### **NUTRICIA RESEARCH**



## At Nutricia, we have 120 years of experience in early life nutrition



40 years of research in gastrointestinal functions in early life



40 years of research inspired by human milk

# Pioneering innovations in prebiotic oligosaccharides and unique process of fermentation

### **Breastfeeding is best for babies**

Breastfeeding is best for babies and provides many benefits. It is important that, in preparation for and during breastfeeding, mother eats a healthy, balanced diet. Combined breast and bottle feeding in the first weeks of life may reduce the supply of mother's own breast milk, and reversing the decision not to breastfeed is difficult. Always consult healthcare professional for advice about feeding your baby. If infant formula is used, manufacturer's instructions for use should be followed carefully.

#### References

Chu DM, Antony KM, Ma J, et al. The early infant gut microbiome varies in association with a maternal high-fat diet. *Genome Medicine*. 2016;8:77.

Collado MC, et al. Microbial ecology and host-microbiota interactions during early life stages. *Gut Microbes*, 3(4): 352-65, 2012.

Helander HF and Fändriks L. Surface area of the digestive tract-revisited. *Scand J Gastroenterol.*, 49(6):681-9, 2014

Kunz C, Rudloff S, Baier W, Klein N, Strobel S. Oligosaccharides in human milk: Structural, functional, and metabolic aspects. *Annu. Rev. Nutr.* 2000;20:699–722.

Martín R, Jiménez E, Heilig H, Fernández L, Marín ML, Zoetendal EG, Rodríguez JM. Isolation of Bifidobacteria from Breast Milk and Assessment of the Bifidobacterial Population by PCR-Denaturing Gradient Gel Electrophoresis and Quantitative Real-Time PCR. *Appl Environ Microbiol.* 2009; 75(4): 965–969.

Moro EG, Boehm G. Clinical outcomes of prebiotic intervention trials during infancy: A review. *Functional Food Reviews*. 2012; 4 (3): 101-113.

Munyaka PM, et al. External influence of early childhood establishment of gut microbiota and subsequent health implications. *Frontiers in Pediatrics*, 2(109):1-8, 2014.

Nuriel-Ohayon M, Neuman H, Koren O. Microbial changes during pregnancy, birth, and infancy. *Front Microbiol.* 2016; 14;7:1031. Shamir R, van Elburg R, Knol J, Dupont C. Gut Health in Early Life: Significance of the Gut Microbiota and Nutrition for Development and Future Health. Essential Knowledge Briefing, Wiley, Chichester (2015) Tamburini S, Shen N, Wu HC, Clemente JC. The microbiome in early life: implications for health outcomes. *Nat Med.* 2016; 7;22(7):713-22. Van de Wiele T, *et al.* How the microbiota shapes rheumatic diseases. *Nature Reviews Rheumatology,* 12:398-411, 2016.

van der Aa LB, Heymans HS, van Aalderen WM, Sillevis Smitt JH, Knol J, Ben Amor K, Goossens DA, Sprikkelman AB; Synbad Study Group. Effect of a new synbiotic mixture on atopic dermatitis in infants: a randomized-controlled trial. *Clin Exp Allergy.* 2010;40(5):795-804.

van der Aa LB, van Aalderen WM, Heymans HS, Henk Sillevis Smitt J, Nauta AJ, Knippels LM, Ben Amor K, Sprikkelman AB; Synbad Study Group. Synbiotics prevent asthma-like symptoms in infants with atopic dermatitis. *Allergy.* 2011;66(2):170-7.