

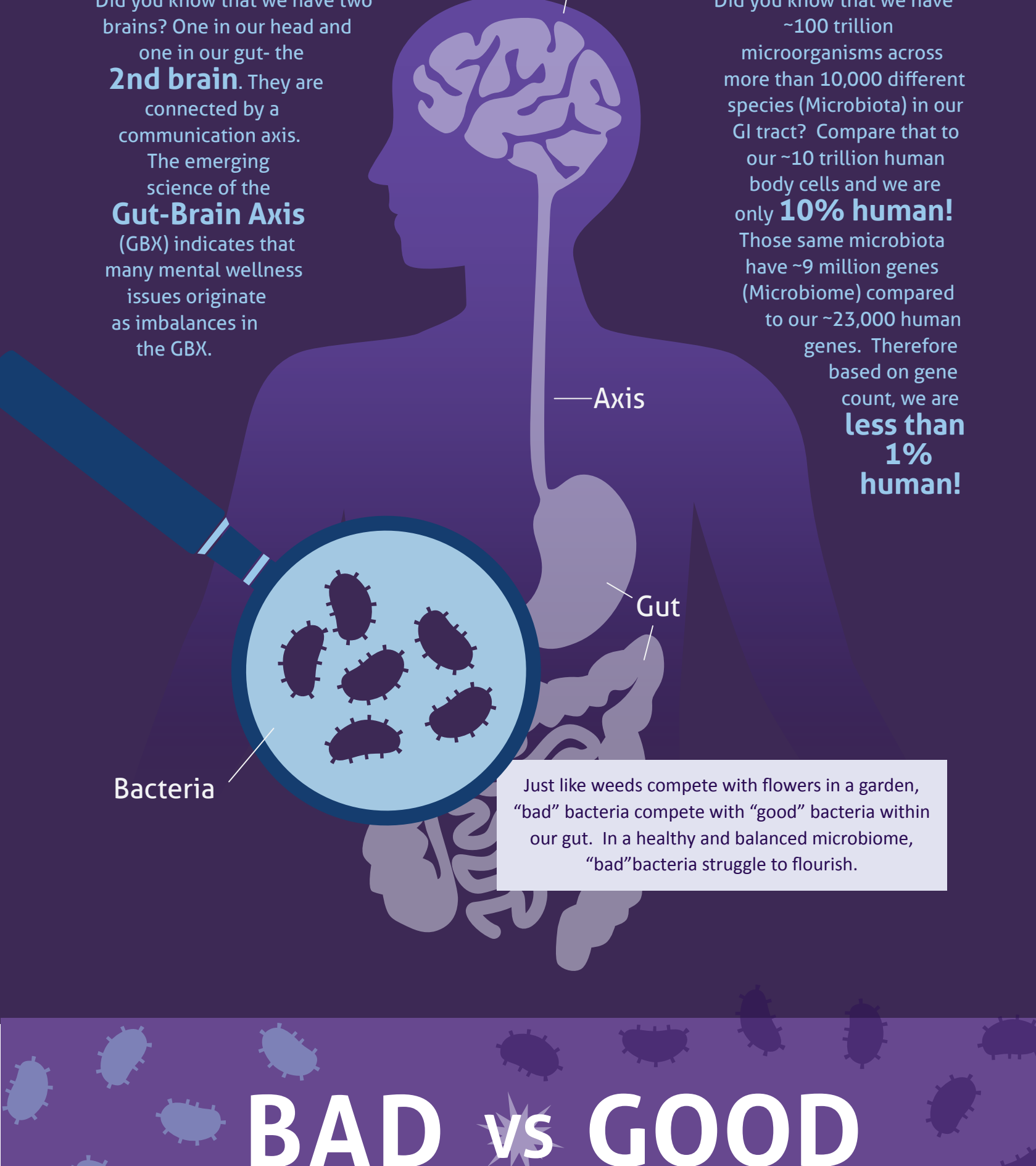
HEALTHY GUT HEALTHY MIND

TWO Brains?

Did you know that we have two brains? One in our head and one in our gut- the **2nd brain**. They are connected by a communication axis. The emerging science of the **Gut-Brain Axis** (GBX) indicates that many mental wellness issues originate as imbalances in the GBX.

100% Human?

Did you know that we have ~100 trillion microorganisms across more than 10,000 different species (Microbiota) in our GI tract? Compare that to our ~10 trillion human body cells and we are only **10% human!** Those same microbiota have ~9 million genes (Microbiome) compared to our ~23,000 human genes. Therefore based on gene count, we are **less than 1% human!**



Just like weeds compete with flowers in a garden, "bad" bacteria compete with "good" bacteria within our gut. In a healthy and balanced microbiome, "bad" bacteria struggle to flourish.

BAD vs GOOD BACTERIA

BAD Bacteria

Campylobacter Jejuni & Salmonella Enterica
– Results in food poisoning and inflammation

Enterococcus Faecium
– Causes post-surgical infections and inflammatory bowel conditions

Clostridium Difficile
– Creates effects ranging from diarrhea to life-threatening inflammation

GOOD Bacteria*

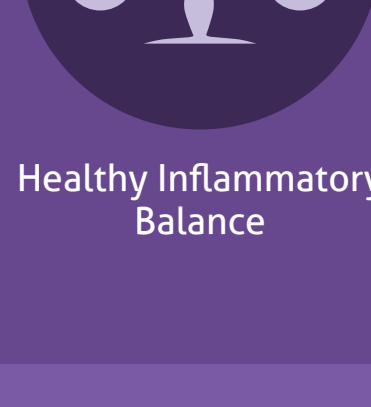
Lactobacillus Helveticus R0052*
– Improves mood by decreasing neuro-inflammation & increasing serotonin metabolism

Bifidobacterium Longum R0175*
– Enhances calmness by decreasing anxiety indices & enhances cognitive function

Lactobacillus Rhamnosus R0011*
– Reduces stress by lowering cortisol exposure & improving GABA neurotransmission

*featured in MentaBiotics™

A Balanced Microbiome Supports:



Healthy Inflammatory Balance



Robust Immune Protection

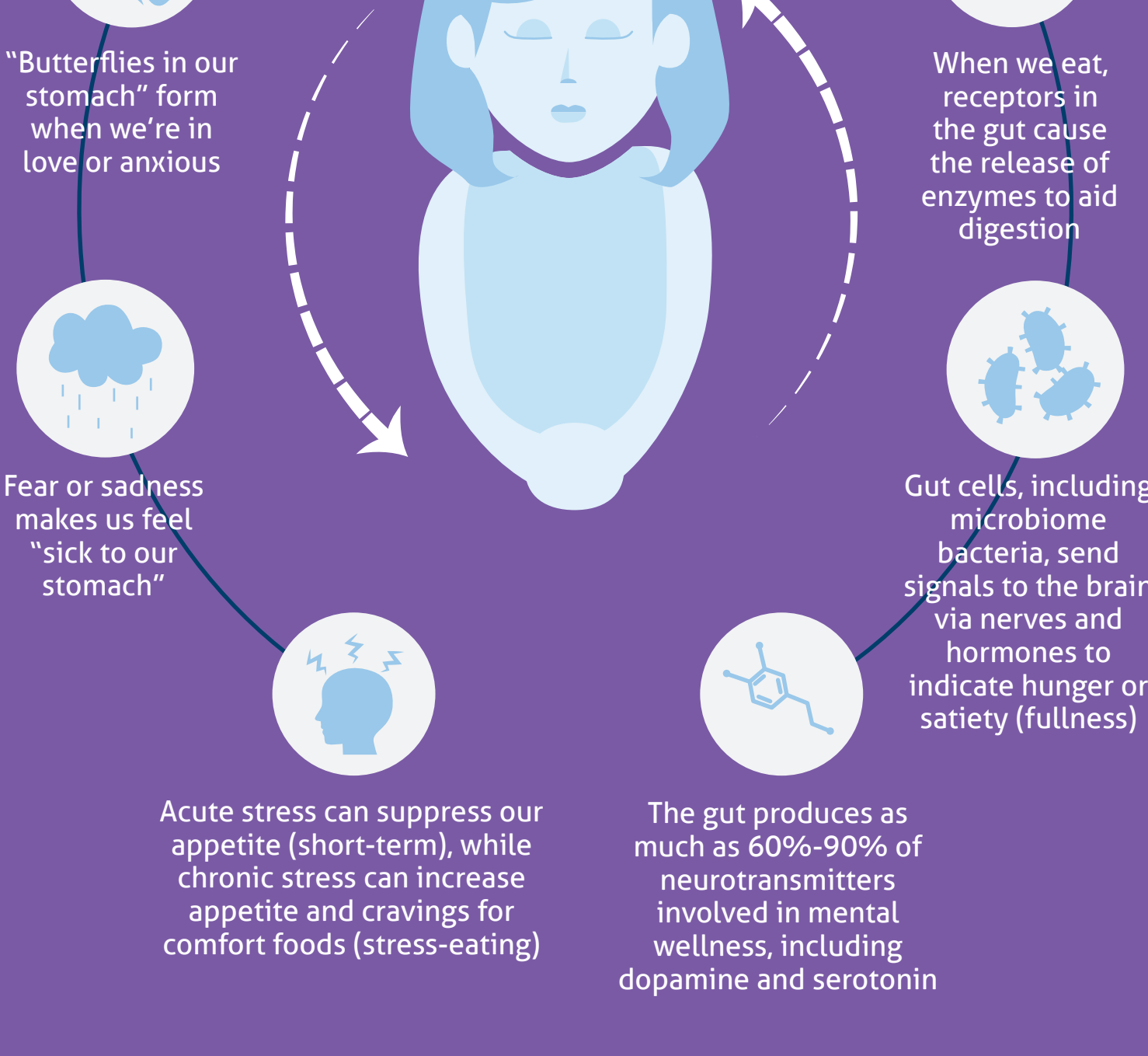


Optimal Digestive Process

IT GOES BOTH WAYS...

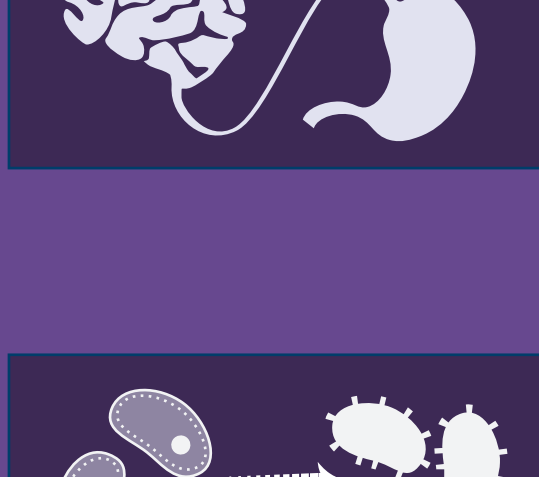
The Brain Can Affect the Gut

The Gut Can Affect the Brain

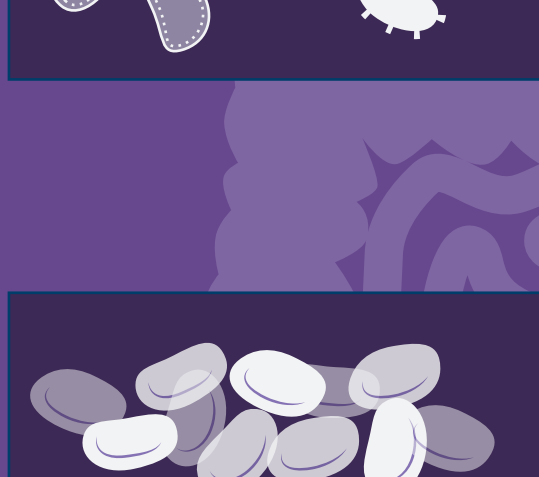


THE GUT-BRAIN AXIS

The "Axis" between the Gut and the Brain coordinates communications



Nerves – such as the vagus nerve, provide a "hard-wired" connection between the gut and the brain



Cells – including the immune system, interact with the gut microbiota



Biochemicals – including hormones, neurotransmitters, and cytokines transmit signals through the blood stream

Balance the MIND with LIFESTYLE Choices

Take time for a MIND BREAK



Mindfulness
Practices such as meditation, yoga, grateful breathing reduce stress and anxiety

Sleep
Inadequate or poor quality sleep increases stress hormone exposure (cortisol) and interferes with mood and mental function



Take time to **SLEEP**

Take time to **MOVE**

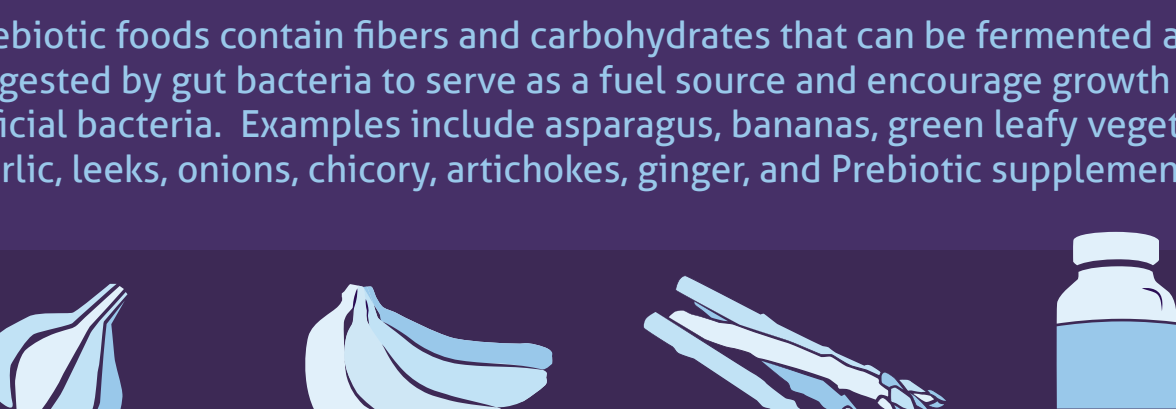


Physical Activity
Regular exercise is shown to reduce stress, anxiety, and depression as effectively as antidepressant drugs

Balance the GUT with NUTRITION

PROBIOTICS

Probiotic foods contain live "good bacteria" which support mental wellness and aid digestion. Examples include fermented foods such as yogurt, kefir, kombucha, sauerkraut, miso, tempeh, and Probiotic supplements.



PREBIOTICS

Prebiotic foods contain fibers and carbohydrates that can be fermented and digested by gut bacteria to serve as a fuel source and encourage growth of beneficial bacteria. Examples include asparagus, bananas, green leafy vegetables, garlic, leeks, onions, chicory, artichokes, ginger, and Prebiotic supplements.



PHYTOBIOTICS

Phytobiotic foods are rich in flavonoids which protect good bacteria and establish a hospitable environment for the growth of good and displacement of bad bacteria. Examples include apples, grapes, dark chocolate, and berries.

