

GUT-BRAIN AXIS



Your gut and your brain are in **constant communication** through a **sophisticated signaling system** and without a doubt, **the gut microbiota plays an important role**. Here's what you need to know about the gut-brain axis:

Gut-brain communication



is two-way and dynamic

Gut microbiota can affect the brain in different ways,



including by changing the actions of Enteric Nervous System (ENS) neurons and the vagus nerve (cranial nerve X)

Altering bacteria in the mice's gut



can dramatically change behaviour and cognition

Short-chain fatty acids produced by gut microbiota



influence how brain cells develop and function in mice

Some probiotics show potential



for influencing brain activity in healthy adults

Patients with several brain-related conditions show an altered gut microbiome



and commonly experience gastrointestinal symptoms