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When tackling mental health, consider your diet, too

Research has shown that there is a strong connection between your food and your mood.

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High-sugar and ultra-processed foods have been linked to major health problems. PHOTO: PEXELS

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Sheri smiles as she bites into the warm chocolate cookie, the flavours of vanilla, sweet chocolate and rich butter transporting her back to her mother's cosy kitchen. The comforting taste melts away the stress of a long day at work.

Sheri is experiencing emotions associated with "comfort foods". How do the taste, smell and sight of certain foods bring pleasure and emotions?

Many of us unwind over comfort food at hawker centres. At the office, there are also easily accessible pantries and vending machines offering snacks to fend off hunger in the absence of time for a meal. In the mood for fast food, though? It is often just minutes away via the tap of an

app.

Such comfort comes with consequences, however.

High-sugar and ultra-processed foods have been linked to major health problems including Type 2 diabetes and obesity. In 2023, over 400,000 Singaporeans were reported to have diabetes. Each year, more patients are being diagnosed with diabetes, especially among young people. Parallel to this increase are more diabetes-related complications such as stroke, heart disease and nerve damage.

The link between food and physical health is well established. But research from an emerging field of study has shown that diets also affect our mental health.

When discussing poor mental health, the focus is often on screen time, social media and the struggle to balance work and family commitments. Our diets are seldom mentioned.

The interdisciplinary field of nutritional psychology examines the intersection between diet, health and cognition. It sheds light on how diet influences our mental state, body functions and view of the world through insights from psychology, social sciences and nutrition. It is highly relevant today with mental health becoming an increasing concern across the globe.

In Singapore, mental disorders are the fourth leading cause of “disease burden” – in other words, the impact of a health problem as measured by financial cost, mortality, morbidity, or other indicators.

The prevalence of poor mental health rose from 13.4 per cent in 2020 to 17 per cent in 2022, according to the Ministry of Health’s (MOH) National Mental Health and Well-Being Strategy 2023. Among those surveyed, young people aged 18 to 29 had the highest prevalence of poor mental health, at 25.3 per cent.

As we tackle this problem from multiple angles, it’s worth looking deeper into the impact of our nutrition on mental health.

A gut feeling

The connection between diet and emotions stems from the close relationship between your brain and your gastrointestinal (GI) tract, often called the “second brain”. Your GI tract is home to billions of bacteria that produce chemicals, which constantly send messages from the gut to the brain. What impacts the gut impacts the brain.

Dr Braden Kuo, director of the Centre for Neurointestinal Health at Massachusetts General Hospital, describes the communication between the gut and brain as constant: “There is immense cross-talk between these two large nerve centres,” Dr Kuo says. “This cross-talk affects how we feel and perceive gastrointestinal symptoms and impacts our quality of life.”

Studies have shown that the connection between diet and mental state is strong.

For example, criminology assistant professor Olivia Choy at Nanyang Technological University’s School of Social Sciences found that low levels of Omega-3 and vitamin D are linked to increased aggression.

Prof Choy's research found that dietary supplements containing Omega-3 fatty acids may be a promising method to reduce antisocial behaviour, including violent offending.

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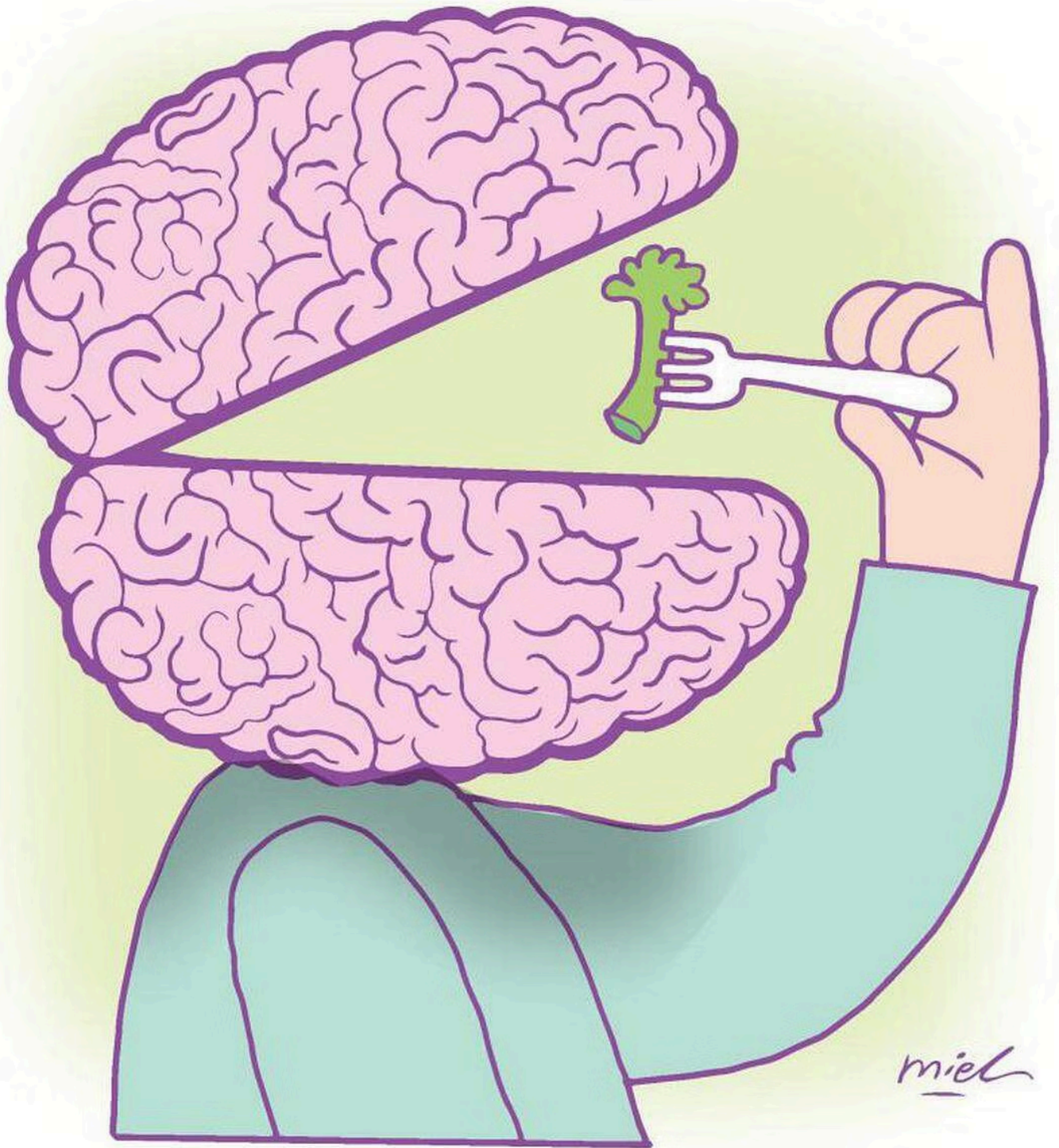
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We have seen this in randomised controlled trials conducted here. Young offenders who received Omega-3 supplements showed reduced aggression compared with controls. Initial evidence has been found that a three-year recidivism rate was reduced by 17 per cent following Omega-3 and vitamin D supplementation.

Similarly, in a random controlled trial on children with externalising behaviours – such as aggression, disruption and being hyperactive – Omega-3 was found to reduce aggression over and above the standard care of medication and parent training given to them.

A diet high in sugar also has been found to impair memory. Having too much sugar can make learning more difficult because insulin resistance damages communication between your brain cells.



ST ILLUSTRATION: MIEL

Discomforting facts about comfort food

Science increasingly shows that what we eat directly affects how we feel. Despite this knowledge, many of us still succumb to easily available and affordable unhealthy choices.

We often turn to comfort foods like chocolate, pizza, and ice cream to make us feel better. But, the problem, experts say, is that while these foods offer a combination of salt, sugar, fat and carbs that make them taste so good, they can make you feel worse. Studies show that a diet high in sugar and ultra-processed foods disrupts gut health, which leads to depression.

Eating too many french fries may lead to depression too. A study involving 140,000 people revealed that frequent fried food consumption, especially fried potatoes, is strongly associated with higher risk of anxiety and depression. Overexposure to acrylamide, which is a food-processing contaminant in fried foods, increases antisocial and phobic behaviour. The group most impacted were young males.

Sweet drinks that we crave when we are stressed or depressed, such as Kopi-O, Milo, and bubble tea, may be comforting but are unlikely to benefit our mental health. A five-year study of 90,000 individuals from Asia showed a higher level of depression among those who consumed sugary drinks, fruit juice and sweetened coffee, whereas black coffee and green tea may decrease it.

And while “happy hour” is connected with socialising and relaxation, having too many alcoholic drinks, especially over a sustained period, may lead to depression called hangover anxiety, or “hangxiety”.

London GP and podcaster Dr Nish Manek explains the neuroscience behind it: alcohol boosts feel-good chemicals and reduces glutamate (a neurotransmitter), creating a calming effect. However, once you stop drinking, glutamate spikes, leading to increased anxiety. Alcohol also impairs memory and reduces deep sleep and overall sleep quality, worsening anxiety and mood. This has been found to be true even with casual drinkers; one glass fragments the quality of your sleep, meaning you wake up more often during the night.

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It’s understandable that a busy worker, stressed out student, or parent struggling for time will reach for a favourite comfort food or drink for that instant “feel-good” factor. But when consumed regularly, these have an impact not just on our physical health, but also our mental health.

Clearly, to help improve our mood and focus to keep us thriving, it’s better to make healthier choices.

Workplaces and institutions can improve worker health by offering healthier food options in canteens, vending machines and gathering places.

Swop out unhealthy with healthy food at key points of consumption, so we can make positive and easy changes in how we eat and manage our diets. Replace candy bars with all-fruit snack bars; redesign the menu to encourage a swop of fries for greens; stock vending machines with no-sugar drinks; serve vegetable-forward lunch plates; cook with less oil.

At home, you can make positive changes, too. Add more vegetables to your stir-fry and choose leaner cuts of meat. Make laksa with light coconut cream and no noodles to reduce fat and carbs. Reduce the amount of sugar you add to tea and coffee. Buy fewer packaged foods. Mix brown rice with white rice. These adjustments satisfy cravings while improving your wellness.