COFFEE

GINSENG

INTEGROUS©
WELLNESS

Anti-inflammatory

This 2021 study was conducted by Taiwanese researchers and published in Nutrients. 12 physically active males took either American ginseng extract or a placebo for 28 days, after which they participated in a bout of downhill running. The levels of certain markers of muscle damage, inflammation, and oxidative stress were measured before and after the exercise.
The results showed that American ginseng supplementation was associated with decreased muscle damage and inflammation, as well as reduced oxidative stress, immediately and up to 72 hours after the exercise. These findings suggest that short-term supplementation with American ginseng may have a protective effect on muscle damage induced by eccentric exercise.

12
28 days

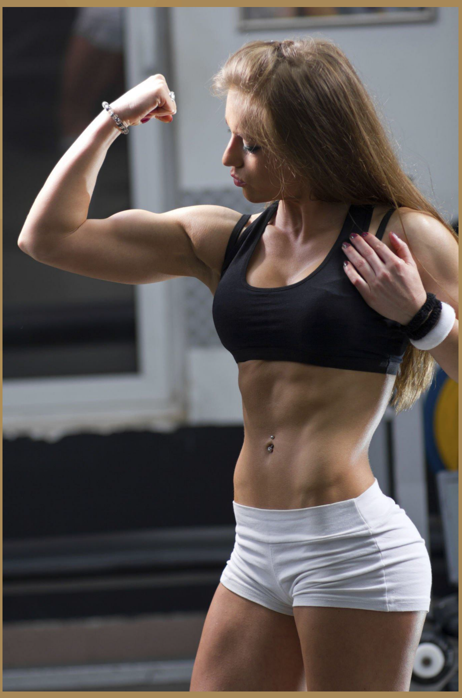
82
12 weeks

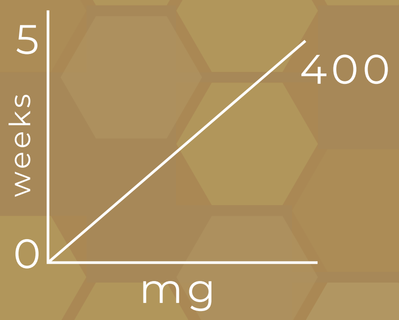
This Korean 2014 study was published in the Journal of Ethnopharmacology. 82 postmenopausal women were given either red ginseng or a placebo for 12 weeks. The levels of various markers of oxidative stress and antioxidant enzyme activity were measured at the beginning and end of the trial.
The results showed that red ginseng supplementation was associated with an increase in the activity of the antioxidant enzyme superoxide dismutase, as well as a trend towards reduced levels of the oxidative stress marker malondialdehyde. However, there were no significant changes in the levels of the other markers measured or in insulin resistance. These findings suggest that red ginseng may reduce oxidative stress in postmenopausal women by increasing antioxidant enzyme activity.

TONGKAT ALI

Muscular strength

This 2013 study by South African researchers was published in Phytotherapy Research. It looked at the effects of a Tongkat Ali on physically active elderly men and women. The subjects took 400 mg of TA extract daily for 5 weeks, and various physical and biochemical parameters were measured before and after treatment. The results showed that TA significantly increased testosterone levels and muscle strength in both men and women and also resulted in some changes in red blood cell counts and kidney function in men. The study suggests that TA may be an effective ergogenic (performance-enhancing) supplement for elderly people.





COFFEE

Weight loss

This statistical analysis by Korean and US researchers was published in Nutrients in 2019. It combined the results of multiple studies to examine the relationship between coffee consumption and obesity. The researchers identified and analyzed data from 12 previous studies that looked at body mass index (BMI) or waist circumference (WC) as measures of obesity. They found that higher coffee intake may be modestly associated with reduced obesity, particularly in men, as indicated by small decreases in BMI and WC in men who consumed more coffee.

This 2020 study was conducted by researchers from various countries and published in the Journal of Nutrition. It examined the relationship between coffee consumption and body fat in a sample of adults in the United States. The researchers used data from a national health survey and measured body fat using a so-called DXA-scan. They found that among women, higher coffee consumption was significantly associated with lower total body fat percentage and lower trunk body fat percentage in a dose-response manner (meaning that the effect increased as coffee consumption increased). Among men, the association between coffee consumption and body fat was not significant, but men aged 20-44 who drank 2 to 3 cups of coffee per day had slightly lower total and trunk body fat compared to those who did not consume coffee.

REISHI

Fatigue

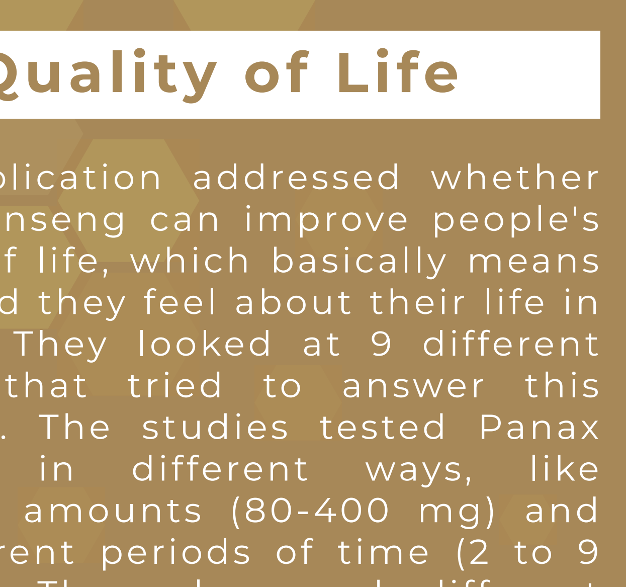
This 2011 study on Reishi was conducted by researchers from Hong Kong and published in the British Journal of Nutrition. It looked at the effects of a reishi supplement on cardiovascular and metabolic health in patients with slightly elevated blood pressure or cholesterol.

The study was conducted as a controlled, randomized, double-blind, cross-over trial in which the patients received Reishi or a placebo for 12 weeks, followed by a period of no treatment, and then the opposite treatment (the control and experimental groups were switched). The researchers measured various parameters, including body weight, blood pressure, metabolic markers, and immune system indicators, before and after each treatment period.

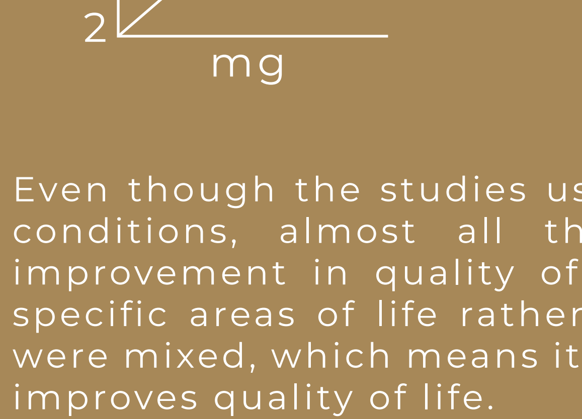
The results showed that Reishi was well tolerated and had no significant effect on body weight or blood pressure. However, it did lower insulin levels and improve a measure of insulin resistance (a marker of diabetes risk) compared to the placebo. Reishi also led to a decrease in triglycerides (a type of fat) and an increase in HDL cholesterol (the "good" cholesterol) in the first treatment period. However, these effects did not persist in the cross-over period. There were no significant differences in other parameters, such as antioxidant status and immune cell levels, between the Reishi and placebo groups. The study suggests that Reishi may have mild anti-diabetic effects and potentially improve lipid levels in people with diabetes, but more research is needed to confirm these findings.

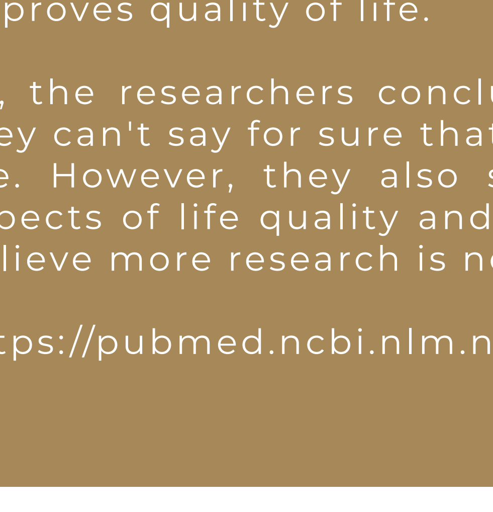
Exercise performance

Researchers found that some types of ginseng might help improve exercise performance, but there are certain conditions. The ginseng needs to be in a specific form (like an extract from the root), the person has to take it every day for at least 8 weeks, and it works better on older people. They found that ginseng might help improve things like strength, stamina, reaction time, alertness, and even how the body uses energy.



Quality of Life





One publication addressed whether Panax ginseng can improve people's quality of life, which basically means how good they feel about their life in general. They looked at 9 different studies that tried to answer this question. The studies tested Panax ginseng in different ways, like different amounts (80-400 mg) and for different periods of time (2 to 9 months). They also used different ways to measure quality of life, from common methods to special questionnaires made by the researchers. In some studies, the Panax ginseng was mixed with vitamins and minerals, while in others it was just the ginseng extract.

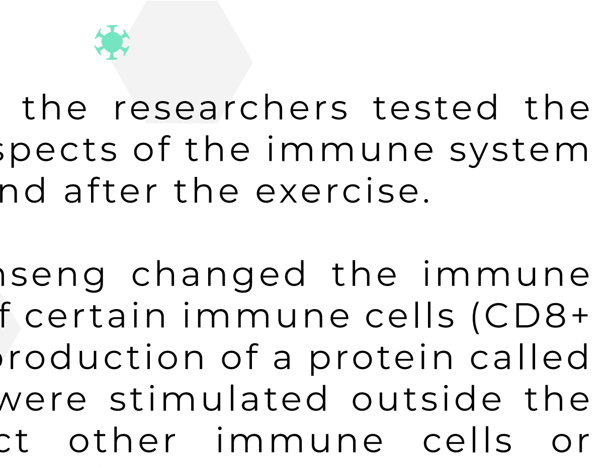
Even though the studies used different people with different health conditions, almost all the studies (8 out of 9) found some improvement in quality of life. The improvements were usually in specific areas of life rather than overall life quality. But the results were mixed, which means it's not clear-cut that Panax ginseng always improves quality of life.

So, the researchers concluded that based on the current research, they can't say for sure that Panax ginseng improves overall quality of life. However, they also suggested that it might improve certain aspects of life quality and might have early short-term effects. They believe more research is needed to figure this out.

https://pubmed.ncbi.nlm.nih.gov/18923572/

Immune function

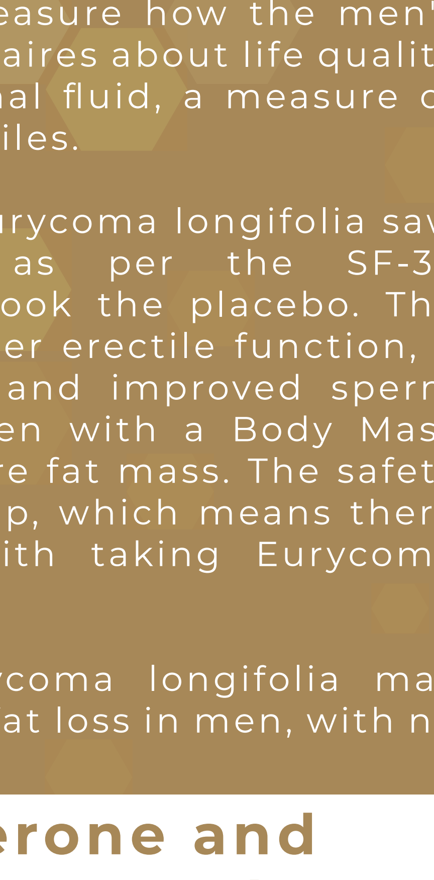
This study looks at how taking ginseng might affect the immune system's response to stress from exercise. The experiment involved ten healthy men who don't normally exercise. They were given either ginseng (in a specific form called North American ginseng or Panax quinquefolius) or a placebo (like a sugar pill) every day for 35 days, then did some moderate exercise. After a break of three months, they switched and got the other treatment for 35 days.



At the end of each treatment period, the researchers tested the men's blood. They looked at different aspects of the immune system and various hormones before, during, and after the exercise.

The researchers found that taking ginseng changed the immune system a bit. It decreased the amount of certain immune cells (CD8+ T cells) in the blood and increased the production of a protein called interleukin-2 when the immune cells were stimulated outside the body. However, ginseng didn't affect other immune cells or functions, and it didn't change the levels of different hormones (like lactate, insulin, cortisol, or growth hormone) in response to exercise.

Fat loss and sexual health

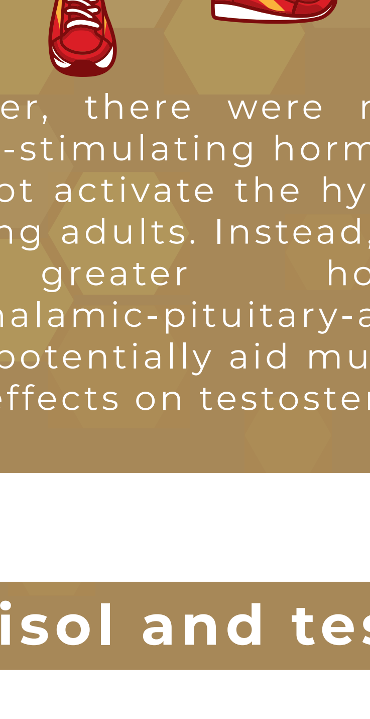


This study examined longjack (Eurycoma longifolia), which is believed to boost male sexual desire and act as an aphrodisiac. The researchers wanted to see if this was really true, so they set up an experiment with 109 men aged between 30 and 55. The men were randomly given either 300 mg of a water extract from Eurycoma longifolia or a placebo, and this treatment lasted for 12 weeks.

The researchers used several methods to measure how the men's lives and health changed, including questionnaires about life quality and sexual health, an analysis of their seminal fluid, a measure of their fat mass, and checks on their safety profiles.

The results showed that the men who took Eurycoma longifolia saw improvements in physical functioning, as per the SF-36 questionnaire, compared to the men who took the placebo. The Eurycoma longifolia group also reported better erectile function, a 14% increase in sexual desire by week 12, and improved sperm motility (movement) and semen volume. Men with a Body Mass Index (BMI) of 25 kg/m² or more also lost more fat mass. The safety checks were comparable to the placebo group, which means there weren't any significant safety concerns with taking Eurycoma longifolia.

In conclusion, this study found that Eurycoma longifolia may improve physical function, sexual health, and fat loss in men, with no apparent safety issues.



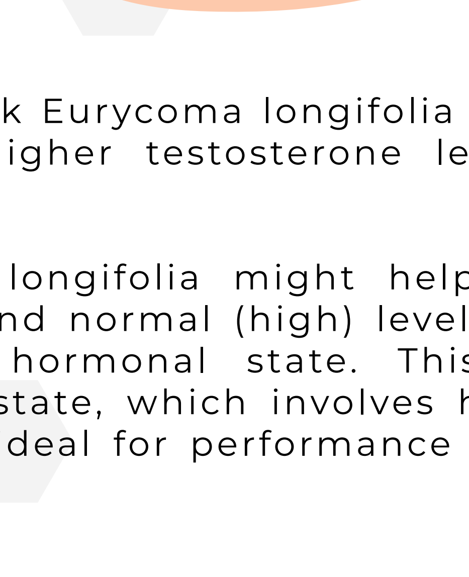
Testosterone and muscle strength

This study investigated how the plant Eurycoma longifolia, known for boosting testosterone, affects healthy young men. In a controlled study, 32 men took either 600 mg of Eurycoma longifolia or a placebo daily for two weeks. Results showed that those who took Eurycoma longifolia had significant increases in testosterone and free testosterone levels, as well as estradiol.

However, there were no changes in luteinising hormone and follicle-stimulating hormone levels, suggesting Eurycoma longifolia may not activate the hypothalamic-pituitary-gonadal axis as much in young adults. Instead, the increase in testosterone might be due to greater hormone production via the hypothalamic-pituitary-adrenal axis. Therefore, Eurycoma longifolia could potentially aid muscle and strength gain in young adults due to its effects on testosterone levels.

Cortisol and testosterone

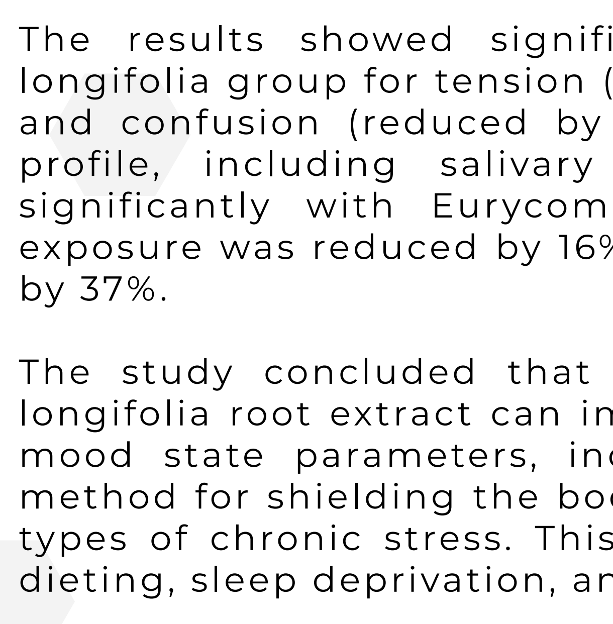
This study looked at how Eurycoma longifolia affects levels of cortisol and testosterone in the body during intense endurance exercise. Eurycoma longifolia is often marketed to athletes as it's believed to boost testosterone.



30 male mountain bikers participating in a 24-hour event were given either a water-soluble extract of Eurycoma longifolia or a placebo about 30 minutes before they exercised. The researchers collected saliva samples from the men before and after each lap they biked to measure cortisol and testosterone levels.

The results showed that the men who took Eurycoma longifolia had 32.3% lower cortisol levels and 16.4% higher testosterone levels compared to those who took the placebo.

These findings suggest that Eurycoma longifolia might help to maintain normal (low) levels of cortisol and normal (high) levels of testosterone, promoting an "anabolic" hormonal state. This is preferred for athletes over a "catabolic" state, which involves high cortisol and low testosterone and is not ideal for performance and recovery.



Cortisol and testosterone 2

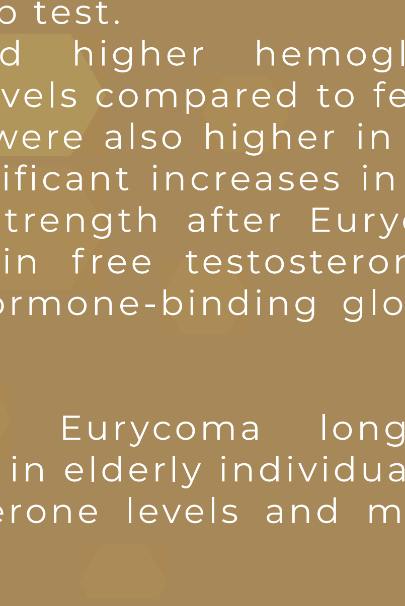
This study evaluated the effects of Eurycoma longifolia, on stress hormones and mood in 63 people (32 men and 31 women) who had moderate stress. The participants were given either a standardized hot-water extract of Eurycoma longifolia root or a placebo for 4 weeks.

The results showed significant improvements in the Eurycoma longifolia group for tension (reduced by 11%), anger (reduced by 12%), and confusion (reduced by 15%). Additionally, the stress hormone profile, including salivary cortisol and testosterone, improved significantly with Eurycoma longifolia supplementation. Cortisol exposure was reduced by 16%, and testosterone status was increased by 37%.

The study concluded that daily supplementation with Eurycoma longifolia root extract can improve stress hormone profile and some mood state parameters, indicating that it could be an effective method for shielding the body from the negative effects of different types of chronic stress. This could include daily stress, stress from dieting, sleep deprivation, and exercise training.

Muscle strength and testosterone in elderly individuals

This study investigated the effects of Eurycoma longifolia as an ergogenic supplement for elderly individuals. Thirteen physically active male and 12 physically active female seniors (aged 57-72 years) were given a daily dose of 400 mg Eurycoma longifolia extract for 5 weeks. Various blood parameters and hormones were measured, including testosterone, cortisol, insulin-like growth factor-1, and sex hormone-binding globulin.



Additional assessments included kidney function, muscle damage, and muscle strength measured by a handgrip test.
After the treatment, male seniors had higher hemoglobin, testosterone, and dihydroepiandrosterone levels compared to female seniors. Hematocrit and erythrocyte count were also higher in male seniors. Both men and women showed significant increases in total and free testosterone levels and muscle strength after Eurycoma longifolia supplementation. The increase in free testosterone in women was likely due to decreased sex hormone-binding globulin levels.

Overall, the study demonstrates that Eurycoma longifolia supplementation enhances muscle strength in elderly individuals, as indicated by the improvements in testosterone levels and muscle force.