

Health & Nutrition Sciences

Probiotics:

Can Help Support Gut Health

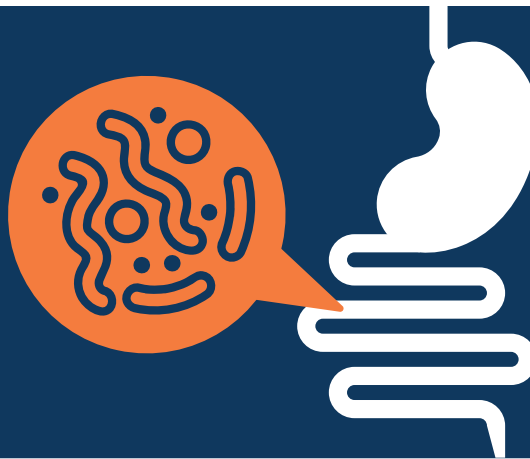


What are Probiotics?

According to the World Health Organization (WHO) definition, probiotics are living micro-organisms that, when administered in adequate amounts, help provide a health benefit.¹ Most probiotics are a bacteria (e.g., *Lactobacillus* or *Bifidobacterium*) or yeast (e.g., *Saccharomyces boulardii*).

Probiotics Can

- Help break down non-digestible components of your diet to produce beneficial substances, such as vitamins or short-chain fatty acids
- Aid in nutrient absorption
- Out-compete the potentially harmful bacteria²



To be called a “probiotic,” the bacteria strain must have benefits supported by scientific research.



Consistency is Key!

When probiotics are consumed, regular consumption is key to ensure they can work together with your unique microbiota since probiotics don't stay in your intestines for an extended period of time.

Classification:

Genus, Species, Strain

Probiotic names are designated by genus, species, and strain. Different strains within the same species can provide different health benefits.

Measurement:

Colony Forming Units (CFUs)

CFUs represent the number of viable bacteria. Probiotic strains have an effective dose for specific health outcomes which are determined by clinical research.

GENUS

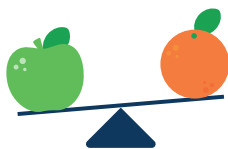
SPECIES

STRAIN

Lactobacillus

Acidophilus

MN5



Comparing Different Strains Is Like Comparing Apples and Oranges

Each strain is different and more CFUs doesn't always mean the probiotic will be more effective. Strains should not be compared by the number of CFUs alone.

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All Probiotics Are Live and Active Cultures, **but** Not All Cultures are Probiotics.

	Live and Active Cultures	Probiotics
Living microorganisms	✓	✓
Found in fermented foods and beverages	✓	?
Clinically shown to provide a health benefit		✓

Fermented Foods and Probiotics

What is Fermentation?

- A metabolic process in which micro-organisms convert sugar to organic acids and alcohol
- ‘Live and active cultures’ are required for bacterial fermentation
- Some fermented foods are further processed (ex. baked, pasteurized) which kills the active cultures



Not all fermented foods contain probiotics – check the label to make sure probiotics are listed!

Do Fermented Foods Contain Probiotics?

- Kimchi
- Sauerkraut
- Kefir
- Kombucha

Maybe

Scientific evidence that **shows** the specific strain to confer a health benefit is required **to be considered a probiotic.**



Key Takeaway

Foods and beverages with probiotics should be delivered at the **right amount** of the **right strain** to provide a health benefit.

Since ‘probiotics’ are not defined by the Food and Drug Administration, PepsiCo follows the internationally endorsed scientific definition by the WHO. We require that our products containing probiotics meet this definition.

PepsiCo and Probiotics

PepsiCo expertly formulates and tests their products regularly to achieve the effective probiotic dose **through the end of shelf-life.**

References:

1. Food and Agricultural Organization of the United Nations and World Health Organization. Health & nutritional properties of probiotics in food including powder milk with live lactic acid bacteria. WHO, (2001).
2. International Scientific Association for Probiotics and Prebiotics; <https://isappscience.org/for-consumers/learn/probiotics/>