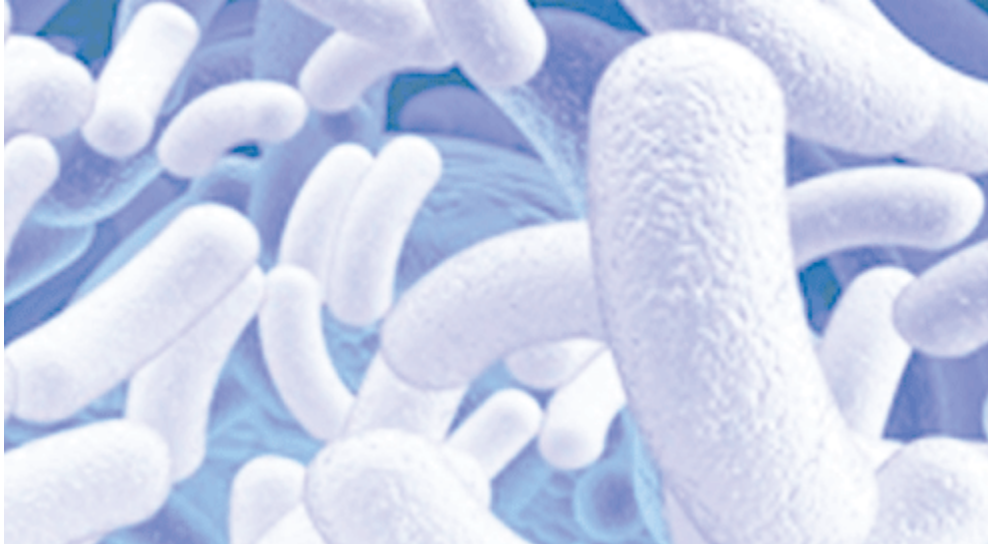


In Sunday Leader

Take Care Of Your Boarders

by Dr. Harold Gunatillake - Health writer



Did you know that you give accommodation to hundreds of trillions of bugs in your small and large gut? Did you know that if you were to take a gram of your faeces, and analyse it, you would discover that it contains a greater number of bacteria than there are humans on the planet? Human body is home to over 100 trillion microorganisms, which, if gathered together on a scale would weigh around 2 Kg. You should feel relieved that your real weight is 2kg minus your apparent weight.

These boarders are given a new name, not just bacteria or bugs. They are called Microbiota. This is derived from the Greek word biote-way of life, from bios life. So, in the rest of this article they are referred to as 'Microbiota' organisms that play a significant role in our health and wellbeing.

Out of these multi-trillions of bacteria, the microbiologists are familiar with only about 1000 different species of known microbiota with more than 3 million genes, about 150 times more than human genes. They are powerful having such large numbers of genes and we need to keep them happy as our boarders. Gut Microbes makes us who we are in our health. Only 10 percent of the cells in your body belong to you. The rest of the cells are formed from your friendly bugs (microbiota). Microbiota could be seen on your skin, eye, throat, lungs, vagina in women, in addition to the trillions in your gut.

It was Hippocrates who claimed that "death sits in the bowel" in 460BC. Microbiologists are now realising that gut works with the brain in preventing many diseases. There is a gut brain relationship through wires. Gut contains nerves that are responsible for producing a hormone called 'serotonin'. This is a 'feel good hormone' also founding in fruits, including bananas. This hormone also affects your brain's mood and behaviour, as well as its overall health. Consuming refined carbs, sugars and processed foods reduces this hormone and most healthy gut microbes can get destroyed. It is a good reason to concentrate eating unprocessed foods such as brown or red rice whole meal bread among others.

Because of this relationship between the brain and the gut, the latter is referred to as the second brain.

Researcher Elaine Hsiao, from the California Institute of Technology, gave an interview at the 4th Gut Microbiota for Health World Summit 2015.

She explained how the gut microbiota influences our brain and how our brain, in turn, affects the gut microbiota. So called “our second brain” can influence our behaviour and relates to the rest of our nervous system.

One third of the trillions of microbiota are specific and common to most people, while the other two thirds are specific to each one of us, meaning differs from person to person. Sometimes, the microbiota in your intestine can be considered like an individual identity card or your signature.

Today, with any chronic ailment you see your GP. He refers to the relevant specialist for further investigations and treatment. This system is going to change very soon. The specialists without treating may refer you to a microbiologist.

He will take a specimen from your intestinal fluid and seeing through the ultra-microscope studies the distribution, lack or the presence of any particular microbiota that is causing the disease.

He then prescribed the specific faecal capsule for the condition to be obtained at the chemist. This way once and for all the disease can be cured without relapses.

So the primary cause of most diseases is traced to your gut microbiota. The gut microbiota interacts with all the functions of the body and that is why it is essential to have healthy gut bacteria.

Some of the diseases recently found caused by or linked to this microbiota are:

- Depression.
- Schizophrenia,
- Obesity,
- Diabetes,
- Colon Cancer,
- Rheumatoid arthritis
- Anxiety,
- Parkinson’s disease,
- Ulcerative colitis,
- And many others.

How does microbiota help us?

They have many functions to perform in our gut to keep our bodies metabolic processes in trim condition.

They help the body to digest certain foods that the stomach and small intestine have not been able to digest- especially fibre

They help with the production of some vitamins. Some create vitamins such as K, B5, B9 and B12.

Others help improve absorption of magnesium, calcium and iron.

They help us combat aggressions from other microorganisms-intruders.

They play an important role in the immune system. They extract energy from food to building the body’s immune system, to protecting against infection with harmful, disease-causing bacteria

A healthy and balanced gut microbiota is the key to ensuring proper digestive functioning & good health.

When the gut microbes are healthy, the body also feels healthy and when gut microbes are sick, the body also feels that way.

Eating red meat

Eating excessive amounts of red meat changes the microbial ecosystem in the gut. This can lead to many diseases, including heart disease and cancer of the colon.

This is a good reason to cut down on your red meat and keep the gut microbiota happy.

Asthma in children

Children from affluent class of families get asthma and very much less among kids of lower middle class families and those from slum areas.

The homes of affluent class families keep their houses in an aseptic environment using antibiotic sprays in every part of the house, including the kitchen and toilets.

As a result of this clean environment the kids don't seem to get contaminated with many of the microbes that other kids are exposed to.

Researchers at the Canadian Healthy Infant Longitudinal Development (CHILD) studies showed these kids of upper strata had lower levels of four microbes: faecalibacterium, lachnospira, Veillonella and Rothia.

When these microbes were replaced the kids had very much less attacks of asthma and gradually disappeared. It was suggested long term "probiotic-style treatment" for children would prevent the onset of asthma.

It was revealed that children exposed to certain bacteria of household dust during their first year of life have fewer asthma symptoms when they reach the age of three, according to a study published in the Journal of Allergy and Clinical Immunology

Obesity problem

Most obese people try all sorts of methods to lose weight, including following various fancy diets, gymming daily, and so on. Most of such people would say, "We tried nothing works".

There is a valid reason for it: Studies on mice have shown that the good gut microbes may contribute to weight gain. An experiment on the human twins, one was thin and the other one obese, whose gut bacteria were transferred them into lean mice. The mice with bacteria from fat twin grew fat, and the bacteria taken from the lean twin remained thin.

Then, there is the story: Rob Knight professor of chemistry and biochemistry at the University of Colorado at Boulder who fell ill while vacationing in Peru. He suffered from stomach discomfort with loose motions. He took antibiotics for five days and got better but then relapsed and took a second course of antibiotics and finally knocked down the infection. When he returned from holidays he started losing weight which he could not do for years with dieting and exercising.

He is convinced the antibiotics changed the bug flora in the gut and caused him to lose weight.

It is inferred from this story that reduction in good bugs in the gut caused by antibiotics caused the change of gut flora environment, could make you lose weight, when every other avenue fails.

So, in the future a poo pill taken daily may be the solution for obesity.

In conclusion, I would like to say the time is coming when most chronic diseases, like the gastro-intestinal, metabolic, psychosomatic maladies and many others will just be cured with ease by taking a poo pills.

Sounds right, tastes right!