



clinicum st. georg  
BAD AIBLING

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*informs!*

## The Importance of Gut-Brain Axis for Brain and general Health

Scientific hypotheses, medical guidelines, and accepted treatments come and go over the decades. I have experienced this many times in my long medical career. Today's guideline recommendations are mostly yesterday's error.

Now, a "new" idea has emerged on the origin of our brain- and general health. In recent years, extensive research on the intestinal microbiome has shown that intestinal bacteria have a major impact on our mental and physical health. This connection is also known as the gut-brain-axis and does not only work in one direction, but is effective in both directions. The brain affects the gastrointestinal tract and the immune system and vice versa. Thus, these systems (the populations of good and bad bacteria) influence the formation and regulation of neurotransmitters and metabolites that act on the brain. This could also explain anxiety that is not apparent as the emotional impact of a chronic illness. While research on the gut-brain axis is still in its infancy, it is already of great importance as it provides clues to understanding how and why some people develop mental health problems. We can also assume that in the future we will solve the treatment of mental illnesses, including myalgic encephalomyelitis (ME / CFS), as it often occurs in Lyme disease and associated co-infections, better with a nutritional approach than with a pharmacological one.

A healthy microbiome can now be easily restored using immune and growth factors. They are not only able to maintain the integrity of the intestinal mucosa while maintaining a healthy ratio of beneficial to pathogenic intestinal bacteria, but also to restore it completely. It has been clinically proven that this can prevent intestinal damage or pathological intestinal permeability. We have already reported on this elsewhere and given instructions on how the intestinal microbiome can be remediated. In addition to an adapted diet, probiotics and prebiotics are important, as are essential fatty acids and medium-chain triglycerides (MCT). Recently, however, a very natural product, namely colostrum (first milk) with its concentrated colostrum polypeptide (CPs) has also proven itself. It improves the defense against oxidative stress and reduces the expression of inflammatory chemokines and cytokines, thereby reducing inflammatory processes, that precede autoimmune diseases and neurocognitive processes. Colostrum, with its abundance of immune and growth factors, is a sure way to maintain the integrity of the intestinal lining while maintaining a healthy ratio of beneficial to pathogenic intestinal bacteria. It has been clinically proven that colostrum can prevent intestinal damage or intestinal permeability.

The colostrum we use comes from the highest quality bovine colostrum, which is collected from antibiotic- and hormone-free cows that graze in the pasture all year round.

To date, most of the research in this area has been carried out on germ-free mice. It has been shown that changing or disrupting their microbiome can trigger anxiety and depression, as well as MS and other



neurological conditions. Germ-free mice have no social skills and cannot recognize other mice they live with. However, when certain strains of good bacteria were introduced into the intestines of these mice, their social behavior returned to normal. If, on the other hand, intestinal bacteria of another type of mouse were introduced, the germ-free mice developed a behavior similar to that of the donor's personality. And when the germ-free mice received intestinal bacteria from people with inflammatory bowel disease (IBS), these mice developed not only symptoms similar to IBS, but also symptoms of anxiety. This explains why people with IBS and other bowel diseases often experience mental health issues such as depression and anxiety that are not due to the emotional effects of the chronic illness.

While still in its infancy, research on the gut-brain axis is of tremendous importance as it helps understand how and why some people develop mental or health problems. As a result, there will also be treatment for neurological diseases in the future, including the neurological and psychological disorders that often occur in Lyme disease and the co-infections associated with it. In the meantime, we have developed a very sophisticated diagnostic panel for our Lyme patients that includes molecular genetic stool analysis and modern endoscopies. Our detailed bowel regeneration program is the only sure way to maintain the integrity of the intestinal lining while maintaining a healthy ratio of beneficial to pathogenic intestinal bacteria. We have put together a bowel regeneration program that contains substances that have been clinically proven to prevent and cure inflammatory or leaky gut damage or bowel permeability disorders. The complex content of our intestinal program improves the defense against oxidative stress and decreases the expression of inflammatory chemokines and cytokines, thereby weakening inflammatory processes that, as we know, often precede autoimmune diseases and neurocognitive states. For maximum results, after a detailed analysis and possible "transfer of living bacteria", we recommend daily use of our "Complex Bowel Program".

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To register online, visit [www.klinik-st-georg.de](http://www.klinik-st-georg.de)*

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