Breast milk boosts preemies' brain growth



Breast milk is the optimal source of nutrition for infants, and for the nearly 1 in 10 U.S. infants born prematurely each year, breast milk is especially beneficial, helping to prevent sepsis and necrotizing enterocolitis and promoting neurologic development.

In a group of 67 preterm infants born at very low-birth weight, <1500 g) and ≤32 weeks' gestation, cumulative lipid intake in the first two weeks of life was positively associated with significantly greater cerebellar volume after adjusting for weight gain, gestational age at birth and postmenstrual age at MRI. Cumulative lipid and energy intake in the first four weeks of life were both significantly associated with greater cerebellar volume. according to sophisticated imaging conducted by Children's National Hospital researchers.

"Our findings
underscore the
importance of early,
aggressive nutrition
interventions to
optimize cerebellar
development."

Catherine Limperopoulos, Ph.D.

Resources: "Receipt of breast milk by gestational age — United States 2017." Centers for Disease Control and Prevention, published June 7, 2019. Katherine M. Ottolini; Nickie Andescavage, M.D.; Kushal Kapse, Marni Jacobs, Ph.D., MPH; Jonathan Murnick, M.D., Ph.D.; Rebecca VanderVeer; Sudeepta Basu, M.D.; Mariam Said, M.D.; and Catherine Limperopoulos, Ph.D., all of Children's National Hopsital Early Lipid Intake Improves Cerebellar Growth in Very Low-Birth-Weight Preterm Infants [published online ahead of print, 2020 May 8]. Journal of Parenteral and Enteral Nutrition. 2020;10.1002/jpen.1868. doi:10.1002/jpen.1868