**HUMAN MILK OLIGOSACCHARIDES:**
Help Strengthen an Infant’s Immunity

What are Human Milk Oligosaccharides (HMOs)?

**Human Milk is Very Diverse**

**Solid components**

> 200 HMOs identified

20–30 HMOs quantified

Three main HMO categories based on their building blocks and major HMOs:

- Non-fucosylated (neutral) HMOs
  - LNT is the most abundant representative in this category

- Fucosylated neutral HMOs
  - 2'FL is the most abundant fucosylated HMO
  - DFL (LDFT) is among the 10 most abundant representatives in this group

- Sialylated acidic HMOs
  - 6'SL is the leading representative of this group
  - 3'SL is an important representative as well

HMOs Help the Immune Defenses in 4 Main Ways

**Promote the growth of beneficial bacteria**

**Prevent pathogen adhesion in the gut**

**Strengthen gut barrier function**

**Educate the developing immune system**

HMOs Support the Development of a Healthy Immunity

**Risk reduction of infections, decreased pathogen load**

**Inhibition of inflammation**

**Inhibition of pathogen growth and adhesion**

**Enhanced vaccine responses**

HMOs are a family of diverse structures which are classified into three main groups; major HMOs of these groups support the development of a healthy immunity, shown by experimental, pre-clinical, observational and clinical studies.