

Nattokinase Q&A edited by Japan Nattokinase Association (JNA)

Q: What disease is thrombosis?

A: This means that a blood clot (thrombus) will form in the blood and block the blood vessels. Well known are cerebral infarction and myocardial infarction.

Q: Is thrombosis a disease that anyone can suffer from?

A: This is a possible disease. If the temperature difference is large, the incidence will increase, and the metabolic syndrome caused by recent changes in the living environment and disordered eating habits has also become a social problem and can also cause thrombosis. In addition, stress and lack of water also have a great impact, so it is necessary to start with young people to pay attention.

Q: Please tell me the difference between natto and nattokinase.

A: Natto is a food made by sprinkling natto bacteria on boiled soybeans and fermenting. Nattokinase is an enzyme produced by natto bacteria during the fermentation process.

Q: Please tell us the role and benefits of nattokinase in an easy-to-understand way.

A: It is known that nattokinase can not only dissolve blood clots (thrombus) directly, but also activate plasmin and urokinase, which are plasmin in the body. It has also been proven to reduce PAI-1 substances in the body.

Q: What is the difference between nattokinase and other proteolytic enzymes?

A: Certain proteolytic enzymes decompose thrombus and protein in the body due to their strong proteolytic ability, but the characteristic of nattokinase is to specifically decompose (dissolve) thrombus.

Q: Please tell me about the effects and benefits other than thrombolysis.

A: It has been proven to improve blood flow, lower blood pressure and inhibit platelet aggregation.

Q: When is the best time to take it?

A: It is said that the most effective way is to take it after dinner and before going to bed, because blood clots are likely to occur when the body's water is insufficient or the blood flow is compressed for a long time. In addition, it is also recommended to take before long-distance flights.

Q: What are the guidelines for effective intake?

A: The unit that expresses the activity of nattokinase to dissolve thrombus is called FU, and intake of 2000 FU per day is used as a guideline for intake.

Q: Is it enough to take nattokinase to prevent blood clots?

A: Intake of nattokinase is one of the ways to prevent blood clots, but regular health management (daily life, diet, moderate exercise) is also very important.

Q: How much natto should I take to get the same effect as nattokinase?

A: Our recommended intake of nattokinase is 2000 FU/day. The average activity of nattokinase per box of 50 grams of natto is 1500 FU. Therefore, the intake of about 1-2 boxes of natto is required. However, according to different natto, the amount of

nattokinase activity will be different. Some boxes of natto have a lower content of nattokinase, and the activity near the expiration date will be lower. In addition, stomach acid will weaken the activity of natto. Nattokinase is usually taken in the form of soft capsules. In this case, nattokinase is less susceptible to gastric acid and can be more absorbed by the body.

Q: Nattokinase seems to be more sensitive to heat. How many degrees Celsius will destroy the activity of nattokinase?

A: It depends on whether the water content is high or low. When the temperature rises above 50 degrees when the water content is high, the activity drops sharply. If the water content is low, 100 degrees may be no problem. Just like humans, humans cannot soak in 50-degree hot spring water for a long time, but can enter a 100-degree dry sauna.

Q: Why can't warfarin users take natto?

A: This is because the vitamin K2 contained in natto weakens the effect of warfarin. In food, natto is rich in vitamin K2.

Q: I am currently taking warfarin, can I take nattokinase?

A: No problem. Nattokinase only has the ability to dissolve blood clots, and the blood does not stop bleeding. In addition, the safety of the combined use of nattokinase and warfarin has been confirmed in clinical trials.

Q: Are there any foods that I cannot or should not eat when taking nattokinase?

A: There are no special foods that should not be eaten. However, in order to prevent thrombosis, it is best to limit the intake of foods that promote blood coagulation (such as vitamin K2). The safety of nattokinase has been confirmed by the Japan Nattokinase Association. It is different from commercially available natto, and vitamin K2 is removed, so you can take it with confidence.

Q: Are there foods that have the same function as nattokinase?

A: There are several other foods in terms of improving blood circulation. However, most of them inhibit blood coagulation in advance and prevent thrombosis. There is no food that specifically dissolves blood clots that have formed like nattokinase.

Q: Please tell me if nattokinase has any side effects.

A: It has been more than ten years since its launch, but it has not seen any side effects. Natto has a long history of diet, and nattokinase is a component of it. We think it is a highly safe and healthy food.

Q: Are there any side effects or poisoning caused by overdose?

A: We have passed many safety tests to confirm that it can be used safely even if overdose. However, taking a large amount will not increase the effect, so we recommend that you take an appropriate dose every day.

Q: JNA and the Japanese Ministry of Health, Labour and Welfare have any cooperation or joint research.

A: JNA and J-Oil Mills, Japan Institute of Biological Sciences, jointly established the Nattokinase Standard (JHFA label). The standard also uses the FU activity measurement method recommended by JNA.

Q: I want to buy a product, what should I do?

A: Sorry, JNA will not sell products directly. However, certain members of the association sell nattokinase products, so I would like to introduce them to them if you wish.