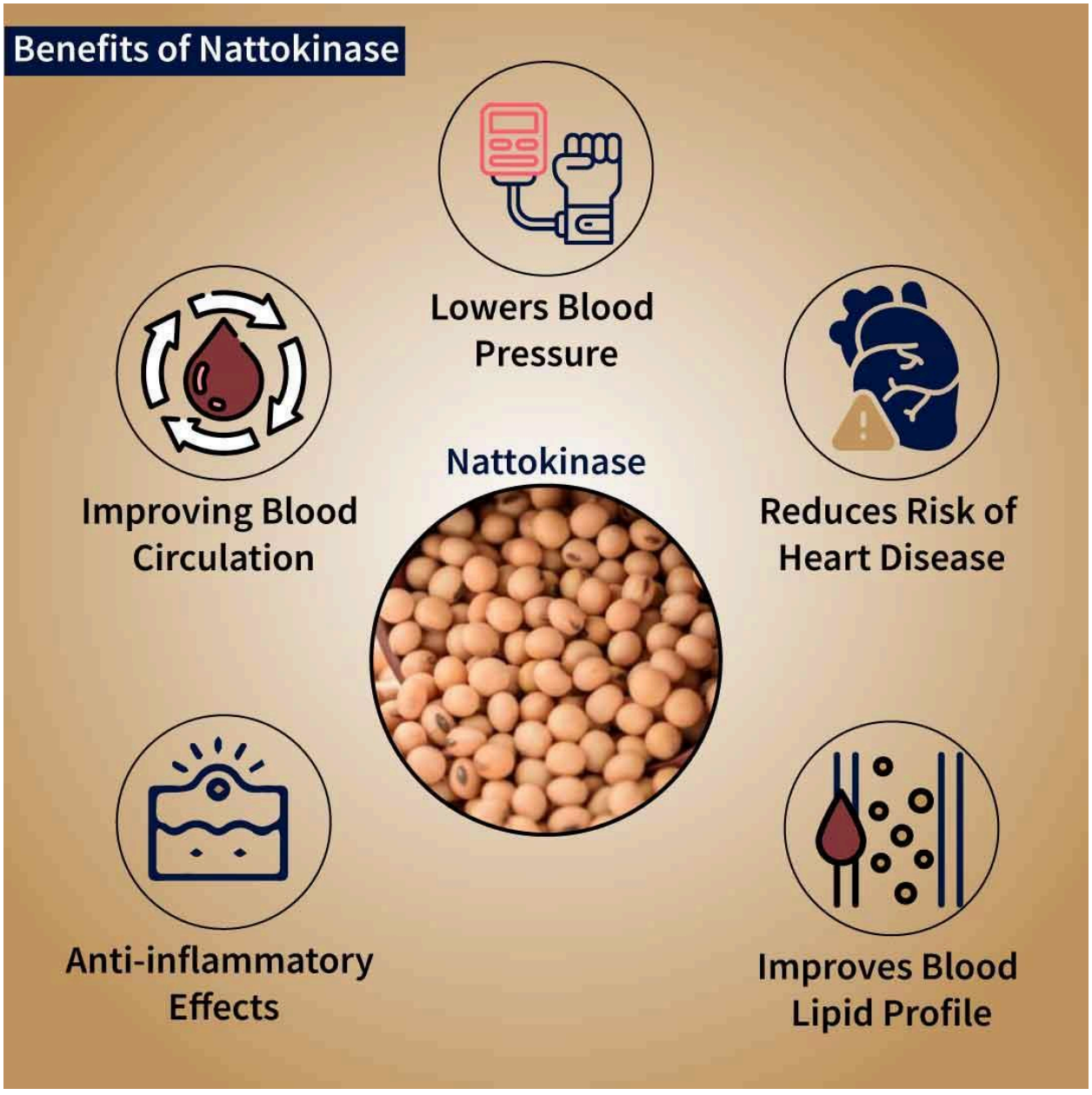
NATTOKINASE BENEFITS RESEARCH REPORT



Nattokinase is an enzyme produced during the fermentation of soybeans into the traditional Japanese food called "natto." It is a fibrinolytic enzyme, meaning it has the ability to break down fibrin, a protein involved in blood clot formation. Nattokinase has gained attention for its potential health benefits, particularly in cardiovascular health.

Nattokinase offers several health benefits, particularly related to cardiovascular health, circulation, and potentially neurodegenerative diseases:

1. Cardiovascular Health:

Nattokinase may help maintain arterial health by reducing the progression of atherosclerosis, which involves the hardening and narrowing of arteries due to fatty buildup. It has shown potential in lowering cholesterol and blood pressure levels, which are key factors in heart disease risk.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6043915/

Conclusion from the above research report:

Nattokinase (NK) has emerged as a promising natural compound with numerous beneficial effects on cardiovascular health. It has been shown to reduce nasal polyp tissue and holds potential for treating chronic rhinosinusitis. NK offers multiple benefits for cardiovascular disease (CVD) patients, including thrombosis prevention, hypertension control, atherosclerosis management, hyperlipidaemia reduction, platelet aggregation inhibition, and neuroprotection. Its advantages over traditional CVD drugs include high safety, low cost, ease of oral administration, a simple production process, and a long in vivo half-life.

NK is expected to become a next-generation drug for thrombotic disorders and CVDs, potentially replacing multiple conventional medications like tPA, aspirin, warfarin, and newer anticoagulants. However, further research is needed to establish its pharmacokinetics, absorption, metabolism, and potential drug interactions. Despite these challenges, the current data on NK is promising, suggesting it may simplify and improve CVD management in the future.

2. Improving Circulation:

By breaking down fibrin and dissolving blood clots, nattokinase can enhance blood flow, preventing clot formation, and thus improving overall circulation. This is crucial for delivering oxygen and nutrients throughout the body and preventing complications like peripheral artery disease and varicose veins.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3879341/

Conclusion from the above research report:

Nattokinase (NK), a fibrinolytic enzyme derived from the traditional Japanese food natto, has been widely studied for its cardiovascular health benefits. Research indicates that NK can improve blood flow by breaking down fibrin, thereby reducing the formation of blood clots and improving overall cardiovascular health. Additionally, NK has been shown to help regulate blood pressure by inhibiting the angiotensin-converting enzyme, which reduces the risk of hypertension.

NK also demonstrates potential in managing cholesterol levels by decreasing total cholesterol, LDL-C (bad cholesterol), and triglycerides, which helps prevent the development of atherosclerosis. The combination of NK with other substances like red yeast rice has been found to enhance these benefits.

However, there are risks associated with NK use, including increased bleeding, particularly in individuals taking blood thinners or those with blood clotting disorders.NK can interact with antihypertensive drugs, potentially leading to excessively low blood pressure. Therefore, it is crucial to consult healthcare providers before starting NK supplements, especially for individuals with preexisting conditions or those taking other medications.

In summary, while NK holds promise as a natural alternative for managing cardiovascular diseases, further research and clinical trials are necessary to fully understand its benefits and risks.

3. Preventing Blood Clots:

Nattokinase exhibits a remarkable ability to prevent and dissolve blood clots by directly reducing fibrin clots more efficiently than plasmin and increasing the activity of anti-clotting enzymes. This makes it beneficial for individuals at a higher risk of cardiovascular events caused by clotting.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4479826/

Conclusion from the above research report:

The study investigates the effects of nattokinase, a fibrinolytic enzyme from the Japanese food natto, on preventing blood clots, showing it significantly enhances fibrinolysis, dissolves existing clots, and prevents new ones by reducing levels of fibrinogen, factor VII, and factor VIII, thereby promoting better blood circulation. Nattokinase's effectiveness is comparable to conventional anticoagulants but with fewer

side effects, indicating its potential as a safe dietary supplement for preventing conditions like deep vein thrombosis and pulmonary embolism. While promising, further clinical trials are necessary to establish standardized dosing, long-term safety, and efficacy across diverse populations, underscoring its potential in improving cardiovascular health.

4. Reducing Inflammation:

With anti-inflammatory properties, nattokinase may help mitigate chronic inflammation's negative effects on the cardiovascular system, lowering the risk of conditions like atherosclerosis. https://pubmed.ncbi.nlm.nih.gov/32193146/

Conclusion from the above research report:

The research on nattokinase, an enzyme derived from fermented soybeans (natto), reveals its potential in disrupting the harmful cycle between inflammation, oxidative stress, and coagulation. Specifically, nattokinase demonstrates significant anti-thrombotic properties by inhibiting lipopolysaccharide (LPS)-induced inflammation and oxidative stress. This inhibition reduces the expression of inflammatory cytokines and oxidative markers, thereby preventing the activation of coagulation pathways. The study underscores the therapeutic promise of nattokinase in managing conditions characterized by chronic inflammation and hypercoagulability, offering a novel approach to prevent thrombus formation and associated cardiovascular complications.

5. Neurodegenerative Disease Potential:

Although more research is needed, early studies suggest nattokinase could play a role in reducing amyloid plaque levels associated with Alzheimer's disease, offering a potential therapeutic application.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8003083/

Conclusion:

Nattokinase, a potent enzyme derived from fermented soybeans, has shown promising health benefits through various studies and clinical trials. As outlined in the preceding sections, its mechanisms of action include enhancing fibrinolysis, improving blood circulation, reducing inflammation, regulating blood pressure, and potentially providing neuroprotective effects.

In conclusion, the accumulated evidence suggests that nattokinase holds considerable potential in promoting cardiovascular health, preventing thrombotic events such as heart attacks and strokes, alleviating inflammatory conditions, and even offering protection against neurodegenerative diseases. Furthermore, its safety profile appears favorable, with minimal reported side effects.

However, despite these encouraging findings, further research is warranted to fully elucidate the extent of nattokinase's benefits and its optimal clinical applications. Rigorous clinical trials with larger sample sizes and longer durations are needed to confirm its efficacy and safety across diverse populations. Additionally, exploring its potential interactions with medications and its long-term effects should be priorities for future investigations.

In light of the growing interest in natural alternatives for health maintenance and disease prevention, nattokinase stands out as a promising candidate. Continued research efforts in this area have the potential to unlock further therapeutic applications and enhance our understanding of this remarkable enzyme's role in human health.

**The information displayed herein has not been evaluated and/or approved in any form by the Japan Ministry of Health, FDA and/or similar body in Japan or elsewhere.*