News Release

For Healthcare Professional media

New Data Show Human Milk Oligosaccharide (HMO) Improves the Balance of Bacteria in Formula-Fed Babies' Digestive Systems*, Providing Important Immune System and Health Benefits

RESEARCH* SHOWS PRESENCE OF HMO, THE THIRD LARGEST COMPONENT OF BREAST MILK, INCREASES BOTH GOOD BACTERIA AND METABOLIC ACTIVITY BENEFICIAL TO BABIES' HEALTH

- New data build on earlier work showing that babies fed formula with HMO have an immune system response more like breastfed babies
- Body of research represents scientific breakthrough in our understanding of the health benefits of breast milk components
- Abbott's Similac is the first infant formula containing an HMO** on the market

PRAGUE, CZECH REPUBLIC, May 12, 2017. New Abbott data presented this week, at the 50th Annual Congress of the European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN) in Prague, further supports the important role Human Milk Oligosaccharides (or HMOs) play in supporting the immune system of formula-fed babies. It all starts in the digestive system.

It is well established that a healthy balance of bacteria in the gut is linked to a strong immune system, since our gut is home to approximately 70% of our immune cells[1]. In the first year of life, a baby is colonized by over a thousand different species of bacteria. Babies who are breast fed often have stronger developing immune systems, in part due to a special type of complex carbohydrates called HMOs, which are the third most abundant solid component of breast milk after fat and carbohydrate.

In a series of studies*, Abbott researchers found that 2'-FL (2'-fucosyllactose), the most abundant HMO found in breast milk, modifies the profile of the bacteria in the digestive systems of formula-fed babies, increasing beneficial species such as Bifidobacteria[2] and boosting favourable bacterial activity in the intestine[3]. With 2'-FL, there is an increase in the production of healthy substances such as short chain fatty acids and a reduction in the release of less desirable molecules such as ammonium[3]. In order to exert these beneficial effects, 2'-FL needs to be modified by bacteria in the gut first[4].

The new data presented this week significantly add to the understanding of the mechanism of action behind HMOs' immune system boosting properties.

Dr. Ardythe Morrow, PhD, Director of the Center for Interdisciplinary Research in Human Milk and Lactation at Cincinnati Children's Hospital Medical Center, commented that, "Human milk delivers optimal nutrition to support infant health and development, including a rich repertoire of human milk oligosaccharides. 2'-FL is the most abundant HMO in most

* Using an experimental model of infant digestion
** Not from human milk

mothers' milk. This new data deepens the evidence for a beneficial impact of dietary intake of 2'-FL on infant gut and immune development."

Previously published Abbott research demonstrates that babies fed infant formula with HMO** have an immune response more like breastfed babies[5]. Levels of five immune markers were nearly identical in breastfed babies and babies fed the formula containing the HMO 2'-FL.

"All parents want to give their babies the strongest possible start in the first year of life which is an important window for the development of the immune system," comments Hakim Bouzamondo, MD, MSc, MBA, Head of Global Nutrition Research and Development at Abbott. "Good nutrition helps build the foundation for a child's ability to learn, grow and thrive. While nothing can replace breast milk, for those mums who need or choose to use infant formula, we're committed to providing the most scientifically advanced nutrition yet with Similac with HMO."

Backed by 15 years of research into HMOs including 20 pre-clinical and clinical studies, Abbott's Similac is the first infant formula with an HMO** on the market. The addition of an HMO brings Similac closer to breast milk than ever before. Similac with HMO is currently available in the United States and has been clinically shown to close multiple gaps in immune function between formula-fed and breastfed babies[5].

With more than 90 years of experience, Abbott conducts ongoing research to give babies the strongest possible start in the first year of life. Abbott is dedicated to unconditional nourishment and continues to offer parents new feeding options. Learn more about the science and benefits of HMO on the Abbott nutrition newsroom.

Important notice: Breastfeeding is best for babies and is recommended for as long as possible during infancy. Breastfeeding provides many benefits to both mother and baby. We recommend that you speak to your healthcare professional for advice on how to feed your baby.

About Abbott

At Abbott, we're committed to helping people live their best possible life through the power of health. For more than 125 years, we've brought new products and technologies to the world - in nutrition, diagnostics, medical devices and branded generic pharmaceuticals - that create more possibilities for more people at all stages of life. Today, 94,000 of us are working to help people live not just longer, but better, in the more than 150 countries we serve.

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**Not from human milk

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