

Scientists Discover Green Tea Boosts Brain Cell Production, Aids Memory

By Sherry Baker, *Natural News*

If you think drinking green tea seems to make your thinking more clear, you probably aren't imagining it. Research just published in the journal *Molecular Nutrition & Food Research* reveals natural properties of green tea actually affect the generation of new brain cells linked to improved memory and spatial learning. This adds to the growing list of documented green tea benefits which include building stronger bones and potentially fighting prostate cancer.

"Green tea is a popular beverage across the world," scientist Yun Bai from the *Third Military Medical University* in Chongqing, China, said in a media statement. "There has been plenty of scientific attention on its use in helping prevent cardiovascular diseases, but now there is emerging evidence that its chemical properties may impact cellular mechanisms in the brain"

Professor Bai's research team zeroed in on the organic chemical EGCG, (epigallocatechin-3 gallate), a key property of green tea. Researchers have long known that EGCG is a potent anti-oxidant and the Chinese scientists wanted to see if the natural compound has a specific, beneficial effect against age-related degenerative diseases, especially those that cause problems with brain function.

"We proposed that EGCG can improve cognitive function by impacting the generation of neuron cells, a process known as neurogenesis," Dr. Bai explained. "We focused our research on the hippocampus, the part of the brain which processes information from short-term to long-term memory."

The research showed that, in fact, EGCG boosts the production of neural progenitor cells. Like stem cells, these brain cells can turn into various types of cells. In order to see if this increased brain cell production could boost memory or spatial learning, the scientists ran tests on two groups of lab mice. One group was given EGCG from green tea in a drink and the other group didn't receive the EGCG. Then the mice were trained for three days to find a visible platform in their maze and also trained for seven days to find a hidden platform.

The scientists discovered that the mice who had had imbibed EGCG from green tea needed far less time to find the hidden platform. Bottom line: EGCG enhances learning and memory by improving object recognition as well as spatial memory.

"We have shown that the organic chemical EGCG acts directly to increase the production of neural progenitor cells, both in glass tests and in mice," Dr. Bai concluded. "This helps us to understand the potential for EGCG, and green tea which contains it, to help combat degenerative diseases and memory loss."

While the new study involved mice, it raises the distinct possibility that green tea could hold the key to treat memory problems in humans -- something Big Pharma's chemical drug concoctions have failed to do successfully.

Source for this article include:

<http://onlinelibrary.wiley.com/doi/10.1002/mnfr.201200035/abstract>