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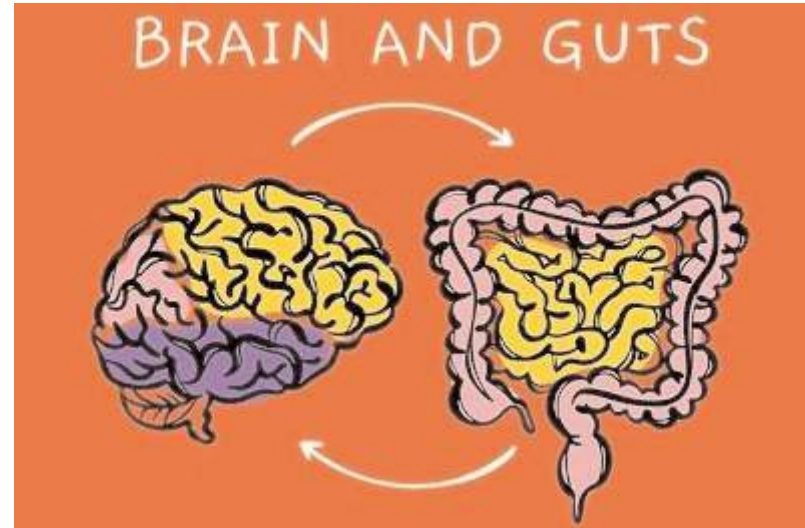
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## MANAGING AUTISM THROUGH GUT-BRAIN AXIS

**Y**ou must've heard doctors and other healthcare professionals refer to something known as the gut-brain axis. But what is the gut-brain axis? Simply put, it's a group of nerves that connect your gut and brain and send and receive messages back and forth. So, is there a connection between autism and the gut-brain axis? Autism is a neurodevelopmental condition, but its expression goes well beyond the brain. A lot of evidence points to the gut-brain axis, the two-way communication network between the brain and gut microbiota that influences digestion, cognition, behaviour and mood.

Children on the spectrum frequently experience gastrointestinal (GI) issues like bloating, constipation and poor appetite. These issues can lead to poor sleep, aggression and irritability. The gut microbiota, which consists of a trillion microorganisms, plays a pivotal role. These microbes produce neurotransmitters such as serotonin and GABA that regulate inflammation and even influence the brain's structure and function through endocrine, immune and neural pathways. A latest pilot study conducted in Kerala examined the effects of probiotics on young children with autism. The two-month probiotic intervention showed



improved behaviour and gastrointestinal issues, but GI improvements were significantly higher. This matches global research that probiotics can be one tool in autism management. Cutting-edge neuroimaging studies show that specific microbial profiles have been linked to function and brain structure changes, especially those regions associated with memory, attention and emotion. Interestingly, probiotics even modulate brain activity patterns in adults and individuals with GI disorders, showing their positive impact. Children become more attentive, sleep better and respond more effectively to

therapy. While diet alone is not a treatment for Autism Spectrum Disorder (ASD), it's a vital piece of the puzzle. The gut-brain axis opens a new dimension in autism care. A balanced diet with reduced processed food, an increase in fiber and the mindful use of probiotics, under professional guidance. It's a gentle reminder that sometimes, the journey to a healthier mind begins with a healthier gut.

***(The author, Dr Dedeepya Puskur, is a developmental paediatrician and clinical head, at Fernandez Child Development Centre.)***