



Exploration of Probiotics by Niels Wandler, [niels@biosa.com](mailto:niels@biosa.com)

## Microbes make the world go around<sup>©</sup>

Life on Earth would cease to exist without the microorganisms that live in us and keep all animals, plants and the environment around us alive. It is a symbiotic relationship. We provide them with a home in our bodies and feed them; In return, they enable us to be nourished by the food we eat and keep us healthy. These invisible friends have evolved over millions of years to work in an intimate dialogue with all living things to maintain life, and without them we would cease to exist. Yet we pay more attention to microorganisms on Mars than to the microbes on earth.



Mars image with the courtesy of [jpl.nasa.gov](http://jpl.nasa.gov)

The only time we give them any thought is when our lives are threatened due to our neglect of them. The microbial community within us *is* us. Ignoring them is having a profound and dangerous effect on our health and the health of our environment on many

levels. Our bodies are complex ecosystems, and its microorganisms maintain the balance between its many processes.

One of the prime functions of microbacteria is to break down the food we eat so it can nourish the body, stimulate the immune system and maintain the health of our organs. There are many factors that can interfere with the work of our microorganisms: the use of pharmaceutical drugs such as antibiotics, processed food, prolonged stress, insufficient exercise, infections, radiation and environmental pollution. It is not only humans who suffer from these things, our pets, farm animals and other creatures who share our environment are also subjected to many factors that harm our system.

Unfortunately, human beings have become the major source of harm to the subtle balance of our bodies' ecosystems. In our 'war on bacteria' we think that to keep clean and healthy we must get rid of bacteria and therefore kill them with antiseptic sprays and antibiotics. Because we think all bacteria are equally dangerous we indiscriminately try to assassinate them all. The result is that we create an excessive growth of pathogenic microorganisms in both our own bodies

and in the environment. We end up at war with the very forces of nature that keep us alive.

In this situation it becomes more important to maintain a healthy community of microorganisms in our bodies, our pets, farm animals and other creatures that share our environment. The best and most efficient way is to



take a good quality probiotic. That way the colon and digestive tract can continue to utilise food and keep our organs healthy and our immune system strong. All animals and humans need this.

### **So, what is a “probiotic”?**

According to the World Health Organisation, the definition of a probiotic is “live microorganisms, when administered in adequate amounts confer a health benefit on the host”.

No one doubts the beneficial effect of taking probiotics, yet the scientific establishment has neglected them. The difficulty is that science has tended to focus on the effects of a single organism on the health of the host. Yet what is really happening when you take a probiotic is that the microorganisms

operate in a collective interaction with each host’s unique physiology. Just as you can never step into the same river twice, you can never have exactly the same effect with probiotics. They form an intelligent community of bacteria, which work from within the body according to that particular body’s unique needs.

Traditional science finds such complexity hard to analyse, it prefers simple cause-effect situations, which can be reproduced exactly. Also in a culture where the drug companies want ‘quick fix’ cures, which can be defined and manufactured, the healing properties of microorganisms has been undervalued. Adding to the complexity is the fact that there are many ways to take probiotics. For example, taking them in pill or capsule form is very different from letting them ferment.

In a fermented tonic, using a multi microbial consortium, the various bacteria metabolize a particular carbon source and create a wonderful array of beneficial bioactive metabolites, cofactors, antioxidants, digestive enzymes, hormones, antimikrobiel / antibiotics, amino acids, etc. If they were working singly in the gut, they would not manage this. That is the magic of fermentation. It allows a beneficial ecosystem to flourish in the colon that is subtly interconnected with the specific needs of that particular body; the whole is greater than the sum of the parts.

Fermentation allows microbes to work with each other in ways that

synergistically magnify their individual benefits. It has been shown repeatedly that the metabolite of one bacterium stimulates/feeds another and so on and so forth. The microbes living in homeostasis with fermentation solution evolve into a potent tonic full of nutritive properties.

### **So what constitutes a ‘good quality’ probiotic?**

There are several factors to consider. First of all, the bacteria of the probiotic



must survive the journey through the stomach into the gut and intestines in excellent working condition. They must not be destroyed by the acids in

the stomach. They must be able to reproduce in the hostile environment. They must demonstrate the self-correcting properties that enable them to work effectively. And they must be able to overcome the pathogenic microorganisms so that the natural order, balance and function of the gut are re-established. To do this, a ‘good quality’ probiotic must be free of detrimental or self-defeating aspects and infused with anti-oxidative qualities.

Yet many commercial probiotics lack aspects of these necessary qualities, which enable them to work effectively in the environment of the gut and surface of the skin. Certain probiotics do satisfy all established parameters for being a good quality probiotic. They have shown to be clinically safe and physiologically effective even when introduced to a severely distressed gut and irritated skin that has been overrun by microbial pathogens (bacterial overgrowth) and their toxic by-products.

Probiotics combining a blend of herbs and organic Molasses fermented with a selection of bacteria and infused with yeast organisms has shown excellent physiological qualities. The addition of beneficial herbs to the fermentation broth increased the potency of the community of ‘good quality’ probiotic microbes. These microbes promote healthy digestion. Such herbs have been used for millions of years by humans and wandering animals who eat them as food or as herbal medicine to infuse their intestinal flora with beneficial substances in order to stimulate digestive function.

A “good quality” probiotic is less about the number of beneficial microbes, also referred to as “CFU”, but all about the number of disorders it addresses simultaneously. .

Niels Wandler