

May 1999 — U.S. Edition

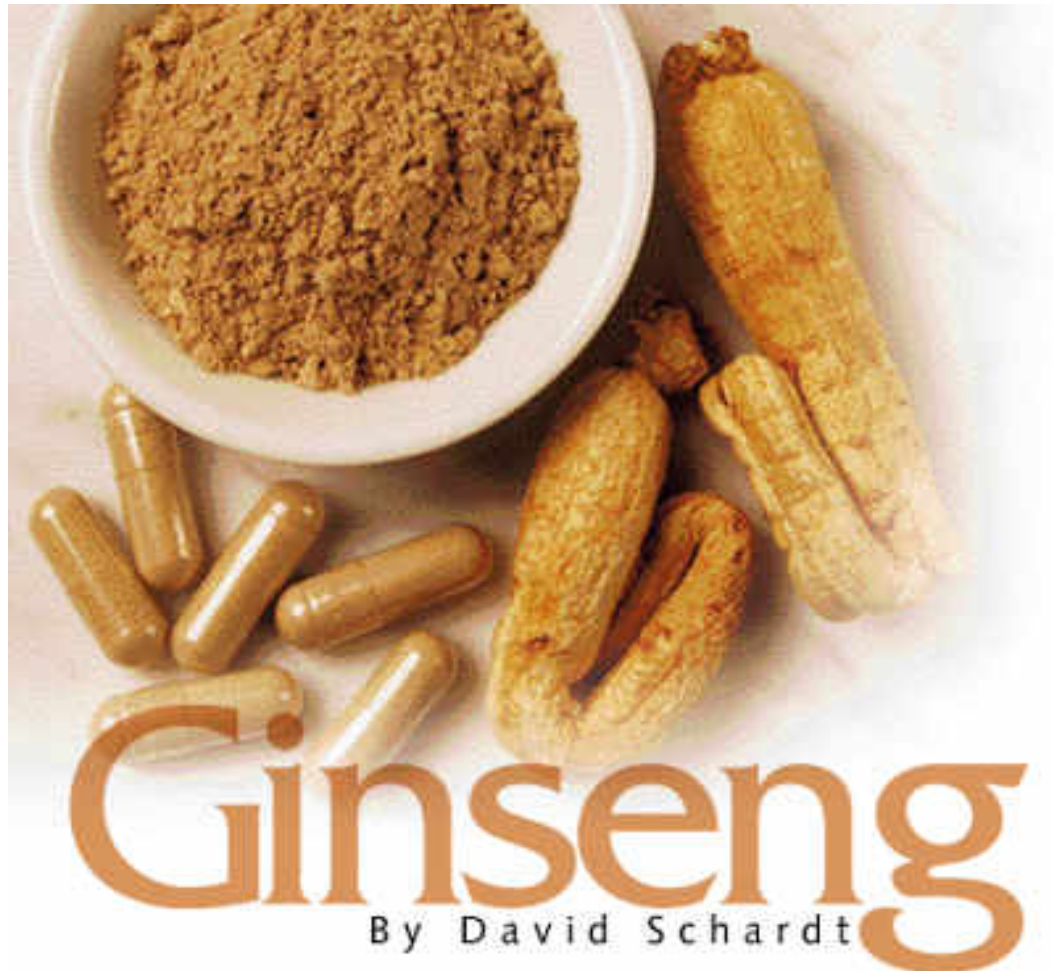
**More energy!
Less stress!
Sharper memory!
Better sex!**

Americans spend hundreds of millions of dollars a year on ginseng in pills, tinctures, teas, chewing gum, snack chips, and “smart drinks.”

And while the herb has been used for thousands of years in Asia as a “tonic,” studies in humans have failed to turn up convincing evidence of any benefit.

But that hasn’t muffled the explosion of ginseng products. Even the major pharmaceutical firms are getting into the act. Centrum and One-A-Day have both introduced ginseng supplements.

Here’s the real skinny on some of the claims about Panax (also known as Korean or Asian) ginseng—the kind most often found in supplements and added to foods.



Energy Booster

“Make the most of your natural, healthy energy,” promise the makers of Ginsana, the best-selling brand of ginseng. “Ginseng helps your body generate the energy it needs,” claims Centrum Herbals Ginseng. Celestial Seasonings’ new tea doesn’t have to make a claim. Its name—Ginseng Energy” says it all.

Yet all five well-designed U.S. and Canadian studies that looked failed to find any connection between ginseng and energy.¹⁻⁵

“If we could increase soldier performance by something as simple as ginseng, we thought we should know about it,” says Joseph Knapik of the U.S. Army Center for Health Promotion and Preventive Medicine in Aberdeen, Maryland.

Knapik and his colleagues gave six West Point cadet marathon runners a hefty dose of ginseng—2 grams (2,000 milligrams) a day for four

weeks.³ Six others were given a (lookalike but ginseng-free) placebo. All 12 then ran on a treadmill until they could run no further.



“There was nothing there,” says Knapik. “Ginseng had no effect on either increasing performance time during exercise or recovery time following exhaustive exercise.”

That’s no surprise to researcher Hermann-Josef Engels of Wayne State University in Detroit. “We gave ginseng to larger numbers of volunteers for longer periods of time and also found no effect on energy,” he says.

Ginsana’s manufacturer has ignored Engels’s two studies showing that the supplement didn’t improve physical stamina.

Where do ginseng’s energy-boosting claims come from? Most companies rely heavily on the research of Imre Forgo, a little-known Hungarian physician who published a series of ginseng studies in the 1980s that were sponsored by a Swiss ginseng manufacturer.

“Forgo’s studies were not well-controlled,” says exercise physiologist Melvin Williams of Old Dominion University in Norfolk, Virginia. (Williams’s lab found that Siberian ginseng had no effect on physical performance.⁶ But Siberian ginseng isn’t ginseng at all. It’s a cheaper alternative introduced by the Soviet Union in the 1960s.)

“The definitive study of ginseng’s effect on energy levels has not been done yet,” concedes Michael Tempesta of PharmaPrint, the company that manufactures Centrum’s new ginseng supplement.

Stress-Buster

Among herbalists, ginseng is known as an “adaptogen”—something that supposedly helps the body use its natural resources to buffer physical and mental stress.

But there’s so little human evidence that ginseng counters stress that a small three-day study completed 20 years ago remains the most frequently cited—and misquoted—evidence.

Twelve British nurses who were switching from the day shift to the night shift were given ginseng or a placebo to see if the herb would help them handle the stress of disrupted sleep patterns.⁷

“Those who had been given ginseng felt more capable and alert and, when tested, had better speed and coordination,” writes Jacques MoraMarco in *The Complete Ginseng Handbook* (Contemporary Books,

1998).

Wrong. When the nurses took the ginseng they reported feeling more lethargic and no more coordinated or “proficient.”

“It’s terrible, isn’t it, that our experiment, which found no benefit from taking ginseng, is so often described as if it did,” complains the study’s lead author, Cosmo Hallstrom, who is now at the Charter Clinic in London.

Hallstrom has just completed a much larger study of ginseng and work-related stress. The results haven’t yet been published.

Memory Enhancer

Look at the labels of memory pills like Remember-FX and GinkgoIQ and you’ll find ginseng among the ingredients. Look at the research and you’ll wonder why.

In study after study, people had no better memories after taking ginseng than after taking a placebo.⁸⁻¹⁰

And a recent British study of 32 middle-aged people found that a ginseng-ginkgo combination improved memories in the morning but worsened them in the afternoon.¹¹

“We were very surprised,” says Keith Wesnes of the Cognitive Research Institute in Reading. Wesnes has just completed a larger followup study of 272 healthy middle-aged volunteers, but results aren’t yet available.

Other Benefits

“Nothing in nature beats ginseng for a quick burst of well-being and ongoing mental and physical vitality,” boast the ads for Nature’s Solutions Ginseng 2000. The makers of Vitasana claim that their pills, which add ginseng to a multivitamin-and- mineral, have been “clinically shown to improve quality of life.”

Only if you ignore most of the evidence.

When researchers used internationally recognized questionnaires like the Psychological General Well-Being Index, Vitasana had no greater effect on volunteers’ quality of life than a placebo.¹²⁻¹⁴

Some of ginseng’s other touted benefits:

■ **Sexual Interest and Potency.** In experiments with animals, ginseng generates the release of nitric oxide. So does the anti-impotency drug Viagra. In the only published human study, 30 Korean men with erectile dysfunction who took 300 mg a day of Korean red ginseng for three months reported significant improvements in their sexual performance.¹⁵ Thirty similar placebo-takers reported less improvement.

But to most researchers, one small study isn’t enough. “The bottom line is that ginseng hasn’t yet been shown to be an effective alternative treatment for impotence in humans,” says Marc Goldstein, director of the Male Reproductive Clinic at New York Hospital-Cornell Medical Center.

■ **Menopause.** There haven't been enough good studies to know if it helps. "The available evidence does not support the use of ginseng for menopausal symptoms," concluded the Society of Obstetricians and Gynaecologists of Canada in 1998.

■ **Immunity.** An Italian study found that people who took ginseng extracts produced more disease-fighting antibodies after being given a vaccine.¹⁶ But no published study has confirmed (or refuted) the results.

Is It Really Ginseng?

When it comes to quality, ginseng has the worst track record of any popular supplement. According to industry insiders, as much as 15 percent of ginseng products that are tested contain no ginseng.

-
- 1 Nutrition Research 16: **1295, 1996.**
 - 2 J. Amer. Diet. Assoc. 97: **1110, 1997.**
 - 3 Med. Sci. Sports Exer. 15: **162, 1983.**
 - 4 Inter. J. Sport Nutr. 6: **263, 1996.**
 - 5 J. Amer. Coll. Nutr. 17: **462, 1998.**
 - 6 Med. Sci. Sports Exer. 28: **482, 1996.**
 - 7 Comp. Med. East West 6: **277, 1982.**
 - 8 Current Therapeutic Res. 57: **959, 1996.**
 - 9 Diabetes Care 18: **1373, 1995.**
 - 10 Aging Clin. Exp. Res. 8: **417, 1996.**
 - 11 Psychopharm. Bull. 33: **677, 1997.**
 - 12 Current Therapeutic Res. 55: **32, 1994.**
 - 13 Psychology and Health 10: **97, 1995.**
 - 14 Psychology and Health, **in press.**
 - 15 Inter. J. Impotence Res. 7: **181, 1995.**
 - 16 Drugs Exper. Clin. Res. 22: **65, 1996.**



**SUBSCRIBE TO
NUTRITION
ACTION**

CSPI