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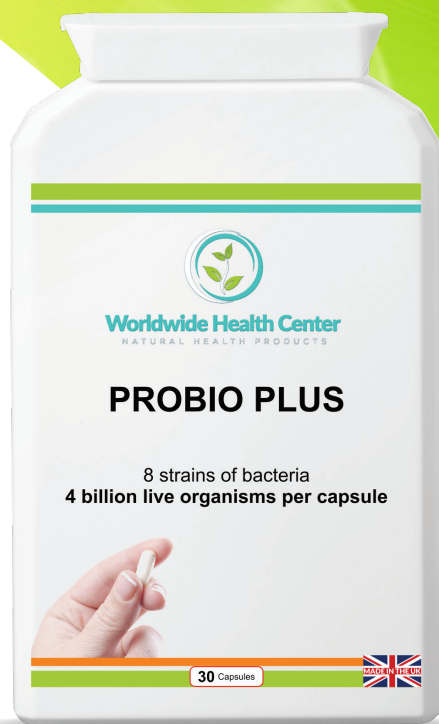
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Last updated: 06.09.16

# ProBio Plus

## HIGH STRENGTH

8 strain, acid-resistant probiotic supplement for full-spectrum support



**4 BILLION  
GOOD  
BACTERIA  
PER CAPSULE**

#### Product information

Each 230mg proprietary blend capsule provides:

Lactobacillus casei PXN37  $1.5 \times 10^9$   
Lactobacillus rhamnosus PXN54  $1.4 \times 10^9$   
Bifidobacterium breve PXN25  $1.9 \times 10^8$   
Bifidobacterium longum PXN30  $7.9 \times 10^7$   
Lactobacillus acidophilus PXN35  $3.5 \times 10^8$   
Streptococcus thermophilus PXN66  $3.8 \times 10^8$   
Bifidobacterium infantis PXN27  $5.3 \times 10^7$   
Lactobacillus bulgaricus PXN39  $3.8 \times 10^7$

**Total Viable Count  $4.0 \times 10^9$**

**4 billion viable organisms per capsule**

**Ingredients:** Capsule: Hydroxypropyl Methylcellulose (HPMC) (Vegetarian); Anti-caking Agent: Maltodextrin (Non-GMO); Anti-caking Agent: Magnesium Stearate (vegetable source); Live bacteria mix: Lactobacillus Casei, Lactobacillus Rhamnosus, Bifidobacterium Breve, Streptococcus Thermophilus, Lactobacillus Acidophilus, Bifidobacterium Longum, Bifidobacterium Infantis, Lactobacillus Bulgaricus (**milk, soya**).

**ALLERGY ADVICE:** for allergens, see ingredients in **bold**. Contains traces of soya and milk (these are used in the bacterium growth medium) at levels which should not affect lactose intolerance sufferers.

**Suggested usage:** Take 1 capsule, 1 to 3 times per day before meals or as advised.

Guaranteed strength for 12 months from the date of manufacture. This probiotic has been specifically manufactured to be heat-resistant and, as such, does not require refrigeration.

**8 pots**  
of probiotic yoghurt

**OR...**



**1 capsule!**



A great source of friendly bacteria without  
the added sugar, dairy, fats and calories of yoghurt!

# About this multi-strain probiotic supplement...

ProBio Plus is a high-strength probiotic that contains **4 billion friendly bacteria per capsule**. It has been specially formulated for nutritionists, colonic hydrotherapists and other natural health practitioners who treat digestive and intestinal disorders, such as dysbiosis, Candida and bloating etc.

With its broad spectrum, 8 probiotic strains (encapsulated for acid resistance) at high concentration, this supplement will tackle most digestive and intestinal system disorders with ease - more than just another probiotic!

Also available in 20 billion practitioner strength - see our ProBiotic MAX formula.

## Beneficial for...

- ◎ Bad breath
- ◎ Bloating stomach
- ◎ Flatulence
- ◎ Body odour
- ◎ Candida albicans overgrowth
- ◎ Coated tongue
- ◎ Coeliac disease
- ◎ Crohn's disease
- ◎ Ulcerated colitis
- ◎ Diarrhoea
- ◎ Constipation
- ◎ Digestive problems
- ◎ Dysbiosis (unbalanced bowel flora)
- ◎ Gall stones
- ◎ Indigestion
- ◎ Irritable Bowel Syndrome
- ◎ Leaky gut syndrome
- ◎ Reflux

## ProBio Plus at work...

This diagram shows the main location of action for each bacterial strain, which together offer full spectrum support of the large and small intestines.

### PROBIOTIC STRAINS

**Lactobacillus acidophilus**

**Lactobacillus bulgaricus**

**Lactobacillus casei**

**Lactobacillus rhamnosus**

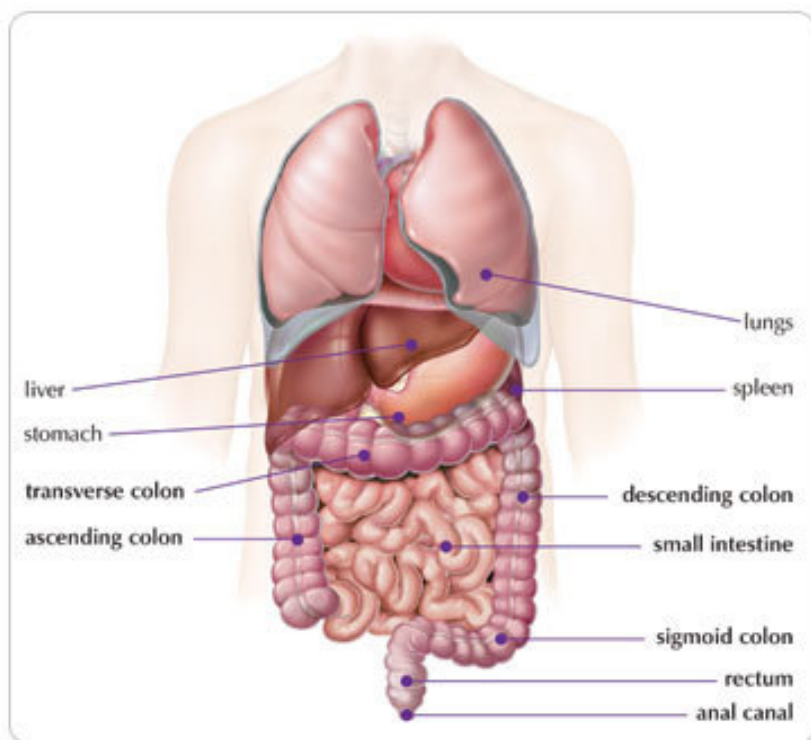
**Streptococcus thermophilus**

**Bifidobacterium breve**

**Bifidobacterium infantis**

**Bifidobacterium longum**

### COLONISATION LOCATIONS OF MICROFLORA



**Small intestine**

**Large intestine**



# Viability of probiotic micro-organisms in the gastrointestinal tract

## Acid stability of Specialist Supplements Ltd probiotic microorganisms in vitro unbuffered growth at pH 2.0 for 2 hours contact time

### Summary:

Individual pure culture samples of probiotic microorganisms contained in these health formulations were tested for stability under acidic conditions to mimic the extreme fasting pH of the human stomach.

### Introduction:

In order to produce beneficial effects within the gastrointestinal tract (GIT), probiotic microorganisms must have the capacity to survive and metabolise in the gut. They must therefore be resistant to GIT levels of acid.

Probiotic formulations also need to contain large numbers of viable organisms (highly concentrated) which, on ingestion, survive the rigorous onslaught of the mammalian upper gut in order to deliver their bacterial content to the small intestine. One of the primary barriers to the passage of bacteria is the acidity of the stomach. The pH of the stomach varies throughout the day under the influence of the buffering action which food or liquid may have on the stomach. However, the fasting pH of the human gut is around pH 3.0.

The amount of time for food to pass through the stomach also varies greatly from a few minutes to an hour or more. The food itself will have some neutralising effect on the pH of the stomach and hence of pH of 3.0 is probably the lowest to which the bacteria will be subjected. In addition the food may also have a physically protective role to play.

The conditions of our laboratory tests will therefore probably be the most vigorous conditions to which the bacteria will be subjected i.e., a pH 2.0 for 2 hours and the results obtained need to be analysed accordingly. It should also be noted that the laboratory conditions (in vitro tests) designed for these tests, whilst attempting to mimic the conditions within the stomach are, in fact, only a simplistic view of what is, in fact, a very complex situation.

Microbial strain	pH	
	Control pH 6.8 (CFU/g)	Test pH 2.0 (CFU/g)
Bifidobacterium breve PXN 25	$7.30 \times 10^9$	$3.30 \times 10^9$
Bifidobacterium infantis (child specific) PXN 27	$5.50 \times 10^9$	$6.60 \times 10^9$
Bifidobacterium longum PXN 30	$4.50 \times 10^{10}$	$2.30 \times 10^{10}$
Lactobacillus acidophilus PXN 35	$1.30 \times 10^{11}$	$2.00 \times 10^{11}$
Lactobacillus casei PXN 37	$9.80 \times 10^9$	$2.50 \times 10^{10}$
Lactobacillus bulgaricus PXN 39	$1.80 \times 10^{10}$	$3.30 \times 10^{10}$
Lactobacillus rhamnosus PXN 54	$9.10 \times 10^{10}$	$1.30 \times 10^{11}$
Streptococcus thermophilus PXN 66	$2.30 \times 10^9$	$1.60 \times 10^{10}$

When held at a pH of 2.0 for a 2 hour period there is no significant loss in viability / concentration of any of the bacterial strains. The contact time is extreme - a two hour contact time period without any buffering effect of e.g. food or water, before plating out.

### Conclusions:

Total viable bacterial counts do not reduce in viability/concentration after contact with acid of pH 2.0 for 2 hours. This means that a high concentration of microorganisms survive, which could reach the small intestine and establish themselves as part of the normal microflora. Laboratory tests are not necessarily a reflection of in vivo conditions although the experiments were designed to mimic the situation as closely as possible.



**Stop that  
bloated  
feeling!**



# Frequently Asked Questions (FAQs)

## Q: When should probiotics be used?

Probiotic supplements are useful when the balance of good and bad bacteria in the bowel has been disrupted. Such an imbalance almost always occurs in the following situations:

- after use of antibiotics
- following illness
- during and after periods of heightened stress
- as we get older (and our digestive enzymes decrease in number)
- following travel to a foreign country
- for people who experience regular tummy upsets
- for people who regularly have an urgent need to use the toilet
- for people who have poor digestion.

An imbalance of bowel flora can lead to a number of unpleasant symptoms, such as a bloated stomach, abdominal pains, irregular bowel movements and a feeling of heaviness after eating. Probiotics are recommended for people who wish to ensure or maintain a favourable amount of the friendly bacteria in their digestive tract.

## Q: Does ProBio Plus need to be refrigerated?

No. This is not necessary because the probiotic bacteria used in this product are specially coated during the manufacturing process to ensure that they remain stable at room temperature. This is important, because many probiotic products that are kept in the fridge are damaged by the continual opening and closing of the fridge door, which lets in moisture and damages the fragile bacteria.

## Q: Why is this multi-strain formula more effective than a single strain product?

A single species probiotic is simply unlikely to deliver as many benefits as a multi-strain probiotic, which colonises and acts upon multiple locations within the body. There are literally hundreds of different species of good bacteria in our digestive system, so a multi-strain formula will work in more areas and also provide better protection against a wider scope of harmful micro-organisms.

## Q: Can ProBio Plus survive the high acidity of the stomach?

Yes. All of the bacterial strains in this product are micro-encapsulated, which means that they are protected and able to reach their target location in the body in a viable state.

## Q: Can ProBio Plus capsules be pulled apart and the contents taken in a drink or on food?

Yes, if the food or drink in question is consumed within 12 hours, the probiotics' effectiveness will not be affected.

## Suggested product combinations:

ProBio Plus can be combined, or used interchangeably, with the other products in our Cleanse & Detox, Digestive System and Probiotics ranges, according to the specific health goals of the user. For example: -

### Quick colon cleanse program:

- 1x ProBio Plus
- 2x Digestizyme
- 1x Paraform Plus One
- 1x Colform



### Total gut therapy program:

- 2x ProBio Plus
- 2x Digestizyme
- 1x Paraform Plus Two
- 1x Colform

