

## Are you listening to your gut?

**You know the expression ‘gut instinct?’ Well, it turns out there is a link between your brain and gut and this is particularly relevant in these trying times, writes nutritionist Martina Gallivan**

It's likely you have experienced a gut instinct on more than one occasion. Perhaps a sixth sense about an upcoming decision which somehow or other doesn't sit well with you. You might call it a feeling of butterflies in the pit of your stomach that somehow appears to be guiding you, almost warning you to hold back.

For example, a monetary commitment, whereby a recession hits and you breathe a sigh of relief in not having put yourself under such financial strain.

Equally this feeling can sometimes pay off when you discover that by following your gut instinct you were right to do so all along.

Years of research has shown the correlation between the brain and our own gut. Anatomically the vagus nerve connects both. In fact, not many people are aware the gut is often referred to as the second brain.

### **The gut-brain axis and the importance of diet**

The enteric nervous system (a major division of the peripheral nervous system) dominates the function of our gastrointestinal tract. 80pc of the neurotransmitter serotonin (the happy hormone) and 50pc of dopamine is located in the gut and not as one would expect, in the brain. In fact, the gut-brain axis regulates our responses to stress related psychological conditions including feelings of depression and anxiety as well as some physiological responses such as fatigue, loss of memory, eczema, IBS and feelings of general malaise.

However, it is the health of our gut microbiome in which we should concentrate in order to alleviate these symptoms. And we can achieve this predominantly through good diet.

Hippocrates the father of medicine suggested “all disease begins in the gut”. Unsurprisingly consuming a prolonged diet which is both high in fat and sugar induces feelings of unhappiness and despondency.

A similar diet could contribute to what is called intestinal permeability or leaky gut syndrome. Intestinal permeability is considered to be the gateway to autoimmunity (e.g. when the immune system attacks its own organs and tissues.) Fundamentally, the problem with leaky gut is it can

lead to a host of other illnesses, e.g. inflammatory bowel disease, rheumatoid arthritis, multiple sclerosis, asthma, food allergies, gluten sensitivity and coeliac disease amongst others.

Your physician may not necessarily connect the dots and most likely will prescribe medication when in fact you may just need only to have changed your dietary intake for symptoms to improve.

I have spoken about good eating in [previous articles](#) which includes increasing wholegrains, vegetables, legumes, nuts, lean protein and plenty of water. And reducing processed foods, ready-made meals and take-out meals.

Taking this a step further you can start the process of positive gut health with prebiotics which begin the process of stimulating good gut bacteria. For example, legumes such as chickpeas, lentils, baked beans are a great prebiotic source, as is stewed apple. Alternatively, probiotics (live microorganisms) usually found in fermented foods e.g. live yogurt, kombucha, kimchi or sauerkraut. You can purchase probiotic supplements also. However, should you choose this option opt for a good brand from your local health food store.

The gut brain axis is often referenced in our industry because it is a biochemical signal between the gastrointestinal tract and the central nervous system. We are aware of a direct relationship between both. Therefore, it's no surprise that all forms of stress can alter the composition of our microbiome which in turn results in dysbiosis (an imbalance) in the body. It is worth noting, the consumption of high sugar high fat foods and beverages can exacerbate weight gain.

## **Dealing with stress**

How we deal with stress has a significant impact on many levels. If a person experiences undue stress or threat their appetite may be affected. The body shuts down suppressing any desire to eat.

Our hypothalamus (located at the base of the brain) controls appetite. It produces CRH corticotropin-releasing hormone which then suppresses appetite. The brain signals our adrenal glands to produce adrenaline which diverts attention away from eating and concentrates on the urgency of the threat.

Varying degrees of emotional turmoil increase the need to consume foods high in sugar or fat. These comfort foods provide a short-term mood booster which soon subsides and subsequently lowers your mood, this can create a varied spectrum of negative emotions.

Indeed, at a Harvard Medical conference last year we were informed by clinicians the importance of fundamental lifestyle changes to treat depression and anxiety amongst the population of the United States rather than administering prescription medication. Patients were given a prescription recommending a change of diet in conjunction with increased exercise as part of their treatment process.

When patients returned a month later for a follow up consultation with their clinician, there were noticeable improved changes to their overall mood, motivation, energy levels, sleep patterns, as well as physiological changes of reduced blood pressure, cholesterol and a reduction in visceral (abdominal fat) percentage.

A study published by The Journal of Clinical Investigation looked at factors contributing to the metabolic syndrome (MetS) a series of risk factors attributed to cardiovascular disease and type 2 diabetes amongst others. It concluded dietary and lifestyle changes decrease our chances of developing MetS, however the study also referenced how changes in the gut microbiome is also capable of mitigating the risk of contracting MetS.

We have learned through many clinical trials and studies concerning various aspects of how our body works as a complete system that a healthy microbiome is key to its healing.

As evidence mounts, the impact of the microbiome on our physical and psychological wellbeing has become clearer. We are certainly capable of intercepting our body's own makeup and strengthening its immune system through dietary and lifestyle changes.

Armed with this knowledge, theoretically we are accountable for our individual health now and in the future.

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