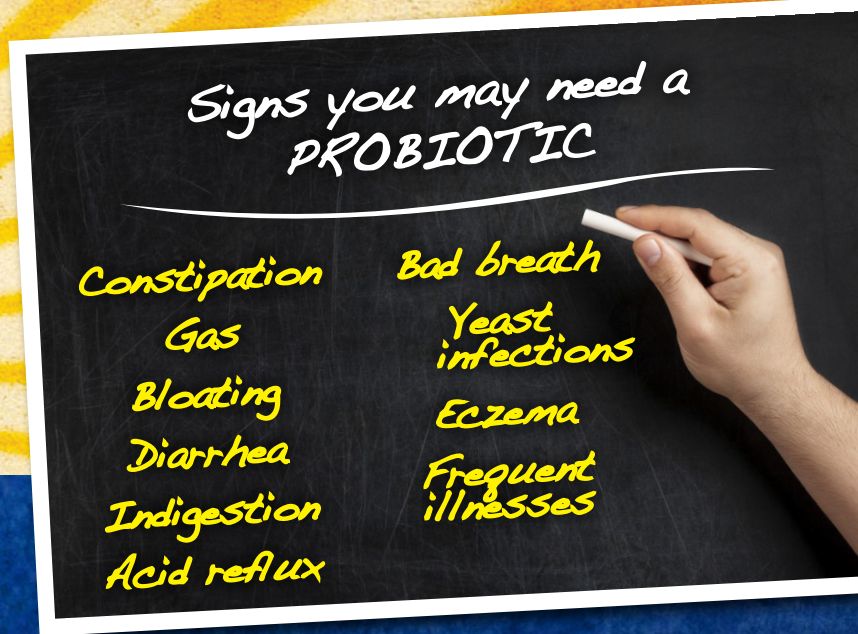




Gut health is a major component of our immune system that is often overlooked. Gastrointestinal issues are among the most common health complaints. This could be anything from constipation, diarrhea, gas, bloating, acid reflux, stomach pain, belching, nausea and more.



Hippocrates said “let food be thy medicine and medicine be thy food”. Unfortunately, many people have lost sight of this and constantly fill their guts with overly processed, high sugar, pesticide ridden, and bacteria promoting foods. Many people think that if they take an antacid for their gastro-esophageal reflux issues or a laxative for their constipation that this is treating the issue. This is most often a Band-Aid solution. The underlying cause generally remains. A treatment aimed at getting to the root of the cause would begin by making changes to promote a healthy gut. A naturopathic approach would certainly start with diet. Another immediate recommendation would be a good probiotic.

Gut flora does not just affect the gut! It is key to our immune system, weight management, skin health and ultimately our ability to absorb nutrients from our foods. Naka Pro PB7 and Pro PB11 capsules are both multi-strain probiotics that also contain L-glutamine. Naka Pro PB7 powder contains all of the probiotic strains found in Pro PB7 capsules, L-Glutamine as well as inulin.

When choosing a probiotic it is important to choose one that has multiple strains as our gut naturally contains hundreds of strains with affinities for different parts of the intestine and different therapeutic actions. It is also important to make sure you are getting a strong therapeutic dose. A general daily dose of 15-30 billion organisms is sufficient. If you are dealing with concerns like Ulcerative Colitis, Crohn's, chronic yeast infections, recovery from antibiotics as well as some other issues, the dose may need to be adjusted upward.

When probiotics are suggested it is quite common for an individual to say they do not require probiotics because they

eat yogurt or other fermented foods. These foods are a good addition to one's diet, assuming they are not full of sugar like most yogurts on the market. Another problem is that these foods do not generally provide an adequate dose of probiotics to maintain gut flora. If you consider that the intestines are the part of the body with the largest surface area exposed to environmental pathogens, toxins, bacteria and viruses, it is no surprise that something stronger than the number of organisms found in yogurt would be required. The human body contains 100 trillion cells and about 10 times this number of microorganisms can be found in the intestines. The micro flora of the intestine is sometimes referred to as the “forgotten organ,” as it plays so many roles in maintaining health. As mentioned, some of these roles are: development of the immune system, absorption and production of vitamins and preventing the growth of harmful bacteria. Probiotics are like the body's own antibiotic system. Considering the importance of micro flora, it is unfortunate that this is an area that is often neglected and abused through poor lifestyle choices, environmental exposures and medications.

When choosing a probiotic for this vital “organ” it is important to choose a quality multi-strain product like Naka Pro PB7 or Pro PB11. People often have misconceptions about what a probiotic strain is. Most people think *Lactobacillus acidophilus* is a strain. In fact, *Lactobacillus* is the genus, *acidophilus* is the species and La-14 is an example of a strain. Not all probiotic strains of a particular genus will be efficacious. In order to be considered viable the probiotic must withstand passage through the gastrointestinal tract and be able to colonize the intestine. This means the strains must be able to withstand both acid and bile as well as adhere to the intestinal walls.

## MULTI-STRAIN

Studies have shown that there could be up to one thousand different types of bacteria found in the human gut. Less than fifty types of bacteria make up ninety percent of what is found in the human intestine. Bifidobacterium and Lactobacillus bacteria are among the largest groups of that ninety percent. When choosing a probiotic it is important to choose one with multiple strains as they serve different functions.

Bifidobacterium and Lactobacillus bacteria are also found outside of the gut in the vagina, urogenital tract and mouth. These strains, as well as others, are used to restore good bacteria after it has been killed or depleted by diarrhea, radiation, chemotherapy, antibiotics and environmental exposures. These probiotics are also efficacious in the treatment of traveller's diarrhea and ulcerative colitis. As we discussed previously, probiotics are important for immunity. Bifidobacterium and Lactobacillus are used in the prevention and treatment of colds and flus as well as skin conditions, yeast infections, lactose intolerance and chronic disease. In Naka Pro PB7 and Pro PB11 you will find a number of Bifidobacterium strains, Lactobacillus strains, as well as others. All of the strains are acid and bile resistant and have demonstrated excellent adhesion to human epithelial cells. The strains used are also resistant to many antibiotics and have been shown to inhibit the following common bacterial pathogens: Salmonella typhimurium, Staphylococcus aureus, Escherichia coli (E. Coli), and Listeria monocytogenes. Aside from the above commonalities a few specific actions of each of these strains are the following:

***Bifidobacterium breve (Bb-03)***-Bifidobacteria genus of probiotics were first discovered in 1899. They have the greatest presence in the intestine of breast fed infants and it has been suggested that Bifidobacterium strains are responsible for increasing breast fed children's resistance to various diseases. These strains are not only responsible for health in infants, but greater quantities are associated with increased health in adults at well. As we age, these probiotics become less prevalent in the gut and supplementation can help to promote the type of resistance experienced during infancy. Bifidobacterium breve (Bb-03) is considered a champion among probiotic strains for its ability to break down certain foods including plant fibres that are normally not digestible.

***Bifidobacterium lactis HN019***-this probiotic is particularly helpful for those who suffer from constipation or long intestinal transit times. One problem with longer transit times is an increase in compounds that can lead to serious colorectal conditions. This probiotic strain has been clinically shown to improve whole gut transit time (WGTT). WGTT effects enterohepatic bile acid and steroid hormone circulation as well as colonic pH and short chain fatty acid concentrations. This suggests a possible association with an increased risk of gallstones, breast and bowel disease in those with slower WGTT. Therefore, decreasing the transit time can have long-term preventative implications. This strain is also helpful for acting on the immune system by improving leukocyte activity in adults.

***Bifidobacterium longum (BI-05)***-this human strain promotes resistance to disease by strengthening the immune system.

***Bifidobacterium bifidum/B. lactis (Bb-02)*** has been found in studies to attenuate Ulcerative Colitis.

***Bifidobacterium animalis subsp. Lactis (BI-04)*** is a human strain that enhances the immune system as well as provides anti-inflammatory action. This is helpful for those who suffer from issues like Crohn's disease.

***Lactobacillus acidophilus (La-14)*** is a human strain that improves the immune system as well as breaks down oxalic acid, which can lead to kidney stones and renal failure.

***Lactobacillus casei (Lc-11)*** is a strain that has been found to be particularly stimulating to the immune system, helpful for lactose intolerance and potentially able to decrease the risk of bladder disease.

***Lactobacillus rhamnosus (Lr-32)*** is particularly helpful in the prevention and treatment of diarrhea. This strain also promotes GI health through increasing intestinal cell replication. It is also used to expel parasites from the body.

***Lactobacillus salivarius (Ls-33)***-this specific strain also exerts immuno-modulating and anti-inflammatory actions on the intestinal mucosa reducing symptoms of issues like colitis and protecting from inflammatory processes in the intestine.

***Lactobacillus acidophilus (NCFM)***-this is an extensively researched human probiotic strain with many health benefits. It has antimicrobial action against many food borne pathogens and other bacteria. It also has the ability to bind environmental toxins. This strain has an increased ability to lower levels of Candida albicans, the opportunistic fungus that is responsible for symptoms of candidiasis. It is also helpful for enhancing the immune system and protecting against systemic infections. There is also evidence that it can help reduce the activity of carcinogenic compounds sometimes found in the intestine. In individuals with small bowel bacterial overgrowth, something often present in those with renal failure, serum levels of the carcinogens dimethylamine and nitrosodimethylamine are reduced. It is also helpful for treating diarrhea as well as constipation, particularly when combined with the probiotic strain Bifidobacterium lactis HN019.

***Streptococcus thermophiles (St-21)*** has been effective in preventing nitrates from being converted to cancer causing nitrites. This strain produces lactase which helps those who are lactose intolerant to more easily digest dairy products. It also has anti-inflammatory effects in the intestine.

## L-GLUTAMINE

Glutamine is one of the most abundant amino acids in the human body. It can become depleted during times of illness and stress. Low glutamine levels can lead to muscle wasting, depletion of the immune system and gastrointestinal permeability. Many people experience gastrointestinal issues as well as other symptoms that may be caused by "leaky

gut". "Leaky gut" is essentially when molecules of food, bacteria or viruses pass through the intestinal walls into the blood stream causing an immune response; this can manifest as inflammation, skin conditions, gastrointestinal complaints, mental and behavioral issues, joint pain and more. L-Glutamine is very important for healing the gut and has been shown to improve gut barrier function and therefore is helpful for the elimination of symptoms caused by "leaky gut". Naka Pro PB7 and Naka Pro PB11 both contain L-Glutamine to further promote healthy gastrointestinal function.

## PREBIOTICS

These are oligosaccharides that serve as food for the good bacteria in our gut. They help increase the rate of production and colonization of probiotics in the intestine. Inulin from chicory root is a common prebiotic and studies have found that when it is combined with Bifidobacterium species, the protective action against pathogenic bacteria is greater than when the probiotic species is used alone. Therefore, if you want to get the most out of your probiotic, choose one with inulin from chicory root. If you are travelling to a country where you are likely to come into contact with pathogenic bacteria through food or water contamination, this will be one of the most important supplements to pack! Naka Pro PB7 powder contains 6000mg of inulin from chicory root per serving.

## SHELF STABLE

In Naka Pro PB7 45 billion organisms are input at manufacturing of this product. The label on the bottle says 16 billion organisms per serving, however, that is actually the number of organisms that exist if left unrefrigerated until the expiration of the product. If you would like to maintain a higher number of organisms per serving refrigerate this product. If you are always on the go and refrigeration is inconvenient, Naka Pro PB7 will still provide you with an adequate dose of at least 16 billion organisms if left unrefrigerated until expiry. In the Naka Pro PB7 triple strength capsules 100 billion organisms are input at manufacturing and 50 billion are present at expiry. For an even more potent probiotic, Naka Pro PB11 is guaranteed to contain 60 billion organisms at expiry.



### WHEN DO I TAKE PROBIOTICS?

Studies have shown that survival of probiotics is best when they are taken 30 minutes before or with a meal.

## STAFF FAVOURITES



- Healthy hair, skin and nails
- Relieves joint pain
- Improves bone strength
- Boosts athletic performance

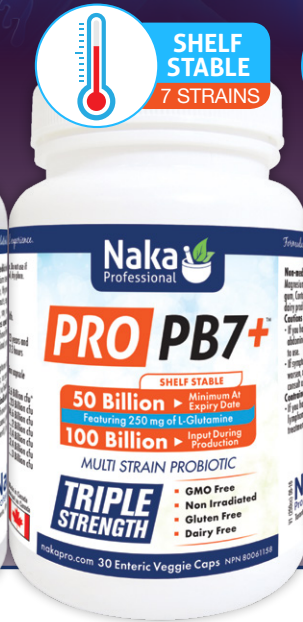
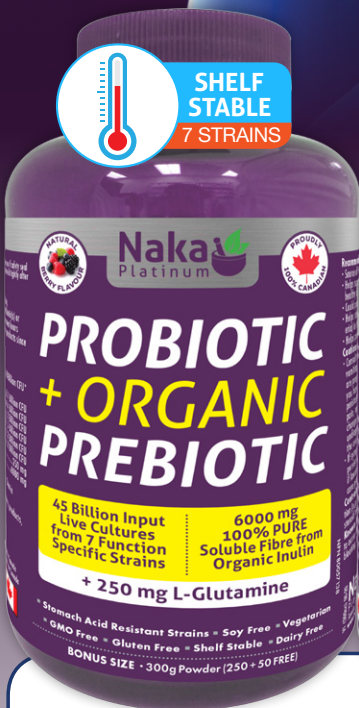
- Most bioavailable coenzyme form of B Vitamins
- Added Sensoril optimized Ashwagandha for stress and mood management
- Added Rhodiola to support the nervous system and physical endurance
- Added Panax Ginseng to support cognitive function + energy production



- Energy boost
- Immune system support
- Brain health support
- Relaxation support
- Cardiovascular health support

# PROBIOTICS

*Healthy Bacteria for Life*



- Supports digestive health
- Fights irritable bowel syndrome
- Aids in weight management
- Supports the immune system
- Added L-Glutamine to remedy leaky gut
- Prebiotics found in PB7 powder