

Nutritional Outlook

THE MANUFACTURER'S RESOURCE FOR DIETARY SUPPLEMENTS & HEALTHY FOODS AND BEVERAGES

BY DANIEL SCHATZMAN
MANAGING EDITOR

COGNITIVE SUPPORT

Food for Thought

Another alkaloid, vinpocetine, is a derivative of vincamine, which is found in periwinkle and other plant sources. "In Europe, periwinkle extracts have been employed as components of herbal preparations intended for consumption by the elderly and others concerned with nervousness and anxiety," Cloutre says. "Vinpocetine supports central metabolism in part by increasing the brain's production of ATP, which is the most important source of readily accessible energy in the body"

According to Svetlana Busiguina, PhD, who works in the technical department at Covex SA (Madrid, Spain), vinpocetine has at least five effects on the body. It enhances brain circulation and oxygen consumption, improves blood flow, increases the brain's tolerance to low levels of oxygen and blood flow, has an anticonvulsant effect, and helps relax blood vessel walls.

Busiguina adds that in one study using positron-emission tomography, a single dose of vinpocetine was shown to increase glucose transport through the blood-brain barrier. In another study, 15 mg of vinpocetine per day for three weeks increased ATP concentration in erythrocytes.



Know J.O.E. coffee from San Francisco-based Jeremiah's Pick is enriched with a stimulative blend of herbal extracts and amino acids. The coffee contains ginkgo, vinpocetine, and L-tyrosine. Staff photo.

Vinpocetine also appears to influence neurotransmitters. "Vinpocetine improves turnover and increases the concentration of noradrenaline, dopamine, acetylcholine, and serotonin, which are involved in complex integrative processes of memory formation," Busiguina says. "It was also shown to activate neurons in the locus coeruleus region of the brain that decrease with age."

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Although vinpocetine is often taken in pill form, it is increasingly being added to foods and beverages, such as coffee. Covex has a U.S. patent for the preparation of beverages consisting of coffee, tea, cocoa, or cola containing caffeine or theobromine and vinpocetine.

"These beverages can be cold or hot," says Busiguina. "Stability studies show the integrity of vinpocetine at high temperatures. It is expected that all of the vinpocetine added to hot drinks will remain active."

OTHER INGREDIENTS

Novocept, a peptide-based supplement from the Novia Nutraceuticals division of Gentlin Health Products Inc. (Burlington, MA), also shows promise. Novocept is a natural by-product of the digestion of yeast. According to Jeffrey Wong, PhD, founder of Novia Nutraceuticals, Novocept produces beneficial effects that are similar to, but greater than, those of vasopressin, a peptide known to act on the hippocampus, a structure

of the brain that is crucial for learning and memory. In addition, Novocept does not produce the side effects of increased blood pressure and decreased urine flow, which can be generated by vasopressin.

"We are excited at the results of our clinical studies that showed the test groups gaining pronounced increases in memory over the placebo groups," says Wong. He adds that the actions of other ingredients like PS, ginkgo, and huperzine A are not specifically targeted at the hippocampus, indicating that they may work synergistically with Novocept.

CONCLUSION

Although the data on some of these products appear exciting, caution is warranted, as many of the ingredients are still not very well understood. More research needs to be conducted to understand and verify the effects of these compounds.

"Many nutrients have appeared on the market, and there is a strong interest among older consumers for these sorts of products," notes Busiguina. "Most published animal studies give fairly strong proof of

the effectiveness of these nutrients." However, she adds that in clinical studies with people, impressive results have not always been observed or replicated.

Still, the future of the category appears strong.

"Right now, the market for memory and cognition products is very active and appears more promising than ever", says Chemi Nutraceuticals' O' Reilly.