12 Ways TO REPAIR YOUR LEAKY GUT
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Hippocrates was an ancient Greek physician who is now heralded as being the father of modern medicine. Much of his wisdom still rings true today, and the above quote is no exception.

Science has finally caught up to what Hippocrates penned nearly 2500 years ago. Indeed, the latest research can affirm that at least 90% of all modern health problems and diseases find their beginning in the gut.

Chronic diseases such as arthritis, diabetes, and depression are rising to epidemic proportions, and they are traced back to the irritated and inflamed gut. Even minor ailments, such as constipation, eczema, lack of libido, aches and pains, and fatigue are directly linked to gut dysfunction. Furthermore, a damaged gut can increase the levels of toxins in the body, leading to premature aging.

When your gut is unhealthy, the whole body is at risk. This is because the digestive, immune, nervous, and endocrine systems all communicate and interact with each other. When your gut is not functioning properly, the activities of the other three systems can be compromised.

The gastrointestinal (GI) tract is the engine of your body. It extracts nutrients from the food you consume and delivers energy to every cell
of the body needed for survival. It is a specialized, incredibly complex system, and every part plays crucial functions. Many processes occur along the 30-foot digestive superhighway, from the mouth to the anus, and things can go awry at any point \(^1\).

Bacterial imbalance, mechanical blockages, and other issues can wreak havoc on the smooth functioning of your digestive system, causing abdominal distress and bloating, or worse, chronic diseases.
What is ‘Leaky Gut’?

It may come as a surprise, but the lining of your intestines is only one cell thick. These intestinal cells form the barrier, known as the gut barrier, that separates you from the outside world. You can imagine it as being a wall in a castle fortress. But in this castle wall are multiple ‘gates’ that open and close, to let citizens in, and intruders out. These ‘gates’ are actually the tight junctions between each of the cells. These junctions have an important and delicate role. These junctions need to stay large enough to allow small vital nutrients to pass through into the bloodstream, while staying small enough to ensure that larger and potentially dangerous particles (castle intruders) do not cross or “leak” through.
When the gut barrier is compromised, it results in a condition called ‘intestinal hyperpermeability’, informally known as ‘leaky gut’. In a leaky gut, these junctions become consistently bigger, allowing the passage of harmful, larger elements such as toxins, pathogens, and even food particles to leak into the bloodstream [2]. It’s like having the castle gates continuously open. Additionally, every time an unwanted particle or pathogen enters the bloodstream, an immune response is triggered. So, if the gut continues to be ‘leaky’, the immune system has to be on constant attack. Thus, when a leaky gut is not healed, it leads to continuous and body-wide inflammation.

Unfortunately, this is taxing on the body, and can lead to a person developing a secondary inflammation-related condition or more [3]. It is not uncommon for people with chronic GI inflammation to develop autoimmune ailments such as Crohn’s disease, rheumatoid arthritis, multiple sclerosis, and ulcerative colitis [4].
The Role of the Microbiome

According to the Human Microbiome Project, around ten trillion bacteria live in your body, while you have only one trillion human cells. In a very practical sense, your microbiome makes up who you are. You are more bacteria than human, and your health heavily depends on the health of your gut.

The most vital part of your GI health is your gut bacterial community, also known as your microbiome. It consists of hundreds of interacting species that co-evolved with you in your gut and other parts of your body [5].

In a world where bacteria or ‘germs’ have been demonized, we need to remember that bacteria can not only be good for us, but vital for our survival. These little microbes, commonly known as “good bacteria,” are integral for boosting our immune system, protecting against pathogens, maintaining healthy digestion, keeping our hormone levels balanced, and making sure our brains are healthy and switched on.

Moreover, these bacteria protect the gut barrier, and work to ensure the cell wall junctions stay tight and healthy, thus preventing leaky gut.

They are permanent residents of the body, and most of them are found in the colon. Every person’s first contact with bacteria is in utero or at birth, and their bacterial community changes during their lifetime. Microbiota patterns vary from person to person due to different environmental conditions, such as medication, infections, and antigen exposure. In
addition, hygiene, age, and genetics also affect the microbiome community [6].

The interaction between you and your gut microbiome determines whether you stay fit or become unhealthy. Disturbances in the normal gut microbiota lead to bacterial translocation (bacterial overgrowth in non-ideal parts of the GI), intestinal barrier dysfunction (leaky gut), and intestinal dysbiosis (the wrong ratios of ‘good’ vs ‘bad’ bacteria) [7].
A leaky gut affects many aspects of human health. When the gut is compromised, you can experience many symptoms that are not just limited to the GI tract.

**Some Gut-Concentrated Symptoms**

- Constipation
- Gas
- Diarrhea
- Bloating
- Irritable Bowel Syndrome (IBS)
- Small Intestine Bacterial Overgrowth (SIBO)
- Celiac Disease
- Food sensitivities
- Gastric Ulcers
- Crohn’s disease

**General Symptoms of Gut Disorder**

Other symptoms of a leaky gut may not just present as digestive issues. As mentioned earlier, problems in the digestive system often extend into the other systems of the body, causing symptoms such as:

- Joint pain
- Arthritis
- Chronic fatigue
- Food allergies and sensitivities
- Nutritional deficiencies
Symptoms of Leaky Gut

- Weak immune system
- Skin rashes
- Weight gain
- Thyroid disorders

Brain-Related Symptoms
- Brain fog
- Depression
- Anxiety
- Mood swings

Autoimmune-Related Symptoms
- Rheumatoid Arthritis
- Neuropathy
- Neurological Symptoms
- Multiple Sclerosis
- Lupus
- Headache/migraine
- Hashimoto’s disease
- Fibromyalgia
- Alzheimer’s disease
Why Are Our Guts ‘Leaky’?

With the many factors mentioned above in mind, you could understand why it’s difficult to pinpoint one single cause of intestinal hyperpermeability. However, there are a few little-known culprits you should be aware of. Listed below are ten factors that can significantly affect the health of your GI tract and play a role in the development of leaky gut.

1. Food
The food you consume not only provides your own body with energy and nutrients that it needs to survive -- your gut microbiota also feed on what you eat. Some foods help grow and maintain healthy levels of the beneficial bacterial community. Other foods not only cause inflammation in your gut, but they also initiate the overgrowth of pathogenic bacteria.

Research shows that your diet has a significant and rapid impact on the abundance and variety of your gut microbiota. Certain types of foods can cause changes in the bacterial community in just 24 hours. When you consume food that alters the balance of bacteria living in your GI tract, it can also impair hormonal balance and immune function. And, as mentioned earlier, an unhealthy microbiome can lead to a leaky gut [8].

Secondly, a leaky gut can be caused by inflammation due to food sensitivities [9]. A food sensitivity is not the same as anaphylaxis, where a trigger food or substance may result in immediate swollen lips or closed airways. Reactions from food sensitivities are usually much more mild and potentially delayed (up to 72 hours), but are not unimportant as they
can create a chronic state of inflammation. Symptoms can include, but are not limited to, asthma, arthritis or joint pain, migraines, ear infections, or eczema. If you feel like you may have a food sensitivity, but you are not sure what it is, you may find it helpful to do an IgG test with your practitioner, or try an elimination diet.

Genetically Modified Organisms (GMOs)
There are two major concerns associated with genetically modified (GM) feed and food.

The first concern is about the effects of GM food on the body. Because they are under regulated by the government, and many products are new to the market, the long term effects of GMOs are unknown. What is known however, is that since GMOs were introduced in 1996, numerous health problems increased. Cases of people with food allergies, autism, reproductive disorders, and digestive issues all increased. However, it is unknown if these issues occurred because DNA changes in these bioengineered foods, or because of the second concern; glyphosate.

Genetically modified foods are engineered to withstand the intense chemical sprays of the herbicide, Round Up, which could kill any other non-modified plant. The active ingredient in this particular compound is called glyphosate. In 2015, the World Health Organization (WHO) classified glyphosate as a probable carcinogen. Glyphosate is also associated with breast cancer, birth defects, kidney disease, and is known to draw minerals and nutrients out of the body. Additionally, research suggests that glyphosate may also be damaging to the microbiome, and thus, impair gut health.

You can lower your exposure to glyphosate by choosing to eat organic.

Gluten
Gluten, found in grains such as wheat, barley and rye, can cause leaky gut
by stimulating the release of zonulin. Zonulin is a molecule released by intestinal cells, which causes the tight junctions of the gut wall to open. This is important mechanism in the body to ensure that nutrients pass from the gut into the bloodstream. However, when there is too much zonulin in the body, the ‘gates’ of the gut are left wide open, allowing undesired particles to pass through. The presence of gluten in the body can stimulate such an overproduction of zonulin, thus contributing to leaky gut.

You do not have to be celiac to be affected by gluten in this way [10].

Milk & Dairy Products
Research shows that dairy intake reduces the abundance and the diversity of the gut microbiota, especially in people who drink significant amounts of pasteurized milk products, which are relatively sterile in microbiota composition [11].

Other research indicates that the gastrointestinal digestion of protein in processed or raw milk leads to the production of a particular molecule that can cause an immune response, with symptoms such as skin reactions, rich mucus production, and inflammation. Moreover, this molecule slows down the passage of food through the digestive system [12].
Low Intake of Dietary Fiber
Data shows that not consuming enough dietary fiber causes microbiota-induced chronic diseases such as obesity. We must remember that fibre is food for our microbiome. Not getting enough fiber not only changes the abundance and diversity of the gut bacterial community, but it also alters the levels of products created during digestion (such as butyrate) that keep the junctions of the gut tight and prevent intestinal hyperpermeability.

Excessive Alcohol
Alcohol in the colon and the small intestine reduces the abundance of helpful bacteria that calm inflammatory activity. This eventually causes intestinal damage or even leaky gut by dissolving mucus on the intestinal lining, which is responsible for the proper function of the gut barrier \[13\] [14].

2. Environmental Contaminants
Many environmental contaminants, including pesticides, heavy metal, and antibiotics, can contaminate water and food. This leads to adverse health effects in the body, such as intestinal disorders, oxidative stress, and inflammation \[15\]. However, a healthy gut microbiota help reduces the toxicity of numerous contaminants by decreasing their absorption and enhancing the function of the gut barrier. Furthermore, it can help calm inflammation, as well as reduce the number of pathogenic bacteria by competing against them and producing compounds to fight them off.

Antibiotics
People are overly exposed to antibiotics not only through their medical use but also their utilization in crops and farm animals. We need to remember that antibiotics not only kill ‘bad’ bacteria, but ‘good’ bacteria too. Exposure to antibiotics therefore can rapidly alter the balance of the gut microbiome, causing immediate effects on health and the opportunistic growth of antibiotic-resistant pathogenic bacteria \[16\].
3. Depression
Through the gut-brain axis, changes in the microbiome and digestive system can affect the function and the structure of the brain, causing depression and anxiety. Similarly, changes in cognitive function affect the gut bacterial community and the gastrointestinal system [17]. Research shows that depression promotes the onset of irritable bowel syndrome (IBS), and the changes in the gut microbiota causing depression can worsen the symptoms of IBS [18].
4. Stress & Insufficient Sleep
Psychological and emotional stress can affect gut microbiota composition, creating dysbiosis. Then this dysbiosis, together with inflammation, can cause metabolic disease, affective disorders, circadian misalignment, and sleep loss. Insomnia alters the function of the immune system, biological rhythms, and the metabolism of nutrients in the body. At the same time, this insomnia affects the digestive functions and the bacterial community in the gut. It is a vicious cycle that starts and ends in the gut.

Further research showed that chronic stress initiates intestinal hyperpermeability, increases the levels of cortisol (a stress hormone), and reduces the abundance of bacteria that help calm inflammation, leading to the dysfunction of the microbiota-gut-brain axis. Chronic stress due to gut dysfunction can also stimulate the development of Parkinson’s disease. In people who already have Parkinson’s, chronic stress can initiate microbial dysbiosis and a leaky gut, which accelerates motor deficits and neuronal degeneration.

5. Obesity
Research shows that being overweight reduces the number of short-chain fatty acids (SCFA) in the GI tract that keeps the junctions tight, increasing the permeability of the gut and stimulating the development of non-alcoholic fatty liver disease.

6. Small Intestine Bacterial Overgrowth (SIBO) or Candida Overgrowth
Your gut bacteria primarily live in the large intestine. Sometimes however, due to factors like aging, poor motility, diabetes, low stomach acid or injury, the gut bacteria can overgrow in the small intestine. This is known as small intestine bacterial overgrowth (SIBO). This overgrowth can stimulate the release of the molecule zonulin, which opens up the...
junctions of the gut. If there is too much zonulin in your body, the ‘gates’ or tight junctions of your gut wall will continue to be open, creating leaky gut.

Additionally, leaky gut can be caused by a fungal overgrowth, referred to as candida. *Candida albicans* is a yeast that is naturally found in the mouth, the gut, and the birth canal \(^{[22]}\). A diet high in sugar, stress, alcohol or the use of oral contraceptives can all contribute to this fungal overgrowth \(^{[23]}\). This can then cause inflammation to the gut wall, causing leaky gut. A common sign of candida overgrowth is a white film over the tongue.

7. Maternal Factors
Your body’s first encounter with the microbiome is during your development in the womb and at birth. The composition of the gut microbiota then adapts and evolves as you grow and become exposed to various environmental factors. Recent studies indicate that the maternal factors that you encounter *in utero* and after birth can affect your immune system and gut microbiome. For example, children born via the vaginal canal have a much more robust and diverse microbiome than their counterparts born via c-section. Additionally, as children gain their microbial foundation from their mothers, it’s important that mothers do their best to nurture their own microbiome \(^{[24]}\).
Why Are Our Guts ‘Leaky’?

8. Childhood Trauma
Irritable bowel syndrome (IBS) is a disorder linked to the interactions of the gut and the brain, and it is also related to early adverse life events. Research indicates that people who experience severe traumatic incidents have a greater risk in developing IBS and gastrointestinal symptoms related to it [25].
Ways to Repair Leaky Gut

The best way to repair your leaky gut is to preserve the diversity and abundance of your body’s bacterial community, and lower GI inflammation as much as possible. Much of this can be achieved through food and lifestyle [26]. The following list is by no means exhaustive, but more importantly, your course of action will differ depending on your specific underlying ailment ie. if you have SIBO, or candida overgrowth, or a food sensitivity. That said, many action steps on this list may be helpful for most people.

1. Get Tested
If you suspect you may have leaky gut, or intestinal permeability, we recommend that you find a gut-knowledgeable health practitioner to guide you through testing. This is because a leaky gut can be the result of many different root causes, whether it be SIBO, candida, food sensitivities or other factors. You may also need to talk with your practitioner about your diet or lifestyle factors, that may inadvertently contributing ill health. Additionally, there are always genetic factors at play. No one size fits all for health, and the same applies for gut health. There are breath tests you can do for SIBO, or stool, urine or blood tests
you can do for candida. Speak to your health practitioner about the best course of action for you.

2. Rest & Relax
Any change in the gut microbiota affects the performance of the brain, which causes anxiety and depression \[^{[27]}\]. Practicing meditation is one way to reduce stress and calm the fight-or-flight response, which prompts the release of hormones and neurotransmitters in the body that disturb the microbiota. When stress levels are low, the gut bacterial community can efficiently create anti-inflammatory compounds to heal a leaky gut \[^{[28]}\].

3. Get Sufficient Sleep
Getting enough sleep regulates the production of inflammatory substances secreted by the immune system caused by sleep deprivation. Decreasing inflammation can prevent the further development of IBS, liver disorders, gastroesophageal reflux, and colorectal cancer. Correspondingly, the sleep-deprivation related diseases exacerbate the same gastrointestinal diseases \[^{[29]}\].

4. Remove Triggers
Avoid the foods that trigger an immune response, as well as those that cause inflammation and increase the levels of pro-inflammatory and pathogenic bacteria. Eliminate or reduce GM food, sugar, gluten, dairy, processed foods, and alcohol. It’s a great idea to try to eat organic as well. Look up The Dirty Dozen, Clean Fifteen by EWG (www.ewg.org/foodnews) to learn how you can shop organic on a budget. You’ll learn which foods you must definitely buy organic, and which foods are safe to buy non-organic.
5. Probiotic Supplements
Several recent studies have shown that probiotic supplements can enhance the production of proteins that are responsible for the tight junctions of the GI tract barrier, reversing leaky gut. Another study shows that probiotic supplements reduce the levels of toxic free radicals in the body, increasing the body's ability to detoxify and counteract their effects through the antioxidant functions of beneficial bacteria. Fermented foods, such as sauerkraut, kimchi, miso, tempeh and kombucha, also contain helpful bacteria (probiotics) that may help repair a leaky gut.

If you have SIBO or candida overgrowth, this is not the best immediate course of action.

6. Prebiotics
Different from probiotic supplements, prebiotics help alleviate the symptoms of and heal leaky gut. The non-digestible carbohydrates and dietary fiber in prebiotics promote the growth of beneficial microorganism communities in the body. They serve as food for your gut microbiota and you can get them by eating prebiotic-rich raw food, such as chicory root, Jerusalem artichoke, dandelion greens, cooked beans, garlic, leeks, onion (even cooked), asparagus, and banana. You can also get them from apples, konjac root, cocoa, burdock root, flaxseeds, yacon root, jicama root, and seaweed.

If you have SIBO, this is not the best immediate course of action.

7. Anti-Inflammatory Foods
Turmeric, ginger, and other anti-inflammatory foods can be fantastic for your gut! In fact, according to a double-blind study in the Journal of Evidence-Based Integrative Medicine, turmeric can cause a 70% improvement in good gut bacteria in less than 60 days!
According to another study in the *Phytotherapy Research Journal*, turmeric (or more specifically, curcumin, which is the active ingredient in turmeric) is “significantly better” for joint pain than conventional anti-inflammatories... And comes without the side effects! Amazing right?!

These special foods, like turmeric and ginger also contain polyphenols, which are compounds that have anti-inflammatory, anti-aging, and antioxidant properties, as well as neuro and cardiovascular protection. Polyphenols reduce the risk of diseases in the intestine, and they have prebiotic-like activities that help increase the abundance and diversity of gut microbiota, helping prevent and treat gastrointestinal disorders [33].

8. Herbs
Marshmallow Root
Now, we are not referring to marshmallow candies! But did you know that the marshmallow root (from which marshmallow candies are made), are full of health benefits? In addition to soothing skin, coughs and the digestive tract (among many other things), marshmallow root can also assist to repair the gut lining. Recent research shows that dried marshmallow root contains proline as the main compound. Proline is an amino acid that helps build protein in the body for tissue repair, and it is stored in the
collagen. In reference to leaky gut, marshmallow root creates a protective layer around the GI cell junctions. You can take marshmallow root as a tea, tincture, powder or within supplement capsule.

**Aloe Vera**
Aloe vera leaves contain compounds that are broken down in the body into metabolites that inhibit the production of proinflammatory cytokines -- molecules that promote inflammation\(^\text{[34]}\). Moreover, aloe vera extracts reduce the levels of gastric acid in the stomach that prevents further damage to a leaky gut\(^\text{[35]}\).

**Licorice Root**
Several clinical and experimental studies show that the rhizomes and roots of licorice (Glycyrrhiza) can treat several diseases through their pharmacological properties. These properties include anticancer, antiasthma, antidiabetic, antioxidative, antimicrobial, antiviral, and anti-inflammatory activities, as well as cardioprotective, neuroprotective, hepatoprotective, gastroprotective, and immunomodulatory effects\(^\text{[36]}\). Licorice root also helps maintain the mucosal lining of the stomach and duodenum. It can be taken as a tea or supplement. Be aware however, licorice can cause edema and hypertension when taken in very large quantities, so just don’t overdo it!

**9. Increase Intake of Dietary Fiber (prebiotics)**
As mentioned earlier, dietary fiber (prebiotics) are the food of microbes (probiotics). These microbes ferment these insoluble fibers to produce compounds that can soothe inflammation\(^\text{[37]}\). Sufficient intake of fiber produces significant levels of these compounds, which helps keep the junctions of the gut tight, preventing intestinal hyperpermeability\(^\text{[38]}\).

**Butyrate**
One of the many metabolites derived by gut microbiota from the dietary
fiber is butyric acid or butyrate. Butyrate, along with other fermentation-derived products, is a molecule that has promising effects in treating various diseases, including colorectal cancer, inflammatory (bowel) diseases, diabetes, and obesity, as well as neurological disorders. In short, your immune function and energy metabolism depend on the regulation of butyrate. 

Research shows that butyrate can improve neurological disorders, from depression to cognitive impairment and neurodegenerative diseases. The proper function and structure of the brain are directly related to the proper function and structure of the gut as well as the composition of the GI tract microbiota.

If you have SIBO or candida overgrowth, consuming more fiber is not the best immediate course of action.

10. Exercise
Evidence shows that exercise increases the diversity of the gut microbiota, combating dysbiosis. Thus, it can enhance the functions of the GI tract bacterial community to suppress inflammation and regulate the immune response.

11. Dietary Supplements
L-glutamine
Often known as glutamine, this compound is one of the most versatile and abundant amino acids in the body. Studies determined that glutamine is vital for the production of a type of white blood cell that fight disease and illness, and molecules that aid cell communication during an immune response and initiate cell movement to the site of trauma, infection, and inflammation. While the body makes L-glutamine, it may still be helpful
to consume additional L-glutamine in supplement form, particularly beneficial for people with immune response disorders.

Moreover, research shows that glutamine supplements reduce the symptoms of intestinal hyperpermeability-induced IBS with post infections and predominant diarrhea [42]. Further, glutamine prevents alcoholic injury in the tissue and dysfunction of the colon, as well as liver damage and the spread on toxins found in bacteria in the blood, causing shock, kidney necrosis, and hemorrhages [43]. Please note however that some people with certain genetic mutations do not feel well while on L-glutamine supplements. If you feel nauseous while on L-glutamine, discontinue use.

Digestive Enzymes
You’ve been told that “you are what you eat”. But a more accurate truth is, “you are what you digest”. Acquiring food is only part of the challenge in order to survive and stay healthy. An equally important task is actually digesting and utilizing the food you eat. Food needs to be broken down to smaller, simpler compounds before your body can absorb them.

This important process of breaking down food for its nutritional components is performed by enzymes, which are either the products of your microbiome or found naturally in your digestive tract [44].

However, sometimes our body’s natural processes are compromised, and we need supplemental support. There are a few reasons your body may need assistance from digestive enzyme supplements, such as digestive disease, liver disease, pancreatic disease, or simply the aging process.

In these cases, digestive enzymes may decrease the burden of digestion on the digestive organs, which in turn reduce inflammation, and ultimately, leaky gut [45].
12. Essential Oils
Essential oils can be a sweet smelling way to nurse your gut back to health. Below are a few oil options you may want to try for relieving gut symptoms. However, we always recommend you discuss dosage and applications with a knowledgeable natural health practitioner.

Lavender
Lavender is a popular oil for essential oil enthusiasts. It’s gentle, a potent anti-inflammatory and known as a general healing oil. Did I mention it smells amazing? Lavender has also been known to calm anxiety and lift depression. As we learned earlier, the gut influences the brain, and the brain influences the gut. Lavender interestingly can benefit both individually, which enhances both on the other end! It’s a win-win scenario on both sides.

Thyme & Rose
The chemical components of thymol (in thyme) and geraniol (found in oils such as rose) have been shown to be a helpful remedy for SIBO.

Peppermint
Peppermint can assist digestion in both whole herb form, and oil form.
We have only been able to scratch the surface on the topic of the gut, and even leaky gut. However, we hope the information you have learned in this ebook will assist you in understanding the importance of a healthy gut, and help you adjust your daily habits to improve your health.

However, we hope your journey doesn’t end here. You need to know the full story.

As such, we’d like to officially invite you to the free screening of *The Gut Solution*, which airs on February 13, 2019.

*The Gut Solution* is an 8-part documentary series that discovers that the hidden root cause behind obesity, depression, anxiety, skin issues, autoimmune disease, and even cancer, can be in the gut. This cutting-edge series draws from the wisdom of 40 world-leading experts, who share how to reverse all of these common ailments that we face today by sharing the tools to heal the gut.

If you are frustrated with your health, and you don’t know what’s wrong, do not ignore your gut. For many people, gut health is the missing piece of the puzzle.

So, take action today. Watch this groundbreaking series, and learn what you can do to truly restore your health.
Conclusion

If you haven’t already, secure your free spot to watch the series by entering your name and email on www.gutsolutionseries.com or clicking the button below.

We’ll see you on February 13!
References


gastric acid secretion and brain and intestinal water content following acetic acid-induced gastric ulcer in male rats.

Keshavarzi Z, Rezapour TM, Vatanchian M, Zare Hesari M, Nabizade Haghighi H, Izanlu M, Sabaghian M, Shahveisi K.


Microbiota and Food Allergy. Shu SA, Yuen AWT, Woo E, Chu KH, Kwan HS, Yang GX, Yang Y, Leung PSC.


45. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4923703/