HUMAN MILK Oligosaccharides

WHAT ARE HMOs?
Unique prebiotics found naturally in human milk | Food for beneficial bacteria in the infant’s gut | 3rd most abundant solid component of human milk

COMPONENTS OF HUMAN MILK

Major nutritional components of human milk are: protein, carbohydrates, and lipids.

2’-FL HMO

- Approximately 75-80% of mothers secrete 2’-FL HMO in their breast milk.
- 2’-FL added to formula has the identical structure as 2’-FL in human milk.
- Prebiotics—food for beneficial bacteria.
- First clinical study with 2’-FL added to infant formula narrows the gap between human milk & infant formula.

EARLY IMMUNE DEVELOPMENT

70%
of the immune system is in the digestive tract, and prebiotics support colonization of the gut which helps support immune system development.

PREBIOTICS & MORE

Emerging research indicates potential multifunctional benefits:

COGNITION
- Learning & memory
- Long-term potentiation
- Brain molecular markers

IMMUNITY
- Pathogen receptor decoy
- Reduced symptoms of food allergy
- Immune modulation

GI TOLERANCE
- Prebiotic
- Gut motility
- NEC

SUPPORTING EVIDENCE

30 STUDIES

provide preclinical and clinical evidence identifying the role of HMOs in health & development. (2000-2017)

*Refer to references.

*Most studies were animal-based.

†Emerging research indicates potential multifunctional benefits:

Macronutrients

Water

Protein

Lipids

Carbohydrates

Lactose

Human Milk Oligosaccharides

2’-FL

Fucosyllactose

Human Milk

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REFERENCES


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