

Be good to your gut

A strong immune system starts in the gastrointestinal system.

By Dr ZAITUN YASSIN & Dr ROSELINE YAP

YOUR digestive system accounts for a very significant part of your body's immune system.

Studies show just how closely linked the gut is with immunity as it accounts for about three-quarters of the immune system.

In fact, the gut is home to a large population of gut microbiota that includes about a thousand different types of bacteria that are both "good" and "bad".

Keeping a healthy balance of good and bad bacteria is essential in order to maintain your health and well-being.

A balanced gut microbiota

The gut microbiota refers to the collection of microorganisms that reside within the gut. Many studies have shown that the diversity and abundance of gut microbiota varies from individual to individual.

A healthy human gut is dependent upon a healthy balance of good bacteria (which provides you with positive health benefits) and bad bacteria (which may cause inflammation and diseases).

A balanced gut microbiota helps to promote normal gut functions such as maintaining proper digestion, regular bowel movements and normal stool, as well as reducing symptoms of digestive disorders, such as bloating, constipation and diarrhoea.

Apart from its importance to gastrointestinal functions, a healthy balance of good and bad bacteria in the gut also provides the highest benefits to the immune system.

This is because around 80% of the immune system is located in the gut.

Part of the reason why good bacteria provides positive effects to the immune system is because they form a barrier on the intestinal wall, which prevents harmful microorganisms from being absorbed.

They also help to modulate the



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immune system, thus improving how it responds to external threats.

Consequences of imbalance

Imbalanced gut microbiota (or dysbiosis) occurs when the bad bacteria in the gut outnumber the good bacteria, and this may upset overall gut health.

The common signs and symptoms of dysbiosis include bloating, constipation, diarrhoea and abdominal discomfort.

An imbalanced gut microbiota could also lead to intestinal inflammation that might damage the gut lining, hence affecting normal gut and immune function as well as overall health.

If left untreated, dysbiosis can cause chronic digestive disorders such as Irritable Bowel Syndrome (IBS), leaky gut syndrome, coeliac disease, and colon or rectum cancer.

It is crucial to have a healthy balance of gut microbiota for overall well-being.

You can help your body achieve an ideal balance by simply practising healthy eating, as dietary fac-

tors play a major role in maintaining a healthy gut.

Start by adopting a balanced, moderate and varied diet every day, and reducing intake of foods high in sugar and fats.

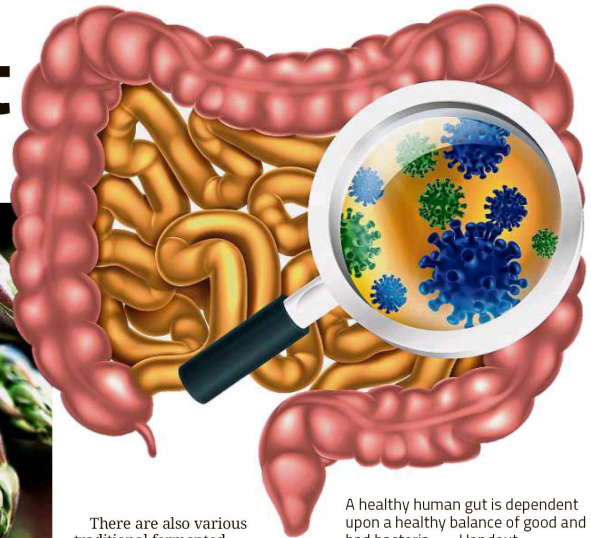
Consume probiotic-rich foods such as fermented milk products (e.g. cultured milk drinks and yoghurt).

Probiotics are live microorganisms that, when consumed in adequate amounts, have been shown to provide health benefits to the human body.

Also known as beneficial or friendly bacteria, they help to replenish the good bacteria in the body, thus promoting a healthy gut microbiota balance.

For cultured milk containing probiotics, you should make sure the products are labelled with:

- The total number of bacteria contained in the product.
- The genus, species and strain of probiotic used.
- Words containing "live" or "active" probiotic cultures.
- At least 106 colony-forming units (CFU) per ml or per gram of probiotic culture.
- Directions for storage.



There are also various traditional fermented foods that may also contain beneficial bacteria.

These include homemade yoghurt (tairu), fermented soy products (tempeh), and fermented vegetables (kimchi and sauerkraut).

Apart from that, you should also eat more high-fibre foods like whole grains, legumes, fruits and vegetables.

Dietary fibres are non-digestible carbohydrates that can help to regulate bowel movement, thereby keeping the digestive system healthy.

Some of these fibres may serve as prebiotics that help to feed the good bacteria in the gut, thereby increasing the population of good bacteria.

Examples of prebiotics in foods are bananas, garlic, onions, shallots, leeks and asparagus.

Other food ingredients that also serve as prebiotics are fructo-oligosaccharides (FOS), inulin and galacto-oligosaccharides (GOS), which may be added in some food products.

Healthy lifestyle improves digestive health

In order to improve your digestive health and boost your immune system, you should also look at the basic tenets of good health, namely,

A healthy human gut is dependent upon a healthy balance of good and bad bacteria. — Handout

ensuring that you do the following on a daily basis:

- Get at least 30 minutes worth of exercise.
- Drink at least eight glasses of plain water, or more on hot days and if you play sports or exercise vigorously.
- Get eight hours of quality sleep.
- Manage stress.
- If you are a smoker, quit smoking.

Dr Zaitun Yassin and Dr Roseline Yap are council members of the Nutrition Society of Malaysia (NSM). This article is contributed by the Nutrition Month Malaysia (NMM) 2018, an annual community nutrition education initiative jointly organised by NSM, the Malaysian Dietitians' Association (MDA) and the Malaysian Association for the Study of Obesity (MASO), and supported by Malaysia Milk. To obtain more information on healthy eating and active lifestyle, visit NMM's Food-Fit-Fun Fair at the Main Atrium, Ground Floor, Sunway Velocity Mall, Kuala Lumpur, today. Nutrition screening and counselling are available for free and lots of other goodies are up for grabs. You may visit www.nutritionmonthmalaysia.org.my or the NMM Facebook page for more information.