THE COMPLETE GUIDE TO PANAX GINSENG RESEARCH

BY MY PANAX GINSENG

www.mypanaxginseng.com
INTRODUCTION

We've read and interpreted the data from every study involving Panax ginseng so you don't have to! Our team have scoured the pages of The National Center for Biotechnology Information (NCBI) and PubMed, the leading sources of scientific data to bring you the good, the bad and the ugly research so you can make a more informed decision before you buy Panax Ginseng.

Ginseng manufacturers claim time and time again to be one of the best natural remedies for some of the most common ailments. But how does the research really stack up against this seemingly simple plant?

In this complete guide to Panax Ginseng you'll learn:

• The benefits of using panax ginseng.
• About the various forms of panax ginseng.
• Why potency plays an essential role in the affects of ginseng.
• About the qualities of panax ginseng and it helps with common ailments.
• What some of the best natural ginseng sources are.
• How much panax ginseng is needed per day.
• What sources of ginseng are used as supplements.
• When to take the various forms of panax ginseng.
• How to combine panax ginseng in to your diet for maximum benefit
WHAT IS PANAX GINSENG

Panax Ginseng is a plant traditionally used in Chinese herbal medicine. It’s one of 13 plants that belong to the Panax family and its uses are vast. There are clinical studies on at least 43 different uses of Panax Ginseng, ranging from weight management and blood sugar control, to erectile dysfunction and raising testosterone levels.

In the table below you’ll find the results from hundreds of studies on panax ginseng, how consistent the research is and whether panax ginseng works as a treatment for different outcomes.

Here’s how to use the chart:

OUTCOME – this is the problem the research was trying to solve with Panax ginseng.

LEVEL OF EVIDENCE – The amount of high quality evidence discovered using humans.

CONSISTENCY OF RESEARCH RESULTS - How consistent the evidence is from various studies.

WHAT THIS MEANS FOR YOU – Whether you should use panax ginseng to treat the outcome, based on the level of evidence and consistent of research results.
<table>
<thead>
<tr>
<th>OUTCOME</th>
<th>LEVEL OF EVIDENCE</th>
<th>CONSISTENCY OF RESEARCH RESULTS</th>
<th>WHAT THIS MEANS FOR YOU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Glucose</td>
<td>Strong</td>
<td>Mostly Consistent</td>
<td>A decrease in fasting blood glucose has been noted over time with standard supplemental doses of panax ginseng in diabetics.</td>
</tr>
<tr>
<td>Cognition</td>
<td>Quite Strong</td>
<td>Very Consistent</td>
<td>An increase in cognition is seen acutely and thought to be due to anti-fatigue effects, with nonfatigued individuals not experiencing an increase in cognitive performance</td>
</tr>
<tr>
<td>Erections</td>
<td>Very Consistent</td>
<td></td>
<td>An improvement in erectile dysfunction is seen with 3g of Korean Red Ginseng (fermented panax ginseng, regular panax ginseng not as well tested.</td>
</tr>
<tr>
<td>Subjective Well-Being</td>
<td>Very Consistent</td>
<td></td>
<td>There appears to be an increase in well being and happiness in persons who use 400mg panax ginseng during acute mental stress.</td>
</tr>
<tr>
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<tr>
<td>Symptoms of Menopause</td>
<td>Mostly Consistent</td>
<td></td>
<td>May decrease some symptoms associated with menopause, mostly related to libido, but this is unreliable.</td>
</tr>
<tr>
<td>Blood Pressure</td>
<td>Mostly Consistent</td>
<td></td>
<td>Although there may be a slight blood pressure reducing effect in persons with the highest blood pressure, overall there is not a significant reducing effect of Panax ginseng</td>
</tr>
<tr>
<td>Insulin Sensitivity</td>
<td>Mostly Consistent</td>
<td></td>
<td>More evidence than not suggests no significant improvement in insulin sensitivity, although it is still a minor possibility</td>
</tr>
<tr>
<td>Anti-Oxidant Enzyme Profile</td>
<td>Very Consistent</td>
<td></td>
<td>An increase in all three main antioxidant enzymes (SOD, glutathione peroxidase, and catalase) appear to occur to a small degree following ingestion of Panax ginseng</td>
</tr>
<tr>
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<tr>
<td>Blood Flow</td>
<td>Very Consistent</td>
<td></td>
<td>An increase in blood flow has been noted with panax ginseng supplementation</td>
</tr>
<tr>
<td>Calmness</td>
<td>Moderately Consistent</td>
<td></td>
<td>Has been noted to improve self-reported calmness</td>
</tr>
<tr>
<td>DNA Damage</td>
<td>Inconsistent</td>
<td></td>
<td>Can decrease the rates of DNA damage noted in lymphocytes, which may be related to the anticancer effects of panax ginseng</td>
</tr>
<tr>
<td>Depression</td>
<td>Inconsistent</td>
<td></td>
<td>Anti-depressive effects may be secondary to reducing menopausal symptoms</td>
</tr>
<tr>
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<tr>
<td>Endothelial Function</td>
<td>Moderately Consistent</td>
<td></td>
<td>A possible increase in endothelial reactivity is noted with panax ginseng supplementation</td>
</tr>
<tr>
<td>General Oxidation</td>
<td>Inconsistent</td>
<td></td>
<td>Oxidation in the body appears to be reduced, which is thought to be secondary to induction of antioxidant enzymes</td>
</tr>
<tr>
<td>HDL-C</td>
<td>Moderately Consistent</td>
<td></td>
<td>May increase HDL-C levels, seems unreliable in doing so</td>
</tr>
<tr>
<td>HbA1c</td>
<td>Moderately Consistent</td>
<td></td>
<td>A possible reduction in HbA1c, but small in magnitude and unreliably seen</td>
</tr>
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<tr>
<td>Inflammation</td>
<td>Inconsistent</td>
<td></td>
<td>A decrease in IL-6 concentrations has been noted</td>
</tr>
<tr>
<td>LDL-C</td>
<td>Moderately Consistent</td>
<td></td>
<td>May reduce LDL-C levels to a very small degree, seems unreliable in doing so</td>
</tr>
<tr>
<td>Lactate Production</td>
<td>Inconsistent</td>
<td></td>
<td>A decrease in lactate has been noted one hour into training in heat, with no significant influence prior to one hour</td>
</tr>
<tr>
<td>Libido</td>
<td>Inconsistent</td>
<td></td>
<td>May increase libido as a side-effect of reducing the symptoms associated with menopause, may not work inherently in youth or men</td>
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<tr>
<td>Muscle Damage</td>
<td>Inconsistent</td>
<td>A decrease in biomarkers of muscle damage (creatine kinase) has been noted 72 hours after exercise in which panax ginseng was preloaded</td>
<td></td>
</tr>
<tr>
<td>Oxidation of LDL</td>
<td>Moderately Consistent</td>
<td>A possible reducing effect on the oxidation of LDL, secondary to reduction of oxidation in general; however, this appears to be unreliable</td>
<td></td>
</tr>
<tr>
<td>Reaction Time</td>
<td>Moderately Consistent</td>
<td>Mixed effects on reaction time, with a possible decrease occurring</td>
<td></td>
</tr>
<tr>
<td>Sleep Quality</td>
<td>Inconsistent</td>
<td>Has been noted to improve the first-night effect (impaired sleep when sleeping in a new location) after a week of supplementation; possibly of interest to frequent travellers</td>
<td></td>
</tr>
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<tr>
<td>Testosterone</td>
<td>Moderately Consistent</td>
<td></td>
<td>May increase testosterone in infertile men, has also failed in fertile men to influence testosterone; likely a mere antioxidative effect in damaged testicles</td>
</tr>
<tr>
<td>Total Cholesterol</td>
<td>Moderately Consistent</td>
<td></td>
<td>Possible cholesterol reducing effect, but appears unreliable</td>
</tr>
<tr>
<td>Vaccine Augmentation</td>
<td>Inconsistent</td>
<td></td>
<td>Has been noted to increase the antibody response to vaccinations when taken prior</td>
</tr>
<tr>
<td>Anaerobic Running Capacity</td>
<td>Inconsistent</td>
<td></td>
<td>Insufficient evidence to support a role of panax ginseng in improving exercise performance</td>
</tr>
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<tr>
<td>C-Reactive Protein</td>
<td>Very Consistent</td>
<td>No significant influence on C-reactive protein levels</td>
<td></td>
</tr>
<tr>
<td>Estrogen</td>
<td>Inconsistent</td>
<td>No significant influence on estrogen levels in women</td>
<td></td>
</tr>
<tr>
<td>Fat Oxidation</td>
<td>Inconsistent</td>
<td>Rates of fat oxidation during exercise appear unchanged</td>
<td></td>
</tr>
<tr>
<td>Heart Rate</td>
<td>Inconsistent</td>
<td>No significant influence on heart rate</td>
<td></td>
</tr>
<tr>
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<tr>
<td>Insulin</td>
<td>Very Consistent</td>
<td></td>
<td>No significant influence on fasting insulin levels seen with panax ginseng</td>
</tr>
<tr>
<td>Oxygenation Cost of Exercise</td>
<td>Inconsistent</td>
<td></td>
<td>No significant influence on oxygen uptake during exercise</td>
</tr>
<tr>
<td>Prolactin</td>
<td>Inconsistent</td>
<td></td>
<td>No significant influence on prolactin in men</td>
</tr>
<tr>
<td>Rate of Perceived Exertion</td>
<td>Inconsistent</td>
<td></td>
<td>No significant influence on the rate of perceived exertion during exercise</td>
</tr>
<tr>
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<tr>
<td>Triglycerides</td>
<td>Very Consistent</td>
<td></td>
<td>No significant alterations in triglycerides and fatty acids in the fasted state or during exercise</td>
</tr>
<tr>
<td>Weight</td>
<td>Moderately Consistent</td>
<td></td>
<td>Does not appear to have any weight reducing properties, although it has been reported in one study secondary to improving the glycemic profiles of diabetics</td>
</tr>
<tr>
<td>Colorectal Cancer Risk</td>
<td>Inconsistent</td>
<td></td>
<td>More than a halving of the risk of colorectal cancer has been noted with panax ginseng daily ingestion</td>
</tr>
<tr>
<td>Ovarian Cancer Risk</td>
<td>Inconsistent</td>
<td></td>
<td>More than a halving of ovarian cancer risk has been associated with daily panax ginseng ingestion</td>
</tr>
<tr>
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<tr>
<td>Overall Cancer Risk</td>
<td>Very Consistent</td>
<td></td>
<td>Has been associated with over half the risk of all tested forms of cancer, possibly confounded with a healthy lifestyle in general (as the study in question did not exert many controls)</td>
</tr>
<tr>
<td>Pancreatic Cancer Risk</td>
<td>Inconsistent</td>
<td></td>
<td>More than a halving of pancreatic cancer risk has been noted with panax ginseng</td>
</tr>
<tr>
<td>Cognitive Decline</td>
<td>Inconsistent</td>
<td></td>
<td>A decrease in symptoms associated with cognitive decline has been noted</td>
</tr>
</tbody>
</table>
References

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125. Hwang YP, Jeong HG. Ginsenoside Rb1 protects against 6-hydroxydopamine-induced oxidative stress by increasing heme oxygenase-1 expression through an estrogen receptor-related PI3K/Akt/NF2-dependent pathway in human dopaminergic cells. Toxicol Appl Pharmacol. (2010)


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