



## **Press release**

### **An essential connection – the gut-brain axis**

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Most people are unaware that and how our gut and brain communicate with each other. However, the importance of the gut-brain axis, a complex information network, is increasingly being recognized by doctors and scientists. This is because this connection plays a crucial role in our overall well-being and cognitive health.

The gut-brain axis can be thought of as a kind of long connecting tube through which stimuli, signals and messenger substances are sent back and forth between the brain and gut. This "interactive highway" is not only responsible for self-regulation in the body, but also for maintaining physiological balance – known as homeostasis. This includes the regulation of body temperature, blood pH, hormone levels and reflexes.

Historically, physicians in ancient Greece recognized the interconnectedness between the gut and brain and researched their interdependence. Today we know, for example, that gastrointestinal symptoms, i.e. those affecting the digestive tract, can be linked to neurological diseases such as Parkinson's disease. Intestinal complaints often precede neurological symptoms.

The vagus nerve is an important communication channel. It consists of 80 % afferent and 20 % efferent fibers and is a vital information artery. Afferent nerves transport signals to the brain, while efferent nerves send information from the brain to the body. If this function is disrupted, it can have far-reaching health consequences, including irritable bowel syndrome or inflammatory bowel disease.

Another exciting aspect of gut-brain communication is neurotransmitters. Research and studies, such as the one conducted by Chiang Mai University

in Thailand in 2022, have shown that gut bacteria not only produce these chemical messengers, but can also influence them in order to use them as communication channels to the brain. According to the study, this can play a crucial role in the management of neurological diseases such as Alzheimer's or Parkinson's. In order to support these important intestinal bacteria, a controlled intake of probiotics can be useful. This can be done either through foods such as yoghurt, sauerkraut or Korean kimchi, or through dietary supplements.

Disruptions to the gut-brain axis can have a variety of causes and lead to a number of diseases, including cognitive decline and Alzheimer's disease. A prime suspect for many of these disorders is stress, which can inhibit vagus nerve function and thus negatively affect the gastrointestinal tract.

So how can we strengthen this central axis of our health? Activating the parasympathetic nervous system, the part of the nervous system responsible for rest and recovery, is key. Relaxation exercises, a balanced diet and the promotion of a diverse gut microbiota are essential.

Taking care of the gut-brain axis is not only a matter of personal well-being, but also a social responsibility. A healthy gut flora and a strengthened nervous system can significantly improve quality of life and at the same time reduce the burden on the healthcare system.

MITOCare offers support by providing supplements that are specifically designed to work with the gut and brain. These supplements can help to support and maintain the important connection between our gut and brain functions.

For more information and in-depth knowledge, visit our knowledge blog at <https://mitocare.de/blogs/wissensblog/die-darm-hirn-achse-wie-arbeiten-darm-und-hirn-zusammen>



A healthy intestinal flora and a strong nervous system can significantly improve the quality of life

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## **About MITOcare**

"Everyone deserves to be healthy".

This statement embodies the credo of MITOcare, the innovation driver in the micronutrient and functional food segment. In product development, we attach great importance to using raw materials of natural origin and bioactive substances as far as possible.

We produce in the DACH region, which contributes to a sustainable economy.

Founded in 2013, MITOcare is headquartered in Munich and currently employs around 50 people. The company is also a

member of the Association of Medium-Sized European Manufacturers and Distributors of Food Supplements & Health Products (NEM). Further details about us, our philosophy and products can be found at [www.mitocare.de](http://www.mitocare.de).