

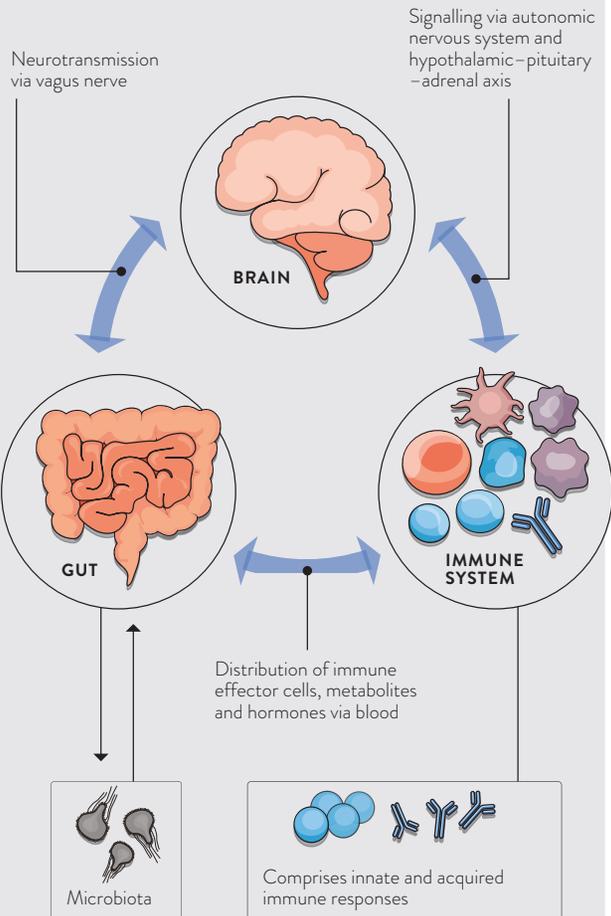


HUMAN MILK OLIGOSACCHARIDES

UNDERSTANDING THE POTENTIAL

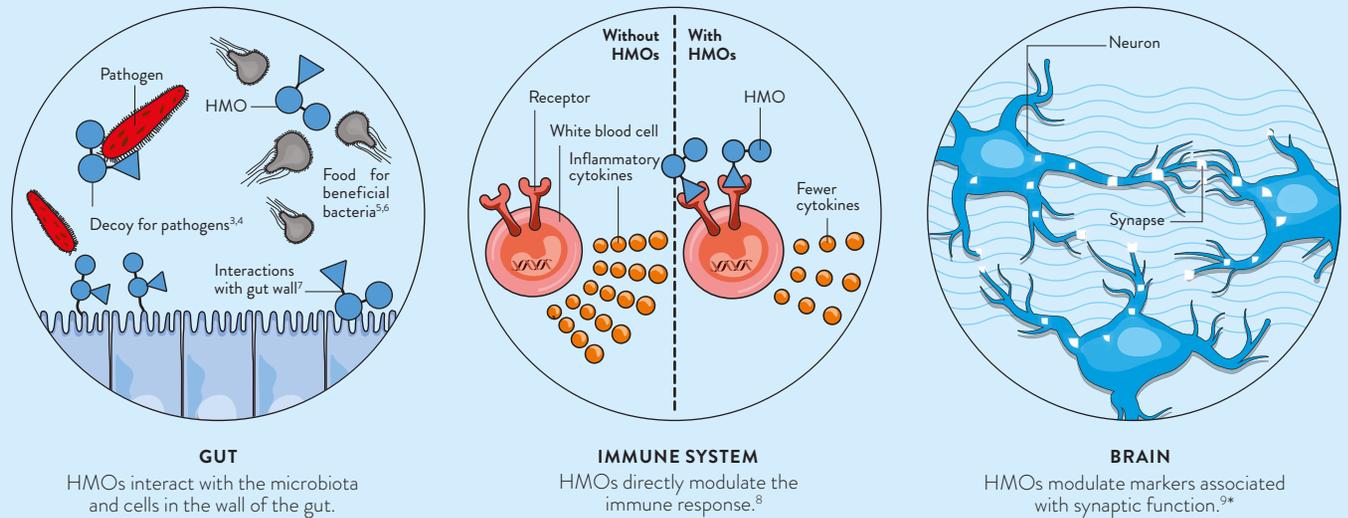
GUT-BRAIN-IMMUNE AXIS

70% of the immune system is in the gut and there are millions of neurons.¹



SYSTEM-WIDE EFFECTS OF 2'-FL HMO

Human milk oligosaccharides (HMOs) have many postulated benefits.²



IMPORTANT OUTCOMES OF 2'-FL HMO

Clinical and preclinical research is revealing potential benefits of supplementation with 2'-fucosyllactose (2'-FL), which is the most abundant HMO in 75–85% of mothers breast milk.^{10,11}

GUT HEALTH

- ➔ Supports growth of populations of *Bifidobacterium* and *Bacteroides*^{5,6}
- ➔ Intestinal adaptation after surgery^{12*}
- ➔ Incidence of infectious diarrhea¹³
- ➔ Severity of experimental necrotizing enterocolitis^{7*}
- ➔ Intensity of colonic motor contractions^{14*}

IMMUNE SYSTEM

- ➔ In a clinical study, compared to a control formula, 2'-FL HMO was shown to:
 - lower plasma inflammatory cytokine levels to more closely resemble those of breastfed infants⁸
 - associate with lower incidence of eczema^{15†}
 - associate with fewer respiratory infections^{15,16†}
- ➔ Food-allergy symptoms¹⁷

BRAIN HEALTH

- ➔ Improves memory and learning^{18*,19*}
- ➔ Changes molecular markers associated with synaptic function^{9*}
- ➔ Positively affects long-term potentiation (synaptic strength)^{9*,19*}

**Preclinical results only.*

†In comparison to control formula without HMOs, based on parent-reported adverse events from a posthoc analysis of a clinical study.

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