



## Innovation Breathes New Life Into an Ancient Herb

Jacob Teitelbaum, MD | DIGITAL EXCLUSIVE

I think one of the biggest challenges for practitioners, at least in my experience, is deciding what supplemental ingredients are beneficial and which ones simply sound like they should be effective, but don't ultimately bear fruit.

For example, *Panax ginseng* has been used an herbal tonic for thousands of years, helping people feel more focused, resilient, alert, and energetic. Traditionally steamed and dried as red ginseng, it is a highly regarded natural medicinal herb for researchers, practitioners and individuals around the world.<sup>1</sup>

But there's much about ginseng that has changed over the years – even in the past couple of decades or so – that calls into question its safety and efficacy.

That's because, sadly, conventionally grown ginseng is often a chemically intensive crop, and the places that once allowed for wild harvesting of ginseng are so developed that there isn't enough around to make it a viable supplemental option.

So, how do you get the same strength, compounds, and results from red ginseng? Innovate.

The clinically studied red ginseng I've used in my own practice is hydroponically grown without pesticides and carefully tended in ultra-clean conditions. The roots of this ginseng are provided with ideal nutrients, growing conditions, and even the stresses they need to develop noble ginsenosides, rare and beneficial compounds. These same compounds may once have been a hallmark of wild-harvested ginseng and may be the reason the herb was so effective in the past.<sup>2</sup>

Noble ginsenosides are better absorbed than the standard or classic ginsenosides that are widely available in most supplements now. In fact, the noble ginsenosides in this ginseng have been shown in an in-vitro scientific (Caco-2) study to be up to 17 times better absorbed than classic

ginsenosides. Of course, improved absorption can mean much more consistent results.

And so far, clinical work with this red ginseng has been extremely positive. For example, during this past year, you've very likely had patients reporting anxiety, exhaustion, brain fog, and an inability to concentrate. Maybe they're dealt with post-viral fatigue, or were already dealing with fibromyalgia (FS) or chronic fatigue syndrome (CFS). If so, this red ginseng may help.

A colleague and I conducted a pilot clinical trial to examine the effects of this ginseng for patients with CFS, fibromyalgia or post-viral fatigue. Of the 60 percent who noted improvements, the results were impressive, especially in four major categories: a 67 percent average boost in energy, a 48 percent average increase in mental clarity, 46 percent average improvement in restful sleep, and a 72 percent increase in stamina.<sup>3</sup>



But even for less dramatic reasons, like staying on task during long afternoons at work, this red ginseng can make a difference.

A three-armed clinical study compared the red ginseng to a leading white ginseng supplement from Europe and a placebo. As a crossover clinical study, all participants were subjects in all three study arms. The individuals in this study worked in roles overloaded with cognitive tasks and exposed to workplace and social demands; in social services, as tele-operators, engineers, or IT personnel.

Participants took a standardized, timed d2 test of attention to assess their ability to focus and concentrate. They took the test in the morning and again after a hard day's work, and the scores were compared. This tracks the scanning speed and accuracy of individuals as they cross out any letter "d" with two marks around it. That sounds easy until you realize that each letter "d" is surrounded by similar letters, like "p" and "b," as well as other "d's" with different numbers of marks.

In the placebo group, the d2 accuracy rate fell 11 points *below* the original baseline level. But the red ginseng group's score jumped to five points *above* baseline, with positive results starting on the first day. This red ginseng continued to support attention and focus into the afternoon hours, when the leading white ginseng's power began to fade – and when many of us do, too.<sup>4</sup>

In other research, brain scans of individuals taking the red ginseng found that the botanical worked to improve mood and support a sense of calm by modulating  $\beta 2$  waves, representing changes in GABA-ergic neurotransmission.<sup>5</sup>

I am convinced these results are, in a large part, due to the way this particular red ginseng is cultivated. It may be somewhat ironic that an advanced method of growing an ancient herb actually restores its greatness. The attributes of the clinically studied red ginseng are probably closer to what was formerly the aspects of wild harvested ginseng.

It can be an easy shortcut to dismiss innovation as a novelty or not being abstractly pure enough to be part of a practice, but I think that is a deeply limiting belief. In my experience, and in the experience of my own patients and those in these studies, it is a deciding factor in the results they've seen with red ginseng, and it may be the same for your practice as well.

## References

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