

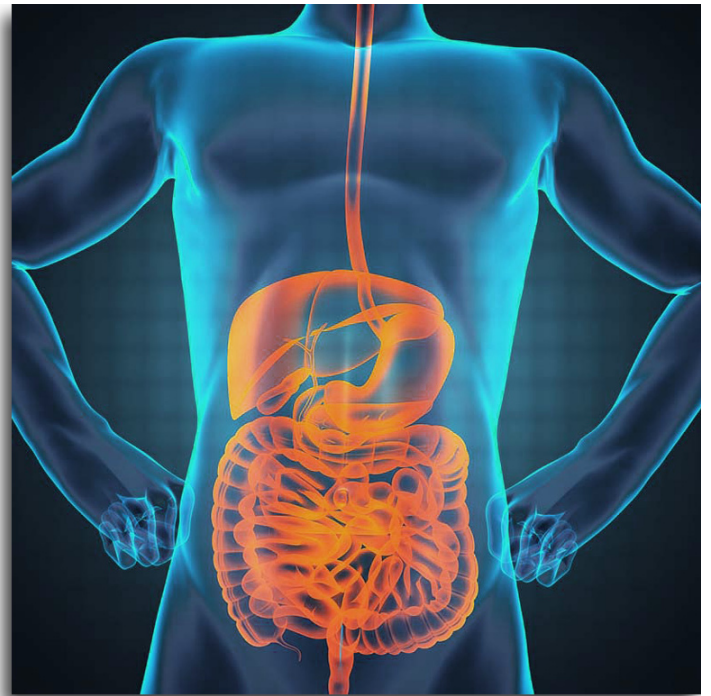
## GUT CHECK!

Gut microbiota is the microbe population living in our intestine. Our gut microbiota contains tens of trillions of microorganisms vital to our health — just some of the important functions our gut microbiota include:

- Helping us digest foods that the stomach and small intestine can't digest.
- Playing an important role in our immune system by combating harmful microorganisms.
- A healthy and balanced gut microbiota is key to ensuring proper overall digestive functioning.

**One third of our gut microbiota is common to most people**, while two thirds are specific to each one of us. That means that our 'microbiome' — which refers to the genetic make-up of our microbiota — is as unique to each of us as our fingerprints.

- 99% of the genes in our bodies actually reside in our microbiome. Our microbiome is acquired from our parents and from our environment — it takes a baby about 838 days to establish an adult bacterial population.
- Our diets also shape our microbiome — 'You are what you eat!' — Bacteroides digest protein while Prevotella digest fiber. Many fad diets today are now targeted at improving your microbiome, but there is limited evidence that they actually work as intended.
- Veganism causes little immediate change in gut microbes. But meat and cheese can cause big changes almost overnight, increasing the kinds of bacteria linked to cardiovascular disease.



- Related to our diet is the use of Probiotics — in human volunteers it has been reported to change behaviors by improving mood.
- Exposure to allergens early in life, while our microbiome is developing, may help protect us from allergies in later years. For example, exposure to dogs, prenatal and in the first year of life, appears to reduced allergy risk later.
- Susceptibility to every kind of infection hinges greatly on genetics — our own and our microbiome. Exposure to good microbes via dirt and contact with healthy, diverse people and animals may be good preventive medicine.
- The early use of antibiotics may have something to do with the skyrocketing rates of food allergies among American children. Antibiotics can be the equivalent of a chemical weapon that doesn't discriminate — NAPALM!