What is Serrapeptase?

Serrapeptase is an enzyme naturally produced by friendly *serratia* bacteria living in the intestines of silkworms. Living organisms produce enzymes to help speed up specific chemical processes. In the case of serrapeptase, it helps speed up the breakdown of proteins, making it a proteolytic enzyme [1].

Serrapeptase production is absolutely essential for the survival of the silkworm. Once the silkworm has spun its cocoon and completed its transformation into a moth, it would be trapped inside the strong silk threads and die if it weren't for serrapeptase. Because of the powerful protein-dissolving properties of serrapeptase, this enzyme literally dissolves the protein molecules that make up the silk cocoon, allowing the moth to escape.

Amazingly, because enzymes are extremely specific, serrapeptase only dissolves non-living proteins like those found in the cocoon, not the living tissue that makes up the newly transformed moth.

**Serrapeptase Benefits**

Although the role of serrapeptase in nature is to literally eat through silkworm cocoons, researchers have found that it performs other hugely beneficial tasks in the human body. When taken orally on an empty stomach, serrapeptase is absorbed by the small intestine and enters the bloodstream [2]. There it works throughout the body to break down protein debris that over-stimulates the immune system and triggers inflammation. It also digests proteins that make up scar tissue, blood clots, cysts, mucus and arterial plaques, among others [3]. Since living tissue is not broken down by serrapeptase, taking serrapeptase enzyme supplements poses no threat to healthy tissue or cells.

**Serrapeptase Reduces Pain and Inflammation**

Serrapeptase is a powerful treatment for pain and inflammation. Serrapeptase helps reduce inflammation by clearing out any "garbage" from the blood, which greatly reduces the stress on the immune system and causes inflammation levels to drop. It is thought to help reduce pain by blocking the release of pain-inducing chemicals called amines [3]. As a result, serrapeptase is often used to treat inflammatory conditions like inflammatory bowel disease (IBD), arthritis, sinusitis, scleroderma and fibrocystic breast disease (FBD). Serrapeptase also offers a safer alternative to long-term use of non-steroidal anti-inflammatory (NSAID) drugs.

**Serrapeptase Breaks Down Fibrin**

Fibrin is usually produced by the body in response to an injury because it creates a protein meshwork that holds together blood clots and scar tissue. When produced in the right amounts, fibrin is an important part of the healing process; however, when too much is produced it can cause deadly health problems like heart attacks, strokes and deep vein thrombosis (DVT), as well as a number of chronic and progressive diseases, like: [4-7]

- Alzheimer's
- Endometriosis
- Fibrocystic breast disease (FBD)
- Fibroids
- Fibromyalgia
- Interstitial lung diseases (ILD)
- Multiple Sclerosis (MS)
- Osteoarthritis
Serrapeptase research has shown that using fibrin-dissolving enzymes like serrapeptase helps remove excess fibrin from the body and keeps fibrin from being overproduced [8]. This can prevent dangerous blood clots from forming, improve cardiovascular health, reduce scarring and help treat chronic fibrin-related diseases.

**Serrapeptase Thins Fluids and Reduces Swelling**

Serrapeptase has been shown to thin the fluids produced in response to an injury and help drain this fluid from the injured tissue. As a result, swelling decreases and tissue repair is sped up. This is the reason why serrapeptase is often used to treat athletic injuries and prevent swelling after surgery.

Serrapeptase also thins other secretions like mucus, making it a useful supplement for people with:

- Cystic fibrosis (CF)
- Bronchitis
- Sinusitis
- Pharyngitis
- Laryngitis
- Chronic pulmonary disease

**Serrapeptase Research Citations**


©2012Serrapeptase All rights reserved.

Serrapeptase | Serrapeptase Side Effects | Serrapeptase Benefits | Serrapeptase Dangers | Neuropeptide | Nattokinase | http://www.serrapeptase.org/serrapeptase-research/what-is-serrapepta