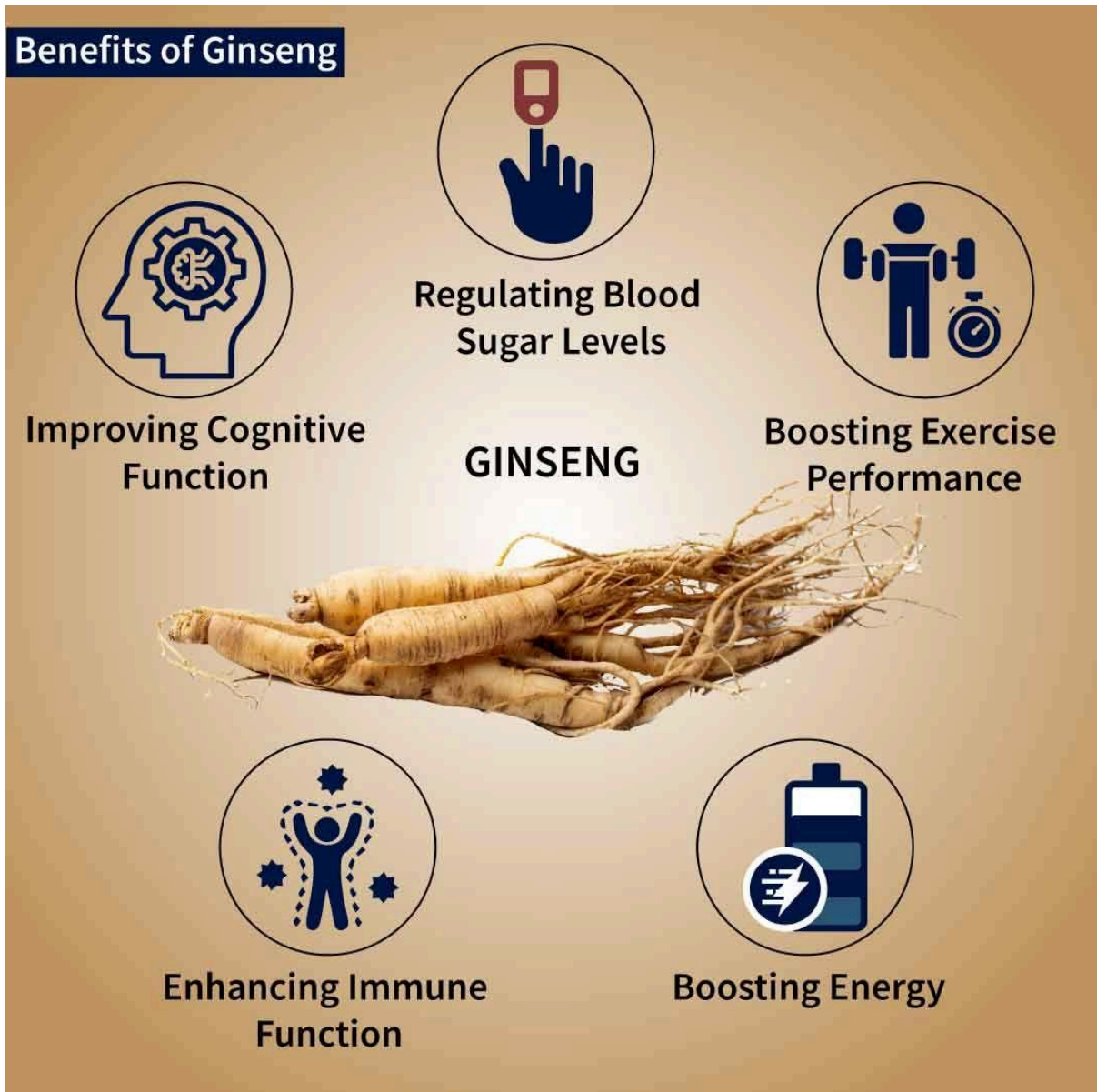


GINSENG BENEFITS RESEARCH REPORT



Ginseng, a popular herb in traditional medicine, is believed to offer several potential health benefits. Here are some of them:

1. Boosting Energy:

Ginseng is often used to combat fatigue and increase energy levels. It's believed to stimulate physical and mental activity, making it a common ingredient in energy drinks and supplements. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5102849/>

Conclusion from the above research report:

Ginseng is a valuable dietary supplement known for its wide range of health benefits. It has adaptogenic, anti-inflammatory, antioxidant, and immunomodulatory properties, making it a versatile remedy for improving overall health and managing various chronic conditions. The active components, ginsenosides, help in reducing inflammation, oxidative stress, and regulating immune functions. Additionally, ginseng shows promise in enhancing cognitive functions, supporting cardiovascular health, managing diabetes, and even exhibiting anti-cancer properties. Further research is needed to fully understand its mechanisms and optimize its therapeutic use.

2. Improving Cognitive Function:

Some studies suggest that ginseng may enhance cognitive function, including memory, concentration, and overall mental performance. It's thought to have neuroprotective effects, potentially reducing the risk of age-related cognitive decline.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6173364/>

Conclusion from the above research report:

Ginseng, particularly its active components ginsenosides, shows promising therapeutic potential for cognitive impairment through neuroprotective effects, modulation of neurotransmitter systems, enhancement of synaptic plasticity, and protection against Alzheimer's-related pathologies. Clinical studies support its cognitive-enhancing effects, though results vary, emphasizing the need for standardized preparations and dosages. Challenges such as poor oral bioavailability and preparation variability necessitate innovative delivery methods like nanotechnology, bioconversion, and encapsulation techniques. Future research should focus on large-scale, well-designed trials and standardized extracts to ensure consistent clinical outcomes.

3. Reducing Stress: Ginseng is often used as an adaptogen, helping the body cope with stress and reducing its harmful effects on the body. It may help regulate the body's stress response and promote a sense of calmness.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5628357/>

Conclusion from the above research report:

Although current drug treatments are often effective, they can sometimes lead to addiction or unwanted side effects. Additionally, as people age, their immune systems weaken, making them more prone to infections. Because of this, we need new treatment methods. Future research should explore alternatives to conventional drugs, like medicinal plants, which have been used for over a thousand years and typically have fewer side effects. Ginseng is one such plant that can help restore balance in the body after stress. Studies on human cells and animals have shown its effectiveness. Understanding how ginseng affects the human immune and metabolic systems, as well as stress-related hormones, could help develop new treatments for both mental and physical health issues.

4. Enhancing Immune Function: Ginseng is believed to have immune-boosting properties, helping the body fight off infections and illnesses. It may stimulate the production of immune cells and enhance the body's defence mechanisms.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7790873/>

Conclusion from the above research report:

Ginseng has shown great promise in boosting the immune system and treating related disorders. It's one of the most researched herbal supplements and is known for its beneficial effects with minimal side effects. Ginseng can improve immunity in various ways and might even help enhance the effectiveness of vaccines against infections and diseases. However, most studies have been done in labs or on animals, with fewer studies involving humans. Ginseng seems to be a very promising agent for enhancing immunity, and more research should be done to understand its effects on the human immune system better.

5. Regulating Blood Sugar Levels: Some research suggests that ginseng may help regulate blood sugar levels by improving insulin sensitivity and glucose metabolism. This could potentially benefit individuals with diabetes or those at risk of developing the condition.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6943541/>

Conclusion from the above research report:

Studies on humans, animals, and cells show that ginseng extracts and ginsenosides can help with type 2 diabetes. Most research focuses on main ginsenosides like Rb1, Re, and Rg1, which are large molecules and not well absorbed by the body.

In one study, overweight and obese people with impaired glucose tolerance or newly diagnosed type 2 diabetes took ginseng root extract, ginsenoside Re, or a placebo for 30 days. The main ginsenosides were not found in their blood, but another study with healthy volunteers detected ginsenoside Re and its metabolites after intake.

Larger ginsenosides might be storage forms, while smaller ones like Rg3 and Rh1 are likely active in the body. This is supported by studies on red, fermented, and black ginseng. More research is needed on these smaller ginsenosides.

Clinical study results on ginseng's effects on diabetes are inconsistent. Variability in participants and ginseng products (due to different sources, species, and extraction methods) may affect outcomes. Consistent quality control for ginseng products is essential for clinical use.

6. Improving Erectile Dysfunction: Ginseng has been studied for its potential to improve erectile dysfunction in men. It may help increase blood flow to the genital area and improve sexual function. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8094213/>

Conclusion from the above research report:

Red ginseng (*Panax ginseng*) has been traditionally used in Asian medicine for its potential benefits in improving sexual function. A systematic review and meta-analysis of 24 randomized controlled trials with 2080 participants found that red ginseng significantly improves erectile function compared to placebo, with a standardized mean difference of 0.63. The efficacy was more pronounced in higher-quality studies and shorter-duration trials. Additionally, red ginseng enhanced sexual desire and satisfaction without significant adverse effects. These findings suggest that red ginseng is an effective and safe treatment option for erectile dysfunction, although further high-quality studies with larger sample sizes and longer follow-up periods are needed to confirm these results.

7. Anti-inflammatory Effects: Ginseng contains compounds with anti-inflammatory properties, which may help reduce inflammation in the body and alleviate symptoms of

inflammatory conditions like arthritis.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6201491/>

Conclusion from the above research report:

Our study is the first to show that Rg3-enriched red ginseng extract (Rg3-RGE) has strong anti-inflammatory effects through the NF- κ B and MAPK pathways. This extract significantly reduced the production of inflammatory substances like NO, iNOS, COX-2, IL-1 β , IL-6, and TNF- α , both at the genetic level and in actual protein production, in both lab tests and animal studies. Based on these results, we believe that taking Rg3-RGE as a supplement could be an effective herbal remedy to fight inflammation in humans.

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8. Supporting Heart Health: Some research suggests that ginseng may help lower cholesterol levels and improve heart health by reducing the risk of cardiovascular diseases.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4213864/>

Conclusion from the above research report:

The review explores the therapeutic effects of ginseng and its active components, ginsenosides, on cardiovascular diseases (CVDs). Ginsenosides exhibit significant antioxidant properties, reducing oxidative stress and protecting cardiovascular tissues. They possess anti-inflammatory properties by inhibiting inflammatory pathways and decreasing pro-inflammatory cytokines. Ginseng promotes vasodilation and lowers blood pressure by releasing nitric oxide (NO), improving blood flow, and reducing heart workload. It inhibits atherosclerotic plaque formation, reduces lipid levels, and prevents LDL oxidation, maintaining clear arteries. Ginsenosides protect cardiac cells from apoptosis, enhance cell survival and repair, and stabilize cardiac rhythm by modulating ion channels, reducing arrhythmia risk. These effects make ginseng promising for preventing and treating CVDs, warranting further clinical studies to optimize their use.

9. Promoting Weight Loss: While more research is needed, some studies suggest that ginseng may aid in weight loss by increasing metabolism and reducing appetite.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5766689/>

Conclusion from the above research report:

Ginseng and its active compounds, ginsenosides, can help control appetite and reduce energy intake by decreasing inflammation in the brain and improving hormone sensitivity. They also prevent the digestion of fats and sugars in the intestine, leading to lower energy absorption. In the liver, ginseng decreases fat and cholesterol production while increasing the breakdown and removal of fats. In fat tissue, ginseng can reduce fat storage and inflammation. In muscle, it boosts energy use by increasing glucose uptake and fat burning. Overall, ginseng reduces energy intake and increases energy use, helping to prevent obesity. However, most studies have been done on animals, and more human research is needed to confirm these effects.

Conclusion:

In conclusion, this review explores ginseng's potential in addressing key cardiovascular risk factors like hypertension, cardiac disease, and hyperlipidemia. Ginseng, a traditional remedy with a long history, owes its medicinal effects to ginsenosides. These compounds impact cardiovascular health by reducing oxidative stress, promoting nitric oxide production, enhancing blood circulation, and regulating lipid levels. However, the precise mechanisms of ginsenosides remain unclear, warranting further research. Given ginseng's widespread use, rigorous investigations are necessary to evaluate both its efficacy and safety as an herbal remedy.

**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.*