can be present but unless it is functional it will not be useful. Therefore, an enzyme product label should list the enzyme's functional activity, and this usually will come from a laboratory measure as standard activity units. For serrapeptase the best standard measure is “Serratiopeptidase Units” or SPU.

To meet your individual needs, there are two levels of potency to choose from with Doctor's Best Serrapeptase vegetarian capsules—either 40,000 or 120,000 SPU. **Doctor's Best Serrapeptase** has 40,000 SPU per capsule, which is considered a very high activity. Since **High Potency Serrapeptase** contains a tremendous 120,000 units, its suggested use is only 1 capsule per day.

## SCIENTIFIC REFERENCES

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5. Shimura S, Okubo T, Maeda S, others. *Biorheology* 1983;20:677-83.
6. Kase Y, Seo H, Oyama Y, others. *Arzneimittelforschung* 1982;32:374-8.
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