



Extracted from Love Your Gut by Sally Joseph, available through sallyjoseph.com; Amazon and selected independent book-sellers.

The organs within your digestive system need to work in harmony with one another in order to function at their best. Say, for example, you experience chronic constipation or diarrhoea (commonly referred to as Irritable Bowel Syndrome or IBS), this will impact on the function of all the other organs within your body, not just those within the digestive system.

Over time, if left untreated, this can lead to the development of other chronic illnesses and diseases, including anxiety and depression. An article published in the Journal of Clinical Psychiatry in 2001, claims that 50 to 90 percent of people treated for IBS have psychiatric disorders, including panic disorder, generalised anxiety disorder, social phobia, posttraumatic stress disorder and major depression. So the take home message is that the gut is typically the start and underlying root cause of most common health ailments and diseases, including autoimmune diseases and bowel cancer.

What Is A Leaky Gut?

Think of the lining of your gut like a pair of women's pantyhose- in that it is a semi-permeable membrane acting to enable specific substances like nutrients from your food to pass through to your bloodstream, but being tight enough to keep out unwanted microbes, allergens and toxins that can damage the delicate colonies of good bacteria within your gut.

Problems with our gut occur when the intestinal wall becomes damaged from things such as environmental toxins, antibiotics, pathogens and gluten - causing the tight junctions of your gut wall to weaken, and become excessively permeable, or 'leaky' - a little like a pair of laddered women's pantyhose. When the gut wall becomes excessively permeable, we develop a condition known as 'leaky gut syndrome'.

Leaky gut increases your exposure to bad bacteria, undigested food particles and toxins, which are able to leak from inside your gut wall into your blood stream.

This process triggers a chronic inflammatory immune response, which can have a systemic effect on the health of other organs within the body.

Groundbreaking research in 2000 by Alessio Fasano, at the University of Maryland, discovered that a protein known as zonulin is responsible for regulating the permeability of the gut wall - a little like the bouncer at a nightclub determining who gets let in and who gets locked out. His research revealed that excess zonulin production was primarily triggered by bacteria. resulting from infection and the consumption of gluten. This research is a significant step in finding more effective treatments for diseases that are related to an exaggerated production of zonulin - including autoimmune diseases, allergies and even cancer.

Gut Offenders

POOR DIET Excessive consumption of sugar, gluten, cow's dairy, coffee, alcohol, artificial additives and processed vegetable oils can have a catastrophic effect on your digestive function, altering your gut flora colonies and triggering chronic inflammation. The various strains of bacteria living within the gut vary from person to person, depending on what they eat, as well as where they live in the world. The Japanese are thought to have some of the healthiest colonies of good gut flora in the world - largely because of their diet.

MEDICATIONS Antacid medications, antibiotics. anti-inflammatory and steroid medications, antidepressants, pain killers and the oral contraceptive pill can all damage your gut wall and the balance of your gut flora colonies.

Antacids prescribed for reflux and heartburn are a classic example of a medication that not only fails to treat the underlying cause of the problem, but also actually exacerbates it when taken for long periods of time. If you have ever tried coming off these

medications without making any changes to your diet, you will know the symptoms usually return, often worse than before.

Antacids suppress the body's production of hydrochloric acid, ordinarily produced by the stomach to assist with the digestion of protein. By repressing this mechanism, the body loses its ability to effectively digest food, resulting in a domino effect of symptoms. Rather than taking antacids to treat reflux or heartburn, I recommend treating the problem at a causative level, by following a program (such as my Love Your Gut program) and supplementing with a digestive enzyme. By doing so, symptoms of acid reflux and heartburn will all but disappear in the majority of cases.

ANTIBIOTICS are a whole other kettle of fish. Society's thirst for this medication to treat every little sniffle and common cold has lead to a situation that threatens to have monumental consequences on our health. With every broad-spectrum course of antibiotics you take, you are reducing vast quantities of your gut's bacterial mass.

Even if you haven't been one to gobble multiple courses of antibiotics in your lifetime, you could be exposed to them through your food! Antibiotics are commonly administered to animals reared in feed lot or cages, such as beef cattle, chickens and pigs. Residual levels of these antibiotics accumulate within our system over time, causing an imbalance in our gut mircrobiome. This will not only leave you vulnerable to recurrent infection and proliferation of hostile pathogens like Candida, but the overuse of antibiotics has lead to the evolution of a new strain of super bugs that are resistant to most antibiotics.

A far better approach to human infection is prevention through eating organic foods and maintaining healthy gut flora colonies to boost your immune defenses. In many cases of infection, such as the common cold and flu, there are other far less destructive alternatives to antibiotics when they are not absolutely crucial for your health.

THE ORAL CONTRACEPTIVE PILL has provided women across the world with the convenience of reliable contraception since the 1960s, and as more and more women are becoming sexually active younger and choosing to start a family later, a woman can end up on the contraceptive pill for up to twenty years. What many women don't realise is that this convenience in a pill is decimating the good bacteria within our guts - increasing the risk of developing serious health problems.

A study of 230,000 American women by Harvard gastroenterologist Dr Hamed Khalili, found women who had been on the Pill for five or more years, were three times more likely to develop Crohn's disease than their hormone-free counterparts. Dr Hamed Khalili also noted in his findings that oestrogen is known to increase the permeability of the gut wall.

If you need to take a course of antibiotics, or choose to use the oral contraceptive pill, it's essential to replenish your colonies of good gut flora by taking a probiotic for at least two to three months in the case of antibiotics, or ongoing if you are taking the Pill, as well as include naturally fermented foods in your diet each day.

9 SIGNS YOU MAY HAVE A LEAKY GUT

- Regular bouts of gas, bloating, diarrhoea or IBS.
- Food allergies or food intolerances
- Seasonal allergies or asthma
- Regular infections chest, ear and throat, colds or flu
- Chronic Fatigue Syndrome or Fibromyalgia
- \bigcap Depression and anxiety
- Acne, rosacea, or eczema
- A Thrush
- Diseases like auto-immune, Parkinson's and Alzheimer's, Autism and ADHD

