New study indicates wild blueberries improve brain's processing speed

KANNAPOLIS, NC, UNITED STATES, September 19, 2022 / EINPresswire.com/ -- In a research study where volunteer participants with cognitive issues consumed wild blueberries daily for six months, the ability of the participants' brains to process information improved. The findings from this double-blind, placebo-controlled, randomized clinical trial have been published in Nutritional Neuroscience, an International Journal on Nutrition, Diet, and Nervous System.

Carol Cheatham, PhD

The paper's lead author, University of North Carolina at Chapel Hill's Nutrition Research Institute (NRI) Associate Professor of Psychology and Neuroscience Carol L. Cheatham, Ph.D., hypothesized that people who consume a flavonoid-rich, freeze-dried wild blueberry powder would show improvements in cognitive performance compared to those who consumed a placebo powder across the six months of the study. According to Cheatham, the study was particularly relevant in an aging society where cognitive decline and dementia become a public health issue. "We need interventions to improve brain health and, thus, quality of life for older adults, especially now that Boomers are reaching the age when brain health becomes a pressing concern," she said.

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The study included 86 older adults (age 65-80) from the Kannapolis area who were, by self-report and the report of a close confidant, experiencing some cognitive issues. Another 43 older adults who were not experiencing any issues were included as a reference group. All participants underwent testing to confirm their cognitive status. They then were

randomly assigned to consume either the wild blueberry powder or a placebo powder and were instructed to include the powder daily in their diets. Participants were monitored at the NRI monthly. At the end of the research study, they were tested again for cognitive abilities. The tests included the Cambridge Neurological Test Automated Battery (CANTAB) and a brain imaging technique known as event-related potentials (ERP).

UNC Nutrition Research Institute Logo

Wildblueberries.com Logo

The results showed that a basic cognitive ability—speed of processing—was improved in the wild blueberry group. In fact, speed of processing was restored to the level of those in the reference group who had not experienced any cognitive decline. Speed of processing is the speed with which the brain moves information, and it underlies all cognitive abilities. How quickly a person can recall a word, make a decision, bring to mind a memory, or even, remember a phone number depends on speed of processing. Daily consumption of wild blueberries for six months, therefore, improves brain health.

Why wild blueberries? Mary Ann Lila, Ph.D. and Director of the NC State Plants for Human Health Institute in Kannapolis is a world-renowned expert in berries and an author on this paper. “The wild blueberry has a phytochemical profile that has been tailored by the harsh environments of Maine and the surrounding areas where they grow. The wild blueberry’s adaptation to this environment has resulted in a diverse phytochemical profile that gives the wild blueberry an incredible potency for human health,” said Lila. “Phytochemicals are compounds in plants that develop to defend the plant from environmental stress, fungi, bacteria, and viruses. Once consumed by humans, they transfer these health benefits to us. The research study conducted here at the NRI shows that the phytochemicals specific to the wild blueberry are important for brain health.”

Wild blueberries are grown in Maine but can be found in the grocery freezer section since fresh berries do not transport well to distant locations. The wild blueberries are individually quick frozen (IQF) within hours of being harvested at the peak of ripeness from the barrens where they grow. The IQF process flash freezes and preserves 100% of the phytochemical integrity and complexity of the berry, thereby preserving all the health benefits for the consumer. They are often added to smoothies, oatmeal, or yogurt, and are good for snacking.

“This study adds to the ever-growing body of evidence that shows that consuming wild blueberries can impact brain function,” said Kitty Broihier, MS, RD, LD and Nutrition Advisor for the Wild Blueberry Association of North America. “Dr. Cheatham and her team’s work is important for helping define the connection between long-term consumption of wild blueberries with improvements in specific aspects of cognition. Combined with the short-term studies that have been done on wild blueberries and cognition, this new evidence helps provide a more complete picture of the beneficial cognitive effects that eating wild blueberries can have and that eating these berries daily may be a practical and effective part of a brain-healthy diet.”

About the UNC Nutrition Research Institute
The UNC Nutrition Research Institute’s mission is to advance the field of precision nutrition by investigating how genes, environment, and microbiome affect an individual’s requirements for and responses to nutrients. Every person is metabolically unique. The NRI is dedicated to finding out how these differences affect an individual’s health so that current one-size-fits-all dietary guidelines can be replaced with customized nutritional recommendations and actions to improve a person’s health and quality of life. Learn more at uncnri.org.

About Wild Blueberry Association of North America
The Wild Blueberry Association of North America (WBANA) is a trade association of farmers and processors of Wild Blueberries from Maine and Canada who are dedicated to bringing the wild blueberry health story and unique wild advantages to consumers and the trade worldwide. WBANA is dedicated to furthering research that explores the health potential of wild blueberries. Hundreds of studies have been conducted on the potential health and disease fighting benefits of wild blueberries. For news, recipes, and related health information about Wild Blueberries, visit www.wildblueberries.com.

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