Satellite Symposium

Human Milk Oligosaccharides: new Horizons in Infant Nutrition

Friday 23rd June 2017
13:00 – 14:00 | Room Dom Luis

21st Latinamerican Congress and 12th Iberoamerican Congress of Gastroenterology, Hepatology and Paediatric Nutrition (LASPGHAN)
Porto | Portugal

Nestlé Nutrition Institute
Human Milk and Human Milk Oligosaccharides: Functional Role and Benefits for Health

HMOs (Human Milk Oligosaccharides) are the 3rd most abundant component in human milk. HMOs content range from 20 to 25 g/L in colostrum to 5-15 g/L in mature milk; but it is also different in milk for preterm than term babies, and depending on the mothers’ genotype. More than 200 HMOs have been identified in human milk, but 10 of them constitute more than 75% total. Its unique structure implies specific benefits for breast fed babies on microbiota, increasing bifidobacteria population, blocking pathogen growth, and on immune system development. Small amounts are absorbed and circulate in infants’ blood indicating potential systemic functions.

Advancing Human Milk Oligosaccharide Research: Learnings from Clinical Trials

Some beneficial effects of maternal milk have been attributed to the content and molecular structure of its oligosaccharides (HMOs). These favor the colonization of the gut of newborns by bifidobacteria, improve the gut barrier function, hamper adherence of bacterial and viral pathogens to the intestinal surface and probably act systemically because some are excreted in the urine. Availability of synthetic HMOs allows exploring in infants their influence on growth, prevention of infections and of decreased need for antibiotics.