

## Collagen Forte

### DESCRIPTION

Collagen Forte, provided by Douglas Laboratories, supplies significant amounts of Vitamin C, L-Lysine, and L-Proline in capsule form to help support healthy collagen synthesis.

### FUNCTIONS

Vitamin C (ascorbic acid) has numerous biological functions. Foremost, it is essential for the synthesis of collagen and glycosaminoglycans which are the building materials of all connective tissues, such as skin, blood vessels, tendons, joint cartilage and bone. Vitamin C is the required coenzyme for two groups of enzymes that catalyze the crosslinking of collagen fibers - lysyl hydroxylases and prolyl hydroxylases. As such, vitamin C is essential for normal wound healing and capillary health. It also participates in the biosynthesis of carnitine, serotonin, and certain neurotransmitters, including norepinephrine. Vitamin C is among the most powerful antioxidants in humans and animals. It is a water-soluble, chain-breaking antioxidant that reacts directly with superoxide, hydroxyl radicals, and singlet oxygen. Laboratory studies show that vitamin C completely protects lipids in plasma and low-density lipoprotein (LDL) against atherogenic peroxidative damage. In addition, vitamin C interacts with glutathione and alpha-lipoic acid, and regenerates vitamin E. The antioxidant functions of vitamin C appear to have clinical significance in providing protection from free radical damage to the eyes, lungs, blood and the immune system. L-Lysine is required for collagen cross-linking. Collagen cross-linking is important for resiliency and elasticity of the collagen and elastin present in all connective tissues and blood vessel walls. During formation of new collagen, fibroblasts secrete immature collagen strands and a vitamin C- and copper-requiring enzyme, lysyl oxidase. Lysyl oxidase oxidizes the free amino group of the immature collagen's lysyl side chains. Once oxidized, these lysyl side chains spontaneously engage in various reactions between collagen strands to bring about cross-linking. As a result, a complex network of collagen strands is formed, providing elasticity and resiliency. L-Lysine has also been shown to be effective in supporting the immune system. L-Proline, another amino acid, also plays an important role in collagen formation. The body convert proline into hydroxyproline, which is used by the body to make into collagen.

### INDICATIONS

Collagen Forte may be a useful dietary supplement for individuals wishing to support proper collagen synthesis in the body.

### FORMULA (#99077)

Five Capsules Contain:

Vitamin C .....	2,000 mg
L-Lysine .....	1,000 mg
L-Proline.....	200 mg

In a base of Threonine

### SUGGESTED USE

Adults take 5 capsules daily with meals or as directed by physician.

### SIDE EFFECTS

No adverse side effects reported.

## Collagen Forte

### STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

### REFERENCES

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**For more information on Collagen Forte visit [douglaslabs.com](http://douglaslabs.com)**

† 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.

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