

Editors' Foreword

The use of herbal extracts to enhance cognitive functioning, including memory and alertness, can be traced back for centuries in traditional Chinese medicine. Today, herbs such as *Ginkgo biloba* are widely used treatments to augment cognitive functions. Their use as cognitive enhancers is especially prevalent in Europe, and continues to grow in the United States. It is hard to pick up a newspaper and not see testimonials to various herbal agents by athletes and movie stars. But what is known in a scientifically adequate way about their efficacy? Is the evidentiary base strong enough to support unequivocal recommendations?

This issue of *Psychological Science in the Public Interest* contains two companion articles, each undertaken by an accomplished team of scientists. Despite focusing on different aspects of the herbal issue, both teams conclude that the evidence to date is inconclusive, uneven, methodologically limited (small samples), and often nonreplicable. Does this mean there is no validity to claims that herbs can enhance cognitive functioning in special groups such as the elderly? No. Both teams report that there are subtle signs that are promising, provided that they can be replicated with large samples and rigorous controls.

In the first of these two articles, the team of Paul Gold, Larry Cahill, and Gary Wenk set as their goal an evaluation of the science surrounding claims about ginkgo's ability to reverse cognitive deficits. Noting that there is some indication that this herb may be effective, they ultimately conclude that the evidence does not support strong recommendations, other than the need for more research. In their words, "Our overrid-

ing impression after seeing the available studies is that there is not enough information to say that ginkgo does or does not improve cognition. There are enough positive findings, perhaps just enough, to sustain our interest in finding out whether ginkgo does improve cognition." However, this will require more and better research than now exists.

In the second article in this issue, Mark McDaniel, Steven Maier, and Gilles Einstein set out to determine whether there are over-the-counter "brain boosters" capable of reversing the deleterious effects of aging and pathological conditions on the memory system. Like the Gold et al. team, this team concludes that there is a need for more and better science with larger samples: "All in all, we believe that the current data do not allow strong scientifically based recommendations for any of these memory nutrients. However, . . . we believe that there are enough positive results with at least some of these nutrients to suggest that this is an important area for further research."

Readers will find that both teams were fair and open-minded in their analyses. There is no hint of prejudged outcomes. Such fairness is no small feat when scholars tackle societally sensitive issues, but these teams managed to maintain their objectivity and fairness. One of our guiding principles in *PSPI* is that it is at least as important to alert readers to situations where the evidentiary base is lacking as it is to confirm where the evidentiary base is strong. So, don't rush to the herbal-supplement counter until and unless the missing research is forthcoming!

S.J. Ceci and R.A. Bjork