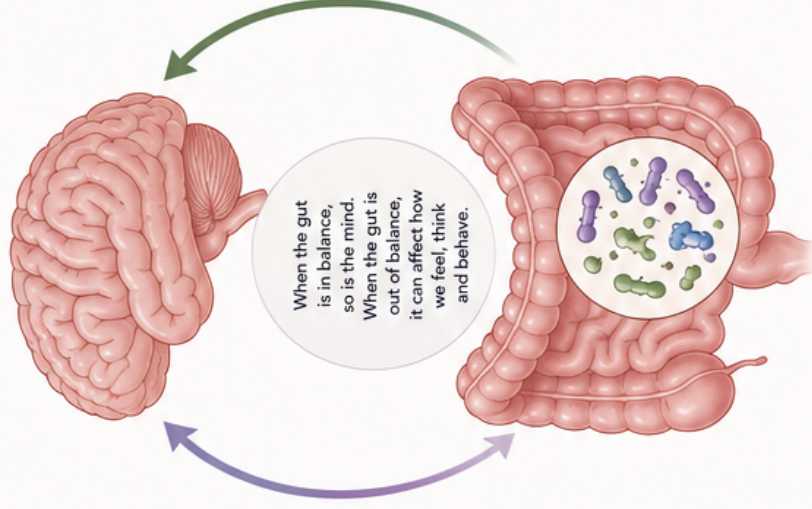


THE GUT-BRAIN CONNECTION

A TWO-WAY STREET

The gut and brain are constantly communicating.
A healthy gut helps support a healthy mind – and vice versa.

THE BIDIRECTIONAL HIGHWAY



FROM BRAIN TO GUT



Stress & emotions
Stress, anxiety and negative emotions can alter gut motility, increase sensitivity and change the microbiome.



Stress hormones
The brain releases cortisol and adrenaline which can increase gut permeability and inflammation.



Behavioural factors
Poor sleep, sedentary behaviour and unhealthy food choices can negatively impact gut health.

FROM GUT TO BRAIN



Microbial balance
A diverse, balanced microbiome supports healthy brain function and emotional wellbeing.



Neurotransmitters
~90% of serotonin is produced in the gut. Gut bacteria influence the production of serotonin, GABA, dopamine and others.



Inflammation
An imbalanced gut can trigger systemic inflammation that may contribute to mood disorders and cognitive decline.



SCFAs & metabolites
Butyrate and other short-chain fatty acids nourish the gut lining, support the blood-brain barrier and reduce neuroinflammation.

1. THE GUT-BRAIN AXIS

The gut and brain are connected through multiple pathways that work together to influence:



Mood & mental wellbeing



Stress response & resilience



Immune function & inflammation



Cognition, behaviour & focus

2. HOW THEY COMMUNICATE



Vagus nerve
Sends messages between the gut and brain in milliseconds.



Neurotransmitters
Gut microbes help produce key neurotransmitters like serotonin, GABA and dopamine.



Immune signalling
Gut bacteria influence immune cells and inflammation, which affects brain function.



Hormones
The gut affects hormones such as cortisol, influencing stress, mood, appetite and energy.



Microbial metabolites
Short-chain fatty acids (SCFAs) and other compounds produced by gut bacteria can cross into the bloodstream and affect the brain.

3. WHEN THE GUT IS OUT OF BALANCE

GUT DYSBIOSIS CAN LEAD TO:



Increased stress, anxiety and low mood



Brain fog and poor concentration



Poor sleep quality



Increased gut permeability ('leaky gut')



Chronic inflammation



Reduced production of mood-supporting neurotransmitters

4. SUPPORT THE GUT, SUPPORT THE BRAIN



Eat a diverse, whole-food diet
Rich in fibre, polyphenols, healthy fats, fermented foods and lean protein.



Support beneficial bacteria
Include prebiotic foods and probiotic-rich foods or supplements.



Manage stress
Mindfulness, breathwork, movement and time in nature help regulate the gut-brain axis.



Prioritise sleep
Quality sleep restores the gut and supports emotional resilience.



Stay hydrated
Adequate water supports digestion, detoxification and overall brain function.



REMEMBER:
Every choice you make has the power to support your gut-brain connection.



A HEALTHY GUT HELPS YOU THINK, FEEL AND THRIVE.
Small daily choices can have a big impact on your gut – and your mind.

GUT HEALTH = BRAIN HEALTH



Better mood & emotional balance



Improved focus & cognitive function



Stronger stress resilience



Better sleep & mental recovery



Long-term brain health & disease prevention