

“Relationship Between Gut Microbiota, Diet, and Personality”

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Gut Microbiota (Phylum / Genus)	Foods That Increase Them	Main Functions	Psychological Effects	Optimism	Sociability	Anxiety	Anger
Bacillota							
<i>Clostridium</i>		Butyrate production, anti-inflammatory	Mood stability	⊙	△	×	×
<i>Faecalibacterium</i>		Strong butyrate production, anti-inflammatory	Stability, sense of safety	⊙	○	×	×
<i>Eubacterium</i>		Butyrate production	Calmness	⊙	△	×	×
<i>Blautia</i>		Gut stabilization	Calmness	△	△	△	△
<i>Ruminococcus</i>		Fiber degradation	Gut barrier stability	△	△	△	△
<i>Lactobacillus</i>		Lactic acid production, GABA promotion	Stress resilience, sense of safety	⊙	⊙	×	×
<i>Enterococcus</i>		Lactic acid production	Mild stability	△	△	△	△
<i>Lactococcus</i>		Lactic acid production	Mild stability	△	△	△	△
<i>Streptococcus</i>		Lactic acid production	Mild stability	△	△	△	△
Actinobacteriota							
<i>Bifidobacterium</i>		Serotonin precursor supply, anti-inflammatory	Mood stability, optimism, sense of safety	⊙	△	×	×
<i>Corynebacterium</i>		Minor lactic/short-chain fatty acid production	Weak direct influence	(×)	(×)	△~○	△~○
Bacteroidota							
<i>Bacteroides</i>		Dopamine metabolism	Sociability, motivation	△	⊙	△	△~○
<i>Prevotella</i>		Fiber degradation, butyrate production	Mood stability	⊙	△	×	×
Fusobacteriota							
<i>Fusobacterium</i>		Pro-inflammatory	Anxiety, anger	×	×	⊙	⊙
<i>Leptotrichia</i>		Pro-inflammatory	Anxiety, anger	×	×	⊙	⊙
Proteobacteria							
<i>Enterobacter (E. coli group)</i>		Inflammation, amygdala sensitization	Anger, anxiety, impulsivity	×	×	⊙	⊙

⊙ High, ○ Moderately High, △ Normal, × Low

Resistant starch	Oligosaccharides	Animal protein	Foods to reduce (high-fat, high-sugar, processed foods)
Dietary fiber	Fermented foods / Dairy		