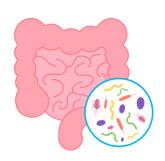
### GASTRONORTH NEWSLETTER

## **GUT INSTINCT**

# HOW IMPORTANT IS OUR GUT MICROBIOME TO OUR HEALTH?

Hippocrates, a Greek physician, supposedly declared that **'all disease begins in the gut'.** Some 2500 years later, it seems he was on to something.



There has been an explosion of scientific literature that has shed light on the crucial role of our gut microbiome in the pathogenesis of various diseases. From gastrointestinal conditions like Inflammatory Bowel Disease (IBD), Irritable Bowel Disease (IBS) and Coeliac disease, to broader health issues such as liver disease, reflux disease, and even bowel cancer.

The trillions of microorganisms residing in our gut not only impact our digestive health but also exert influence over our mood and emotions. Imbalances in the gut microbiome have also been associated with conditions like anxiety and depression. These microbes play a crucial role in regulating neurotransmitters and the production of mood-related compounds.

An imbalance of the gut microbiota has also been linked to obesity and Type 2 diabetes.

In our quest for optimal health, we need to support the intricate balance of microorganisms in our gut as best we can.

## **HOW CAN YOU IMPROVE YOUR GUT HEALTH AND MICROBIOME?**

Our gut microbiome is made up of good and bad bacteria. The aim is to feed and promote the growth of the beneficial bacteria.

#### **1.FOOD**



**Fermented Foods** - Incorporate kim chi, sauerkraut, keffir, kombucha or miso into your diet. These foods are rich in **PROBIOTICS** (live microorganisms like Lactobacilli) which add to the population of good bacteria. Probiotics also produce beneficial **POSTBIOTICS** in the gut, such as short chain fatty acids, which have an anti-inflammatory, immunomodulatory and other health-promoting effects.

**Fibre** - Consume a diverse range of fruits, vegetables, wholegrains and nuts. Fibre provides PREBIOTICS which means it acts as food for the good bacteria. This stimulates growth among the pre-existing good bacteria. Fibre also helps maintain bowel health.

Fluid- Drink plenty of water. It also aids digestion and prevents constipation.

Reduce highly processed foods, sugars and artificial sweeteners - These are thought to alter the gut bacteria, but also when consuming these foods, you are likely eating less of the food that is beneficial to your gut microbiota.

#### 2. FITNESS



**Regular Exercise & Sleep** - Ensure you make time for these two key healthy habits.

**Stress Management** - Stress and depression can reshape the gut bacteria's composition through stress hormones and inflammation. Some strategies to reduce stress levels include deep breathing, mindfulness, yoga, sport or just going for a walk with friends or family.

#### 3. FASTING



**Intermittent Fasting** - Try periodically incorporating time restricted fasting for 12 or ideally 16 hours once or twice a week. This can have a range of positive benefits not only for metabolic health (e.g. weight control) but promote a diverse healthy gut microbiome.

## DR TIN NGUYEN'S QUICK RECIPE FOR FERMENTED VEGETABLES

Making your own fermented food is easy and often tastes better than store bought ones.

#### **INGREDIENTS**

- Fresh vegetables (cabbage, capsicum, radishes, carrots etc.)
- Salt (non-iodized, preferably sea salt)
- Filtered water
- Optional Herbs and Spices (caraway seeds, dill, garlic etc.)



Note: Don't add garlic or onions if intolerant, or if you are on a modified low FODMAP diet.

#### MAKE THE SALT SOLUTION

- A common brine percentage is 2% (e.g. 20g salt in 1L water). Adjust to taste.
- Dissolve the salt in filtered water to create a brine solution. Use enough to cover the vegetables.

#### **METHOD**

- Wash and chop vegetables and any additional herbs/spices, and place into a clean mason
  jar. Pack tightly and press down firmly to minimise any air pockets, leaving some space at
  the top.
- Pour the brine over the vegetables so they are completely covered (this helps prevent mould growth).
- Place lid lightly and leave for 1-2 weeks to ferment (time depends on temperature and your taste preference). Bubbling is a sign of fermentation (indicates beneficial bacterial consuming sugars in the vegetables and producing carbon dioxide and lactic acid)
- Taste test the vegetables periodically to determine the level of fermentation that suits your tastebuds.

#### **STORAGE**

- Once the vegetables have reached your desired level of fermentation, store them in the refrigerator, which slows down the fermentation process.
- Enjoy your homemade fermented vegetables as a tasty and probiotic-rich addition to your meals.