

## The axle of microbiota-gut-brain.

*The bowels provide a major portion of energy,  
to initiate and support a heat shock response,  
reducing own activity.*

Japanese scientists [Nobuyuki Sudo](#) and Yoichi Chida scientifically established [stress](#)' effect not only on physical state, but also directly on the psychic state through the reaction of gut microbiome to this event /stress/. This effect is expressed according to the following algorithm: Bowels → microflora → brain.

It became known that bowels' microbes, through the vagus nerve, has a direct impact on the development of the brain's neural systems that control the endocrine response.

It was also found that this impact could be shown in [childhood](#), if changes in composition of gut microflora, for a number of reasons */including artificial feeding/*, took place at an early age.

As it happens, the monotypic genus of parasitic protists - [Toxoplasma](#), is capable to change both psycho and somo, and not only human being. Thereby, male and female behavior is fundamentally opposite.

Even such kind of indisposition as [schizophrenia](#), according to Professor [Md. Dr Torrey](#), comes from an infectious disease.

Therefore: - the bacteria of gut microflora, having a direct impact on individual behavior, are able to impact on both the actions of their */bacteria/* bearer, and intimately on the recipients and environment with which it */bearer/* contacts.

- **Here-hence: - Not who you born with but who you eat with.**

It is obvious from the reports of scientists: - the microbiota, inhabiting the [bowels' lumen](#), impacts on the central nervous system function, brain activity, which, in turn, affects the development and microbiota content. The concept */microbiota-bowels-brain/*, follows from here, and it */concept/* is closely related to development and function of pituitary-hypothalamic-adrenocortical axis.

Centerpiece, microbiota-bowels-brain, showing a meaningful effect on the central nervous system in a number of diseases, is able to manifest such indisposition as: Alzheimer's and Parkinson's diseases, and autism as well.

There is wonderful news: Gut microbiome, modified by poor nutrition, is able to renew the full functioning of body only when a protein with amino acid, range from a single source of origin, is intervened into diet */such an antioxidants repository is the biological [#immunomodulator\\_OMARIDIN™/](#)*.