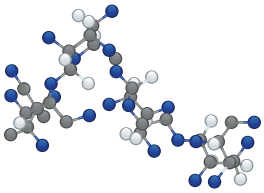
What makes HMOs unique?

Produced by the mammary glands, **HMOs** are **complex sugars with unique structures** present in the human breast milk[1,2]

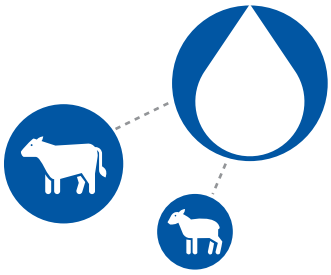
~200 HMOs have been identified and **2'FL** and **LNnT** are two most commonly found **HMOs** in human breast milk[2,4-7]

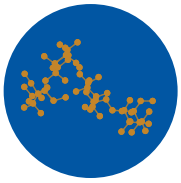


HMOs are the **3rd most abundant solid component** of human breast milk after lactose and lipids[1,2]

Levels and **composition of HMOs**[3,4]
- **Unique** to **human breast milk**
- Can vary from mother to mother and over the **course of lactation**

Diversity of **HMOs** is **unique to human breast milk**, in comparison with cow's milk and milk from other farm animals[3]





Beneficial effects of **HMOs** are **highly structure specific**[6]

Majority of the **HMOs** reach the lower gut unchanged, supporting **baby's immunity**[11]

HMOs Promote and modulate the growth of **beneficial bacteria**; thereby help in shaping the gut microbiota in babies[3,8-10]

HMOs may benefit **brain development** and **cognition**, as suggested by recent preclinical studies[12-14]

2'FL, 2ifucosyllactose; **HMO,** human milk oligosaccharide; **LNnT,** Lacto-N-neotetraose.

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HMO ACADEMY