

The gut microbiome and mental health

Autism spectrum disorders

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Background: Autism spectrum disorders (ASD) is a group of neurodevelopment disorders with a mainly unknown etiology. Many of the patients suffer from gastrointestinal symptoms and recent studies on animals have proposed a link between the intestinal microbiome and ASD.

The aim of this paper is to summarize the actual evidence on the association between ASD in humans and microbiota dysbiosis.

Method: Medical databases were used to search for studies published over the last 10 years looking at the gastrointestinal microbiome in children with ASD, their siblings or neurotypical controls. 13 articles were engrafted in this review.

Results: Keeping the heterogenicity and the inadequate quality of some of the studies in mind, they indicate a dysbiotic microbiome in children with ASD compared to neurotypical controls while a difference could not be found comparing ASD to their siblings. Furthermore, a strong correlation between the severity of gastrointestinal symptoms and the severity of the ASD were seen.

Conclusion: Taking the research to the next level, novel approaches by manipulating the gut microbiome has been conducted and shows promising results, but further research is needed.