

Smallest Preemies Can Achieve Catch-Up Growth by 2 Years of Age with Exclusive Human Milk Diet New Study Finds

Growth Milestone Met Without Elevating Body Fat or Insulin Resistance

DUARTE, Calif., March. 12, 2019 – [Prolacta Bioscience](#), the pioneer in human milk-based neonatal nutritional products for premature infants, today announced results from an independent study comparing the long-term growth of preemies after leaving the neonatal intensive care unit (NICU). The findings showed that premature infants born small for their gestational age (SGA) achieved greater catch-up growth later when compared to preemies born at appropriate size for their gestational age (AGA). Both groups were fed an exclusive human milk diet (EHMD)ⁱ including Prolacta’s 100 percent human milk-based fortifier in the NICU, and both showed adequate growth by 2 years of age. The study also noted that the SGA infants experienced their catch-up growth without increasing their body fat or insulin resistance.

“The results from this study suggest that an EHMD may improve long-term body composition and metabolic outcomes of very low birth weight premature infants, especially those who were born small for their gestational age,” said Dr. Amy Hair, senior author on the paper (Section of Neonatology), Department of Pediatrics, Baylor College of Medicine, Texas Children’s Hospital. “Even the smallest preemies receiving an EHMD are able to achieve age-appropriate growth without developing levels of body fat or insulin resistance at 2 years of age that could increase the risk of diabetes later in life.”

The study, titled “Premature Small for Gestational Age Infants Fed an Exclusive Human Milk-Based Diet Achieve Catch-Up Growth Without Metabolic Consequences at 2 Years of Age,”ⁱⁱ was published in the journal *Archives of Disease in Children: Fetal and Neonatal Edition*. It compared the post-hospital-discharge growth, adiposity (fatness), and metabolic outcomes of 33 AGA preemies and 18 SGA preemies who were all fed an EHMD. The groups were examined at 12 to 15 months and 18 to 22 months, corrected gestational age, to determine body measurements, serum glucose levels, and non-fasting insulin levels.

During the two-year follow-up period, researchers found that while both the SGA and AGA infants had acceptable growth at 1 and 2 years of age, the SGA preemies achieved the same weight gain as the AGA group and gained significantly more body mass between the first and second scheduled exams – the catch-up factor. Additionally, there were no substantial differences found in trunk fat mass and total fat mass between the groups. Infants in the SGA group also showed lower insulin levels (which can indicate greater insulin sensitivity and less risk for diabetes).

(more)

“We have seen increasing evidence that an EHMD provides a wide range of benefits for premature infants with very low birth weights,” said Scott Elster, president and CEO of Prolacta Bioscience. “This study is the first to evaluate the longer-term growth and development of the smallest preemies fed an exclusive human milk-based diet in the NICU, and it suggests that the positive outcomes associated with an EHMD may continue as these babies mature.”

About Prolacta Bioscience

Prolacta Bioscience® Inc. is a privately held life sciences company dedicated to Advancing the Science of Human Milk®. Prolacta is the world’s leading hospital provider of 100% human milk-based nutritional products that are changing the standard of care for extremely premature infants. In addition, the company is exploring the therapeutic potential of human milk across a wide spectrum of human diseases, including applications for infants requiring surgery for congenital cardiac and gastrointestinal disorders. Operating the world’s first pharmaceutical-grade human milk processing facilities, Prolacta leads the industry with the highest quality and safety standards for the screening and testing of donor milk. Prolacta is a global company with headquarters in Duarte, Calif.

www.prolacta.com

ⁱ An exclusive human milk diet (EHMD) is achieved when 100 percent of the protein, fat and carbohydrates in an infant’s diet are derived from human milk. This diet includes a human milk-based human milk fortifier.

ⁱⁱ Visuthranukul C, Abrams SA, Hawthorne KM, et al. [Premature small for gestational age infants fed an exclusive human milk-based diet achieve catch-up growth without metabolic consequences at 2 years of age.](#) *Arch Dis Child Fetal Neonatal Ed.* 2018;0:F1–F6. doi:10.1136/archdischild-2017-314547.