

## GROUNDBREAKING STUDY REINFORCES NEED FOR INCREASED CHOLINE SUPPLEMENTATION DURING PREGNANCY.

New research from Cornell University finds that doubling recommended prenatal choline significantly improved childhood brain performance.

**New Hampton, NY, (January 10, 2021)** – In a new paper<sup>1</sup> just published in *The FASEB* Journal, Cornell University researchers confirmed the critical role choline plays in infant cognitive development. This groundbreaking new research shows that pregnant women who took more than twice the recommended dose of choline during pregnancy had children that demonstrated significant cognitive benefits through early childhood. The original Cornell findings published in 2018<sup>2</sup> established that higher doses of choline during pregnancy led to improved cognitive performance in infant offspring.

This new paper now highlights that cognitive improvements were both significant and enduring in those same children at the age of seven. VitaCholine® from Balchem was the choline source used in the original 2018 study at Cornell University.

According to the Cornell researchers, even after seven years and without additional choline supplementation, the children born from the higher choline dosage (930 mg) pregnancies maintained their significant cognitive performance advantage over the children from the lower choline dose (480 mg) group. Further, their cognitive performance significantly improved compared to the lower choline dose group as the testing regimen prolonged and the difficulty progressed. This is the first human clinical study to confirm years of previous animal research that the brain-boosting benefits of supplemental choline during pregnancy endure at least into early childhood.

This landmark research may well have an important impact on public health policy according to Shitij Chabba, Vice President of Minerals & Nutrients and Human Nutrition & Health Marketing at Balchem. "Higher maternal intakes of VitaCholine significantly improved children's ability to stay focused and on-task, even during long, challenging assignments. The cognitive boost from VitaCholine observed in infants continues at least to school age when children begin to tax their brains in educational settings," said Chabba.

Surprisingly, nine out of ten pregnant women don't even get the recommended Dietary Reference Intake (DRI) of choline<sup>3</sup>. They likely need to consume higher amounts of choline for their children to realize these newly discovered heightened cognitive benefits. Many prenatal vitamin manufacturers are beginning to reformulate with higher levels of choline and these study findings are likely to help drive that trend.

"The importance of choline during pregnancy cannot be overstated and this new paper helps establish choline as the premier brain nutrient. The American Medical Association recommends choline inclusion in prenatal vitamins because of the growing body of research that proves its benefits throughout life." Chabba continued. "This is exciting news for moms — by supplementing with VitaCholine, they give their children the best start in life for enduring, high cognitive performance."

## Cited Sources:

<sup>1</sup>Bahnfleth, CL, Strupp, BJ, Caudill, MA, Canfield, RL. (2021), Prenatal choline supplementation improves child sustained attention: A 7-year follow-up of a randomized controlled feeding trial. FASEB J. 2022; 36:e22054. https://doi.org/10.1096/fj.202101217R

<sup>2</sup>Caudill, M.A., Strupp, B.J., Muscalu, L., Nevins, J.E.H. and Canfield, R.L. (2018), Maternal choline supplementation during the third trimester of pregnancy improves infant information processing speed: a randomized, double-blind, controlled feeding study. The FASEB Journal, 32: 2172-2180. https://doi.org/10.1096/fj.201700692RR

<sup>3</sup>Wallace, T. C., & Fulgoni, V. L. (2017). Usual Choline Intakes Are Associated with Egg and Protein Food Consumption in the United States. Nutrients, 9(8), 839. https://doi.org/10.3390/nu9080839

## About Balchem

Balchem Corporation develops, manufactures and markets specialty ingredients that improve and enhance the health and well-being of life on the planet, providing state-of-the-art solutions and the finest quality products for a range of industries worldwide. The company reports three business segments: Human Nutrition & Health; Animal Nutrition & Health; and Specialty Products.

The Human Nutrition & Health segment delivers customized food and beverage ingredient systems, as well as key nutrients into a variety of applications across the food, supplement and pharmaceutical industries. The Animal Nutrition & Health segment manufactures and supplies products to numerous animal health markets. Through Specialty Products, Balchem provides specialty-packaged chemicals and chelated minerals to the micronutrient agricultural market.

-- END -

Media contact:

Tracy Snider <u>tsnider@balchem.com</u> 314-704-0553