

What is Saponin?



What is Saponin, the Red Ginseng (Korean) component?

Saponin derives from a Greek word Sapona, meaning soap. There are many plants around us that contain saponin. Beans, green onion, deodeok, bellflower root, water parsley, mung bean, garlic, onion, ginkgo nut, arrowroot, leek, and many other plants contain a small amount of saponin, but saponin in red ginseng is strictly different from these.

The red ginseng saponin has mild medicinal characteristics with no toxins, and is completely different from saponin found in other plants in its chemical makeup. Red ginseng is known to be the most bioactive, superior ginseng in the plant Kingdom. In nature, red ginseng saponins appear to act as antibiotics that protect plants from microbes. In humans, they might fight cancer and infection.

Saponins produce an active compound called ginsenosides whose key medical benefits reach out to the central nerve system, endocrine system, immune system, metabolism, etc. and have various effect on the body's conditioning function. Simply put, it would be easier to understand to say that saponin enters the body and cleans the vessels and various organs as if it were cleaned with soap.

Ginseng contains 24 types of saponin, while red ginseng contains 32 types. Thanks to the continued research efforts of renowned scientists around the world, its chemical structure, as well as its medical vitality are being uncovered.

Benefits of saponin:

- Breaks down fat well, accelerates nutrient absorption and digestion;
- Anti-inflammatory, antioxidant, and anti-cancer effects;
- Helps erectile dysfunction;
- Revitalizes enzymes within cells and improves metabolism;
- Increases energy, invigorates, aids fatigue recovery, improves lethargy and lack of appetite;
- Improves serum protein synthesis;

- Stimulates activity of the enzyme involved in the process of bone building and repair, and increase calcium deposition by bone marrow stem cells;
- Improves arterial flexibility significantly and decreases blood pressure;
- Improves depression by increasing levels of the neurotransmitters serotonin, dopamine and noradrenaline.

According to recent studies, such benefits of red ginseng intake are a result of red ginseng saponin, and non-saponin components working together.

However, it has been revealed that much of the broad physiologically vitalizing effects of red ginseng are centered around saponin.

Several studies have found evidence to support the belief that saponins have potent anti-carcinogenic properties. It is thought that saponins protect against cancers via a range of different mechanisms, including an overall antioxidant effect, direct and select cytotoxicity of cancer cells, immune-modulation, and regulation of cell proliferation.



Why Not take Ginseng Orally?

Recent scientific studies have made it clear that saponins are partially destroyed in the digestive tract, making a topical transdermal application ideal.

Benefits of Saponins are documented in thousands of scientific references such as:

“Beneficial effects of Korean red ginseng on lymphocyte DNA damage, antioxidant enzyme activity, and LDL oxidation in healthy participants: a randomized, double-blind, placebo-controlled trial” .

-Nutrition Journal

“Saponins institute immune system modulating effects that increase anti-tumor activity in the body. Colon, breast, uterine and prostate cancer rates are lower in countries where inhabitants consume large amounts of foods that contain saponins. The stimulation of bile acid secretion in the intestinal tract, and antioxidant activity may also contribute to a reduced risk of cancer.”

- Journal of Medicinal Food, Chemistry, Processing, and Health Benefits; J. Shi; Spring 2004

“It’s a good alternative for stress”

- Journal of Pharmacological Sciences, The Japanese Pharmacological Society
<http://plaza.umin.ac.jp/~JPS1927/jps/JPS-Preprints/95-2-1-5.pdf>

“Improves glucose and insulin regulation in well-controlled, type 2 diabetes”

- Nutrition Metabolism and Cardiovascular Disease Journal
[http://www.nmcd-journal.com/article/S0939-4753\(06\)00109-8/abstract](http://www.nmcd-journal.com/article/S0939-4753(06)00109-8/abstract)

“Saponins may stimulate the immune system and they are used as adjuvants in vaccines and oral intakes of saponins have been used to help treat retroviral infection. They stimulate antibody production, inhibit viruses, and induce the response by lymphocytes, which are white blood cells that fight infection.”

- Journal of Medicinal Food, Chemistry, Processing, and Health Benefits; J. Shi; Spring 2004

“Korean red ginseng can be an effective alternative for treating male erectile dysfunction.”

- Sector of Sexual Medicine, Division of Urological Clinic of Sao Paulo University, Sao Paulo, Brazil.

<http://www.ncbi.nlm.nih.gov/pubmed/16855773>

- Department of Urology, University of Ulsan College of Medicine, Asan Medical Center, Seoul, Korea

<http://www.ncbi.nlm.nih.gov/pubmed/12394711>

“Research has shown that Korean Red Ginseng contains more Ginsenosides (the main active ingredient) than ginseng sourced from America or China.”

- Dr. Kim Si-Kwan, Dean of College Biomedical & Health Science at Konkuk University (Korea)

“Korean Red Ginseng has been known for centuries as the “miracle root” that can help alleviate a multitude of ailments, from cancer to diabetes. It can also help students and busy executives, having the ability to improve mental performance and reduce fatigue.”

- Dr Chang Yuan Shiun, Professor of Pharmacognosy at China Medical University