

# probiotics

## your questions answered

**A**t Go Vita, probiotics are some of our most popular products – but can also be some of the most confusing. In this article naturopath Paul Keogh answers some of your most frequently asked questions.

### What are probiotics?

Your intestines are home to trillions of bacteria, which are collectively referred to as the microflora or microbiota and comprise over 500 individual species. Unlike the bacteria that cause infections, many of those that are natural residents of your digestive tract have positive health benefits, and consequently are known as 'probiotics'.

Probiotic supplements contain 'live' or 'viable' bacteria from bacterial strains that are normally found residing in or passing through the human gastrointestinal tract. In order to be considered viable, the bacteria must be capable of reproducing and/or colonising the intestines.

### What is a probiotic strain?

A probiotic strain is a subtype of a bacterial species, usually referred to by a code at the end of the species name. For example, *Lactobacillus acidophilus* is a species of bacteria, and *Lactobacillus acidophilus* La-14 is a specific therapeutic strain of that species.

### What do probiotic bacteria do?

The intestinal microflora performs a number of important roles in human health. For example, they are involved in the decomposition of food, absorption of nutrients, gut motility, and the production of vitamin K, several of the B-group vitamins (including folate), and other compounds such as short chain fatty acids.

They are also essential for the development of the immune system.

### What conditions can probiotics help?

Taking clinically tested, probiotic strains helps maintain healthy digestive function, so it's not surprising that they may be beneficial for a wide range of digestive symptoms, including flatulence, bloating and abdominal discomfort.

Some (eg. *Lactobacillus acidophilus* La-14 and *Bifidobacterium animalis* subsp. *lactis* HN019) also support healthy bowel movements by improving the characteristics of the faeces and the speed at which bowel movements move through the intestines, and help to restore the microflora to health after antibiotic use.

However, you may be surprised to know that specific probiotic strains can also have actions far beyond the digestive system. Some support healthy immune function (eg. *Bifidobacterium rhamnosus* HN001), some may reduce the incidence of upper respiratory tract infections (eg. *Bifidobacterium animalis* subsp. *lactis* BI-04),

and some may also assist in the management of allergic conditions such as eczema (eg. *Bifidobacterium rhamnosus* HN001).

### How do probiotics support immunity?

Certain strains of probiotic seem to change the way the immune system reacts to invading microorganisms, competing with harmful bacteria to inhibit their ability to colonise the gut and helping to improve the integrity of the intestinal barrier that prevents infectious organisms from moving from the bowel into the rest of the body.

### Are prebiotics and probiotics the same thing?

Prebiotics and probiotics are different.

Probiotics are viable bacteria that are consumed for their direct health benefits.

The term 'prebiotics' is used to describe certain complex sugars found in our diets that have benefits for the health and activity of the microflora. Examples include fructooligosaccharides (FOS) and inulin.

### What causes the normal microflora to become disordered?

Among others, factors that can interfere with the balance and activity of the gut microflora may include antibiotics, stress (both physical and emotional) and diets containing large quantities of animal protein, sugars, or refined carbohydrates. Taking probiotics can support the overall ecology and balance of the intestinal microflora and help to restore these issues.

Unlike the bacteria that cause infections, many of those that are natural residents of your digestive tract have positive health benefits, and consequently are known as probiotics!

### What does CFU mean?

Colony-forming units (CFU) are the units of measure used to express the number of viable (live) bacteria present in a probiotic supplement (in other words, the number that are capable of reproducing or colonising the intestines).

### Can I eat yoghurt instead of taking a probiotic supplement?

It's not ideal, because while some yoghurt is fermented using strains of bacteria with known health benefits, it's often unclear how many live bacteria (CFU) are present in each tub.

On the other hand, probiotic supplements must state the CFU for each bacteria and list the health benefits attributed to each strain on the label.

### If I am on antibiotics, can I still take a probiotic? Will the antibiotics kill the probiotics?

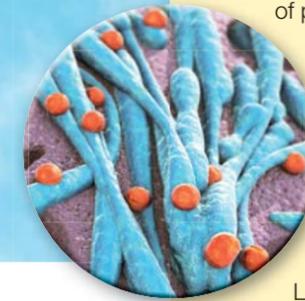
Most clinically or scientifically evidenced probiotic strains have a high level of antibiotic resistance and can be taken during antibiotic treatment to help maintain healthy gut ecology and function. ☑

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## Four questions to ask when choosing a probiotic supplement:

### 1 Does the label list the strain of the probiotics as well as the species?

In the same way that exposure to one strain of the flu virus might make you sick while another doesn't, different strains of probiotic bacteria have different effects on your body – and only some of them have been scientifically proven to be effective. Among others, strains of bacteria that have been successfully subjected to clinical trials include *Bifidobacterium animalis* subsp. *lactis* HN019 and *Lactobacillus rhamnosus* HN001. Other strains with extensive scientific research behind them include *Bifidobacterium animalis* subsp. *lactis* BI-04, *Lactobacillus rhamnosus* Lr-32, *Lactobacillus acidophilus* La-14 and *Lactobacillus plantarum* Lp-115.



### 2 Does the label explain how many colony-forming units (CFU) of each individual strain are present?

The therapeutic doses of probiotics can vary widely, sometimes depending on the probiotic strain involved and the health condition it's being taken for. So it's important to be sure the supplement you purchase contains not only clinically tested and scientifically researched strains of probiotics, but also that those strains are present at not less than 1 billion CFU per strain unless clinical evidence supports a lower dose.



### 3 Has the product been packed, transported and stored in a way that ensures optimal potency throughout its shelf life?

Probiotic bacteria are living organisms that are sensitive to temperature and other aspects of their environment. Refrigeration optimises their survival during storage and use.



### 4 How resilient are the bacterial strains?

Probiotics can be impacted by conditions inside your body too. Most probiotic strains have been selected to survive well in the acidic environment of your stomach, and consequently are able to effectively colonise the gut where their benefits are most needed. When selecting a supplement, look for probiotic strains identified on the label as these will have been specially chosen for their proven resistance to stomach acid, digestive enzymes, bile salts, heat and some of the most commonly prescribed types of antibiotics. They remain highly viable within the digestive tract and have a proven capacity to colonise or proliferate in the small and large intestines where they help inhibit disease-causing microorganisms and contribute to gastrointestinal health.

