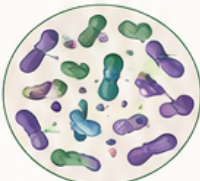
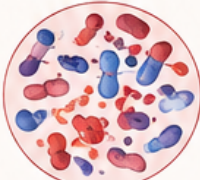
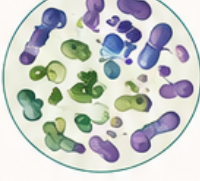


How Different Diets Affect the Microbiome

Diet shapes the diversity, composition and function of the gut microbiome, influencing overall health and disease risk.

PLANT-BASED (VEGETARIAN)	WESTERN DIET	KETOGENIC DIET	MEDITERRANEAN DIET	HIGH-FIBRE WHOLE FOOD DIET
				
DIET CHARACTERISTICS - High fibre - Rich in fruits, vegetables, whole grains, legumes, nuts - Low in saturated fat	DIET CHARACTERISTICS - High in saturated fat - High in sugar & refined carbs - Low in fibre	DIET CHARACTERISTICS - Very low carbohydrate - High in fat - Moderate protein	DIET CHARACTERISTICS - High in fibre & plant foods - Healthy fats (olive oil, nuts, fish) - Moderate in protein	DIET CHARACTERISTICS - Very high fibre - Whole, minimally processed foods - Diverse plant variety
MICROBIOME IMPACT High diversity and abundance of beneficial bacteria. More SCFA (short-chain fatty acid) producing bacteria.	MICROBIOME IMPACT Lower diversity. More inflammatory and opportunistic bacteria. Less SCFA production.	MICROBIOME IMPACT Reduced diversity (may decrease beneficial fibre-fermenting bacteria). Increase in bacteria that utilise fat and protein.	MICROBIOME IMPACT High diversity and abundance of beneficial bacteria. Increased SCFA production and anti-inflammatory potential.	MICROBIOME IMPACT Very high diversity. Enriched in fibre-fermenting bacteria and SCFA production.
 ↑ Prevotella ↑ Faecalibacterium ↑ Roseburia ↑ Bifidobacterium ↑ Akkermansia	 ↑ Alistipes ↑ Bilophila ↑ Bacteroides (certain species) ↑ Enterobacteriaceae	 ↑ Akkermansia ↑ Parabacteroides ↑ Bacteroides (certain species) ↓ Prevotella ↓ Roseburia	 ↑ Faecalibacterium ↑ Roseburia ↑ Bifidobacterium ↑ Akkermansia ↑ Lactobacillus	 ↑ Prevotella ↑ Faecalibacterium ↑ Roseburia ↑ Bifidobacterium ↑ Akkermansia
POTENTIAL HEALTH BENEFITS Improved gut barrier, inflammation reduction, lower risk of chronic disease.	POTENTIAL HEALTH RISKS Increased inflammation, impaired gut barrier, higher risk of obesity, metabolic and chronic disease.	POTENTIAL OUTCOMES May support weight loss and improved metabolic markers; long-term effects still being studied.	POTENTIAL HEALTH BENEFITS Supports heart health, reduces inflammation, improves metabolic and cognitive health.	POTENTIAL HEALTH BENEFITS Strong gut barrier, anti-inflammatory, supports immune function and long-term health.



Individual responses vary based on genetics, lifestyle, environment, medications and overall dietary pattern.



Increase



Decrease



Variable/
Individual

KEY