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Your stomach and your moods

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THE gut and the brain – two separate entities, yet closely connected. This relationship serves as an important function not only in managing emotions and stress but also aiding digestion. Everyone has a unique gut microbiome (environment) because of the microorganisms, such as bacteria, fungus and viruses that live inside the gastrointestinal (GI) tract. While these microbiomes differ depending on diet, lifestyle and other factors, they can influence different aspects of one's health such as appetite, weight and even our moods. According to consultant psychiatrist of Sunway Medical Centre Velocity (SMCV) Dr Ryan Tee Chun Keat, the gut-brain axis is the two-way connection between the gut and the brain. The trillions of microorganisms in our gut provide important functions to our body, including benefits to our mental well-being.

“These microorganisms, among others, have a role in the body's stress response, mood and cognition. In other words, having a healthy gut and mind go hand in hand,” he shares.

How to better understand our gut

Maintaining good gut health is essential for our overall well-being as it is the foundation of the body's optimal functioning. Consultant gastroenterologist and hepatologist of SMCV Dr Tan Yu Peng says if the harmony of our gut microbiome is breached, the body's finest equilibrium will be tampered.

As a result, the stomach acidity, intestinal alkaline level, gut immunity and gut bacteria will all be disrupted. This can lead to digestive problems, such as bloating, indigestion, heartburn and inflammation of the bowel – which is why, along with genetic factors, our dietary choices and medications are the primary influences that can impact our gut health.

Tee explains that this is especially evident in people who suffer eating disorders, such as anorexia, bulimia and binge eating.

Additionally, it is essential to be aware of and understand the signs of an unhealthy gut.

“Poor digestion can manifest in various ways, such as bloating, stomach aches, diarrhoea, constipation, weight fluctuations, skin disorders, and even emotional disturbances,” Tan points out.

If left untreated, these symptoms can lead to more severe conditions, such as autoimmune problems and diabetes in the long run. Thus, being proactive about gut health and taking steps to improve it can have significant benefits.

Connection between gut and emotions

Our gut, often referred to as our second brain, plays a vital role in promoting our overall mental well-being. This is because the enteric nervous system (ENS), which is responsible for controlling the gastrointestinal tract, communicates with our brain using the same neurons and neurotransmitters as the central nervous system. This means that our gut and brain are constantly communicating with one another, influencing each other's function in real-time.

For instance, during the “fight or flight” response, the ENS responds by slowing down digestion, redirecting more energy towards the threat-causing situation. This interconnectedness works both ways, as our current emotional state can have a significant impact on our GI system as well.

Tee says, for example, people who are experiencing depression, anxiety or stress may develop gastrointestinal symptoms, such as abdominal discomfort, bloating, indigestion, stomach cramps, constipation and diarrhoea. He reminds us that being human means experiencing a wide range of emotions, from joy and happiness to sadness, anger, envy and disgust. It is natural and important not to neglect or invalidate any of these feelings. However, Tee advises to seek help from a psychiatrist for an assessment if any one emotion becomes overwhelming to the point of neglecting our health as it could be a sign of an underlying mental health disorder that requires attention.

Overall, the balance of microorganisms in our gut plays a crucial role in our emotions. Therefore, it is essential to maintain a well-balanced microbial community in our gut to promote optimal mental well-being.

How does gut change over time?

As we age, our body has to adjust to various changes, such as our bones shrinking in density and strength and our muscles losing their endurance and flexibility.

Similarly in our gut, the microbiome will also have to adapt to accommodate the overall bodily changes. Some of these changes include the esophagus moving slower, the stomach walls becoming thinner and stomach

juice secretion output decreasing over time. These specific factors will impact our ability to digest food and process it into energy, hence, the need for the elderly to pay closer attention to their daily routines and dietary changes that best suit their needs.

Furthermore, the delicate balance of good and bad bacteria in our gut may shift, resulting in an increase in dangerous bacteria and a loss in diversity, which is why diseases, such as reflux or peptic ulcer disease, inflammatory bowel disease and colon cancer are common in the elderly. The aging process can also affect muscle movement, potentially causing uncomfortable symptoms like constipation, fecal soiling, incontinence and perineum itch. However, according to Tan, these issues can be mitigated as long as we prioritise our overall health.

“As the saying goes, you are what you eat, so it is always important for us to be mindful of our food regardless of our age.”

“Maintaining good gut health is essential for managing emotions and promoting mental and physical well-being. Adopting a healthy lifestyle, managing stress well and taking care of our mental well-being can help regulate gut health and improve our overall health.

Practical ways to improve gut health and overall emotions

The good news is that we have the power to positively impact our gut health with our food choices. Maintaining a high-fibre diet, including both soluble and insoluble fibre, and limiting foods high in fat and sugar are crucial.

“Adopting a healthy lifestyle by exercising regularly, avoiding smoking and alcohol, and limiting caffeine intake can contribute to a healthy gut,” advises Tan.

Tee suggests in addition to eating more fruits and vegetables, whole grains, nuts, fish and olive oil, doing what you enjoy, such as going out, spending time with loved ones or getting enough rest can also be helpful for your gut and mental health.

When we engage in activities that we like, our brain releases dopamine, which gives us a sensation of pleasure. Stimulating the reward pathway in the brain through enjoyable activities further enhances our sense of pleasure.

In general, adopting a healthy lifestyle, managing stress well and taking care of our mental well-being can help regulate gut health and improve our overall health.

In addition, we can promote a healthy gut microbiome by incorporating prebiotics and probiotics into our diet. These friendly bacteria play an important role in helping us digest complex food and converts it into simpler forms that our body can absorb easily. Thus, prebiotics serves as a vital source of nourishment for our microbes, ensuring that our digestive system stays healthy.

Tan says probiotics is present in natural food like yogurt or in the form of supplements.