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## A Randomized, Double-blind, Placebo-controlled, Clinical Study of the General Effects of a Standardized *Lycium barbarum* (Goji) Juice, GoChi™

### BACKGROUND

For thousands of years, the goji berry (*Lycium barbarum*) has been a mainstay of Traditional Chinese Medicine (TCM), and its remarkable and diverse health-promoting properties have earned it a reputation as Asia's most potent health food. But outside of its native continent, the goji berry was virtually unknown until FreeLife International® introduced the Asian health secret to the world with the 2003 launch of Himalayan Goji® Juice. Since that time, goji has attracted increasing media attention as an anti-aging *superfruit*, and it has become a favorite of celebrities, world-class athletes, and health-savvy consumers worldwide.

The global *goji phenomenon* has aroused much scientific interest as well, and there are now dozens of published research papers that offer scientific validation of the berry's legendary attributes. Science has also revealed that the goji berry's broad-based health benefits are due primarily to the presence of unique molecules, not found in any other fruit, called *Lycium barbarum* polysaccharides (LBPs). Unlike dried berries or any other goji product, Himalayan Goji Juice is standardized to a consistently high level of the all-important LBPs.

### REASONS FOR THE STUDY

Since its launch, users of Himalayan Goji Juice have reported dramatic and rapid improvements in energy levels, quality of sleep, feelings of calmness and contentment, reduction of stress, and other key health aspects. It was proposed that these rapid and noticeable improvements might be attributable to the juice's high degree of LBP standardization and high absorption potential, and to prove this, a study was designed to attempt to demonstrate these same dramatic results under rigorous and tightly controlled clinical conditions. For this study, FreeLife® selected GoChi™, the next generation of Himalayan Goji Juice. The result of several years of scientific development, GoChi is an enhanced Himalayan Goji Juice formula containing at least 30% more bioactive LBPs than the original formula. GoChi is also preservative-free, is certified both kosher and halal, and has 20% fewer calories and an even better taste than the original formula.

### STUDY DESIGN

The duration, sample population, and methods of this randomized, double-blind, and placebo-controlled study conformed to the norms of FDA Good Clinical Practice. In this 14-day clinical trial, 35 healthy adult subjects were divided into two groups selected at random to ensure fair and even distribution of health status between the two groups. After a two-week washout period for all subjects, the **GoChi group** was administered a 120 ml (4 fl. oz.) daily dose of a goji juice (GoChi) containing a standardized content of *Lycium barbarum* polysaccharides (LBPs), the acknowledged bioactive principles of the goji berry. The second, or **placebo group**, received a 120 ml (4 fl. oz.) daily dose of a placebo control solution that tasted, smelled, and looked like GoChi, but did not contain any goji juice or LBPs. The participants had no knowledge as to whether they were drinking the GoChi or the placebo, and the scientists also had no knowledge as to which group was receiving the GoChi or the placebo. The GoChi group consisted initially of 17 individuals, of which 16 completed the study. The placebo group consisted of 18 individuals.

Based upon the medicinal properties of *Lycium barbarum* in TCM and the health benefits reported by FreeLife customers, the participants were examined by questionnaire for subjective ratings (0-5) of general feelings of well-being, neurological/psychological traits, gastrointestinal, musculoskeletal and cardiovascular complaints, as well as any adverse effects. Data were statistically analyzed for changes between day 1 and day 15. Descriptive statistics were calculated for placebo and GoChi for all dependent measures and summarized as means and standard errors. For all clinical symptom questions under all categories, each question was graded and the scores analyzed for changes between day 1 and day 15 with the nonparametric Wilcoxon matched pairs tests.

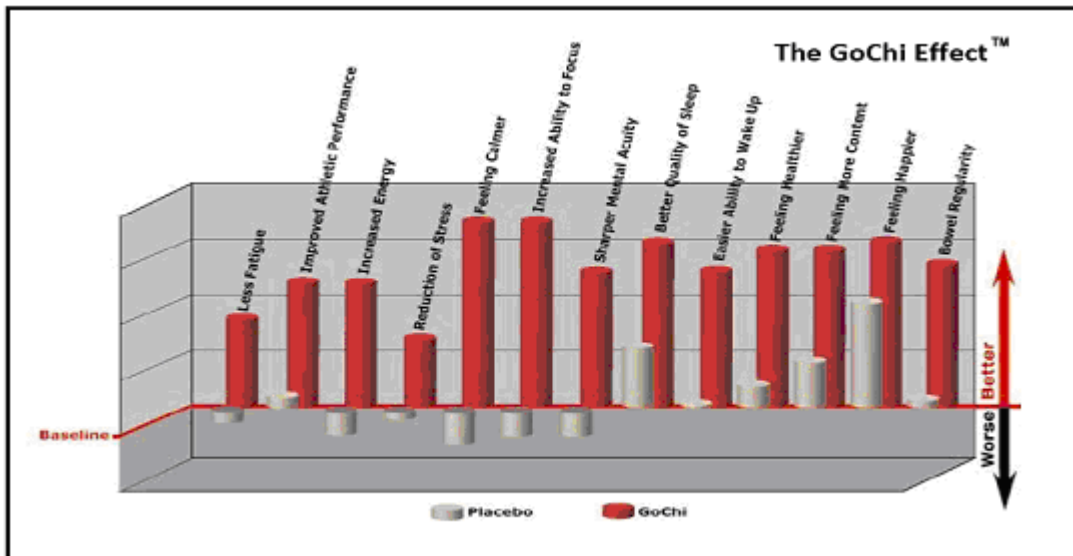
## RESULTS

The GoChi group showed statistically significant improvements (confidence level at 90-99%) between day 1 and day 15 in the following 13 key health aspects: increased energy, less fatigue, increased focus and mental acuity, improved athletic performance, reduced stress, increased feelings of calmness and contentment, feeling happier, healthier and more regular, better quality of sleep, and easier ability to awaken in the morning. In addition, over 90% of those who consumed GoChi reported feeling an improvement in their health.

In contrast to the GoChi group, the placebo group only showed a statistically significant improvement in 1 of the 13 categories (happiness). No statistically significant changes were found in any of the other 12 categories. There were no adverse events reported by any subjects in either the GoChi or the placebo group during the study period.

## CONCLUSION

The results shown in this randomized, placebo-controlled, double-blind, clinical study clearly indicate that daily consumption of GoChi can cause immediate and significant improvement in 13 aspects of general well-being, neurological/psychological traits, and gastrointestinal function.\* These effects are consistent with previously published experimental studies, with the prescribed uses of *Lycium barbarum* as practiced in Traditional Chinese Medicine, and with the benefits reported by FreeLife customers the world over.



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\* This statement has not been evaluated by the US Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.