

Blueberry and green tea containing supplement protects against stroke damage

March 4 2008

A unique dietary supplement called NutraStem has been shown to have beneficial effects following experimental stroke. A nutritional supplement product, NutraStem also known as NT-020, is a proprietary formulation of blueberry, green tea, vitamin D3 and carnosine extracts- a combination of nutritional ingredients thought to be potent in protecting against brain damage.

“Stroke is the third leading cause of death and the leading cause for disability in the U.S. with two of every 1,000 adults experiencing their first stroke in any given year,” said Cesar V. Borlongan, PhD, of the Medical College of Georgia, lead author of a study that tested NT-020 post stroke effects in animal models. “We explored how increasing the nutritive diet through NT-020 supplementation might render a therapeutically potent neurogenesis following stroke.”

NutraStem was developed by Natura Therapeutics, Inc., based in Tampa, Florida and founded by neuroscientists from the University of South Florida.. NutraStem was designed to encourage the proliferation of adult stem cells, which have the potential to develop into most tissues and bone cells in the body and have the capacity to migrate toward problem or damaged areas.

A study, conducted jointly by scientists at the University of South Florida College of Medicine (Tampa) and the Medical College of Georgia (Augusta), examined two groups of laboratory animals in a double-blind procedure. One group received the dietary supplement for

two weeks prior to undergoing surgical stroke. The second group did not receive the dietary supplement. Results, published online in the high-impact journal REJUVENATION RESEARCH), showed that the group receiving NutraStem had greatly reduced neural damage in the brain and demonstrated significantly reduced motor deficits.

”The numbers of new neurons found in the damaged brain of the treated rats was significantly higher,” said co-author Paula Bickford, PhD, of the University of South Florida College of Medicine and co-founder of Natura Therapeutics, Inc. “An important feature of our results is that the combination of agents used was 100 times more potent than previously published study results that examined each of the individual ingredients used by themselves.”

Co-author Cyndy D. Sanberg, PhD, of Natura Therapeutics, Inc., noted that while eliminating detrimental calories has been found to be protective against stroke by reducing oxidative stress, the nutritive diet of NutraStem could enhance and augment that approach.

“Our study found robust neuroprotective effects of the NT-020 formula,” said Borlongan. “Two weeks of NutraStem therapy lessened stroke-induced behavioral deficits, reduced stroke-induced infarcts and promoted the birth of new neurons. Our results provide a critical advance in the scientific and clinical arena by demonstrating the advantage of a multi-agent over a single agent regimen.”

Citation: Yasuhara, T., Hara, Koichi, H., Maki, M., Masuda, T., Sanberg, C.D., Sanberg, P.R., Bickford, P.C., and Borlongan, C.V. Dietary supplementation exerts neuroprotective effects in ischemic stroke model. Rejuvenation Research, 11(1), 2008, 201-214.

Source: Cell Transplantation Center of Excellence for Aging and Brain Repair

Citation: Blueberry and green tea containing supplement protects against stroke damage (2008, March 4) retrieved 5 May 2024 from <https://medicalxpress.com/news/2008-03-blueberry-green-tea-supplement.html>

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