

Japan has the highest average longevity in the world, which is partly attributed to a high consumption of soybean products, especially "natto".

The Discovery of Nattokinase. Doctor Hiroyuki Sumi has long researched thrombolytic enzymes searching for a natural agent that could successfully dissolve thrombus associated with cardiac and cerebral infraction (blood clots associated with heart attacks and stroke). Sumi discovered nattokinase in 1980 while working as a researcher and majoring in physiological chemistry at Chicago University Medical School.

After testing over 173 natural foods as potential thrombolytic agents, Sumi found what he was looking for when natto was dropped onto artificial thrombus (fibrin) in a Petri dish and allowed it to stand at 37 C (approximately body temperature). The thrombus around the natto dissolved gradually and had completely dissolved within 18 hours. Sumi named the newly discovered enzyme "nattokinase", which means "enzyme in natto".

When unhealthy fibrin formation occurs, there are major implications for cardiovascular health. The consequences can include:

- ◆formation of unhealthy blood clots
- ◆increased blood viscosity (thicker)
- ◆impaired circulation
- ◆effects on blood pressure
- ◆blood cells sticking to vessel walls (especially veins, further encouraging the development of unhealthy clots)

A fibrinolytic enzyme is an enzyme that breaks down or dissolves fibrin. There are 3000 + enzymes in the human body yet only one, plasmin, breaks down fibrin. Unfortunately, the body's protection of fibrinolytic enzymes tend to decline with age.

Nattokinase and plasmin are known as fibrinolytic enzymes.

Nattokinase is capable of directly and potently decomposing fibrin as well as activating pro-urokinase (endogenous).

Recently, the incidence of osteoporosis is increasing dramatically. One cause of osteoporosis is a lack of Vitamin K2. Natto contains plenty of Vitamin K2, and may therefore help to control the aging process.*