



Probiotics and Probiotic Food

Most people will know what a probiotic is... for many it's the stuff you take to keep the gut healthy or for when you've had antibiotics... funny how "antibiotics" mean "against life" and "probiotics" mean "for life".. anyway...

Probiotics and Probiotic foods play such a large part of our overall gut health, it just seems that as medicine has progressed and as a species the human race has gotten extremely "clever" and "scientific" we've forgotten many of the grass root eating habits our ancestors had and as a result our gut bacteria and our health has suffered dramatically.

Our bodies contain trillions of microorganisms with at least 1,000 different species of known bacteria. These can weight up to 2kg with around 1/3 of the bacteria common to most people and 2/3 specific to us.

This gut bacteria is found throughout our body and is there to perform a number of functions including supporting digestion of certain foods, maintain a healthy immune system and keep the balance right internally, maintain the integrity of the gut mucosa and as a result provides a barrier effect preventing leaky gut which can lead to auto immune diseases, issues with brain function and concentration, IBS symptoms, allergies, eczema, asthma and other more serious illnesses.

Our gut bacteria, however, is acquired via our mothers as we are born (providing birth is vaginal and not Caesarean) and then through breastfeeding and other environmental factors. When we're born our digestive system is sterile, a blank slate waiting to be written on so it's important we use the right ingredients to produce a healthy intestinal colony.

So how do we keep a healthy gut..

Food and dirt are the best source of probiotics and good bacteria. Probiotic foods include yogurt, kefir, whey, sour cream, sauerkraut, fermented vegetables and fermented fish. As far as dirt is concerned, let your kids get dirty, let them put dirty fingers in their mouths. Our overly sterile approach with sterilised hand wipes and washes has removed some of these essential bacteria from our day to day.

Bacteria we consider to be probiotic include:

- Lactobacilli ie: *L.acidophilus*, *L.bulgaricus*, *L.rhamnosus*, *L.plantarum*, *L.salivarius*, *L.reuteri*, *L.johnsonii*, *L.casei* and *L.delbrueskii*. These bacteria are essential to the digestive system and are found in the mucous membranes of the mouth, throat, nose, upper respiratory tract, vagina and genital area as well as being found in human breast milk.
- Bifidobacteria ie: *B.bifidum*, *B.breve*, *B.longum*, *B.infantis*, are the most common although there are many more. These are mostly found in the bowel, lower intestines, vagina and genital area



- *Saccharomyces boulardii* is commonly used to treat diarrhoea and is a fabulous bacteria I often use to treat dysbiosis and *Candida albicans*
- *Escherichia coli* or *E.coli* is a good bacteria and can also be a pathogenic bacteria with some strains causing serious infections. Should only be found in the bowel and lower parts of the intestines and nowhere else. If they are found in other parts of the body indicates Dysbiosis.
- *Enterococcus faecium* or *Streptococcus fecalis* are found in human stools and live in the bowel.
- *Bacillus subtilis* or soil bacteria has strong immune-stimulating properties and is effective with allergies and autoimmune disorders. So as our grandparents used to say "a bit of dirt won't kill them".. quite the opposite actually.

As you can see so far bacteria play a big role in our over health so now it's time to discuss probiotic foods as it's essential these are added from the beginning of the program.

These foods can either be dairy based or vegetable based and where you start depend on your symptoms and reactions to foods. The best way to introduce these foods though is gradually so here's some steps to follow when you start the GAPS Diet whether it be at the introductory stage or the Full GAPS Diet.

Dairy based probiotic foods:

- Include whey, yoghurt, sour cream and kefir. If you suspect allergy do the sensitivity testing first. If there's a reaction wait for 6 weeks then try again.

Vegetable based probiotic foods:

- Include sauerkraut and fermented vegetables and initially only start with the juices as the vegetables themselves are too fibrous early on.

Introducing the probiotic foods slowly:

- Days 1-5, start with 1-2 teaspoons of the juice or dairy (if tolerated and appropriate) daily
- Days 6-10 increase to 3-4 teaspoons daily
- Days 11-15 increase to 5-6 teaspoons daily
- Continue increasing at this pace until you're able to add and tolerate a few teaspoons of probiotic food in every cup of meat stock you drink and every bowl of soup you eat
- You're able to add the vegetables in stage 3 of the Introduction Diet so again, take that slowly introducing a few at a time and monitoring your reactions
- Note: it's important to ensure the food isn't too hot when adding the fermented juices / foods into them as the heat will kill off the beneficial bacteria