

LEAKY GUT SYNDROME

Another in Dr. Smith's Client Education Series

This pamphlet is complimentary to Dr. Smith's clients.

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Leaky Gut Syndrome

Ever heard of Leaky Gut Syndrome? Yes, it is a medical condition. To most people it is not a familiar disorder, but chances are either you, or someone you know, has it.

Here's what happens. You eat food, it is digested in your stomach, then passed on to the intestines. You receive nutritional benefit from foods when food/nutrients are absorbed **through** the intestinal walls, where the nutrients enter the blood stream, then delivered to individual cells.

Problems occur when the intestinal walls become inflamed, which causes a separating of the cells, which allows partially digested foods and bacteria to enter the blood stream. Compound this problem with the fact that most people have a problem with constipation, and you will see that what is allowed to enter the blood stream was only meant for the toilet. Can you imagine drinking a cup of filthy toilet water per day? Well, that is similar to the effects of Leaky Gut Syndrome.

Now, when this filthy mess hits the blood stream the immune system is alerted that "foreign invaders" are present, and goes about its business to neutralize the threat. When this happens, the food you are eating for health and wellness becomes the enemy as antibodies attack the food/filth, and now your food becomes an **antigen** or **allergen**. In other words, you begin to develop food allergies.

To make matters worse, the **antigen/allergen** complexes settle in specific sites in your body and can cause arthritis in that area, and can contribute to degenerative disorders such as chronic fatigue, immune disorders, kidney disorders, liver disorders, Lupus, multiple sclerosis, and thyroid disorders. You see, what is happening is that your immune system is so busy fighting the enemy (your food), that it doesn't have time to protect you against other problems.

What are some of the causes of Leaky Gut Syndrome?

1. **Drugs, Pathogenic Bacteria, Candida, and/or Parasites** - All can cause a chronic irritation in the intestinal walls.

Antibiotics, aspirin and other anti-inflammatory drugs, and excessive laxatives are some of the most common drugs that can cause a chronic irritation in the intestinal walls, but in truth the list seems endless. A safe rule of thumb is to talk to your health care provider about using natural means whenever possible, and using drugs only for acute situations.

Drugs such as antibiotics, too much sugar, toxic chemicals, food additives, and

polluted water are some of the causes for an overgrowth of pathogenic bacteria, is also known as "unfriendly bacteria," and usually responds well to "friendly bacteria" such as L-acidophilus, bifidus, bulgaricus, etc.

2. When the "unfriendly" bacteria take over, you generally also have Candida, which can produce acetaldehyde, which damages membranes, and can contribute to many serious disorders such as leaky gut syndrome-

Parasites are not as uncommon as most people believe and can cause many health disorders, specifically leaky gut syndrome.

3. Intestinal Mucosa protects the intestinal walls, and acts as a barrier to help stop the absorption of toxic chemicals. However, when these toxic chemicals reach a certain point, especially when constipation is a chronic problem, the mucosa lining becomes compromised.

What types of toxic chemicals are the worst? Some of the worst offenders are pesticides, food additives, contaminated water supply (the average city's "safe" water contains over 800 toxic chemicals *including* flouride), alcohol, coffee, dyes, and preservatives.

4. Liver - The liver filters out toxins, but when one has Leaky Gut Syndrome, those toxins that were sent to the intestines for elimination are reabsorbed into the system, causing the liver to work overtime trying to re-detoxify and eliminate. When there is a chronic overload of toxins, they are stored in the body's tissues, setting up sites of infection. Teeth roots (needing root canals) and heart valves (why you need to take antibiotics prior to dental work) are the most susceptible to infection.

So, basically we have a cycle of ingesting toxic substances that disrupt the intestinal flora (friendly bacteria), which causes chronic inflammation of the intestinal walls, which causes the cells to separate, thereby allowing toxins and food to pass into the blood stream, causing an overload of work and exhaustion to the liver and immune system. Eventually these toxins are stored in the tissues, and the body's major defense and cleansing systems continue to malfunctioning as more and more toxins flood the blood stream. Can you see how this might lead to serious diseases? What to do? **DETOXIFY YOUR BODY!**

1. Use supplements and tinctures to help detoxify your body. The suggestions are below.

2. Exercise and sweat. Exercising can help to work out the toxins from your tissues, and sweating is another form of toxic elimination. If you have difficulty exercising, start with a sauna or jacuzzi.

Also, exercising will help to relieve constipation. A common sign of extreme toxicity is

experiencing light-headedness or nausea when exercising or when warm. This is because the toxins are being released from your tissues.

So, talk to your health care provider, and exercise/sweat with caution when experiencing discomfort. The key to detoxification is to take it slow and easy. If exercising makes you sick, back off and do less, but don't stop unless your health care provider recommends it. If you can't exercise for 20 minutes per day, try 10, or 5, or even 3 minutes.

3. Diet - Sorry folks, but there is no way around it. The old saying, "Garbage in, Garbage Out," does **NOT apply** to Leaky Gut Syndrome. It is more like "Garbage in, Garbage stored in the tissues." Begin by eating at least 40 grams of fiber per day. If raw vegetables are difficult you can supplement with psyllium seed husks available as capsules in your health food store or Metameucil™ at your corner drug store. Follow the Candida diet that follows.

4. Protocol – Healing leaky gut isn't all that difficult. First, you have to "band-aid" the portion of the gut that is porous to help the healing process. The simplest way is ¼ cup of aloe vera juice in the morning and evening. The cheap "stuff" in most Wal-mart stores is just fine for this. You can dilute the aloe vera with cranberry juice if you like. Assuming there is no parasitic activity (which is a huge assumption) take New Zealand Colostrum which has been clinically proven to heal leaky gut. Immediately begin taking probiotics (L-acidophilus, bulgaricus, etc.). We also recommend **d-Lenolate** or **Colloidal Silver** to kill the C-albicans.

Altered Immunity & The Leaky Gut Syndrome **By Dr Zoltan P Rona MD, MSc**

The leaky gut syndrome is a name given to a very common health disorder in which the basic organic defect (lesion) is an intestinal lining which is more permeable (porous) than normal. The abnormally large spaces present between the cells of the gut wall allow the entry of toxic material into the blood stream that would, in healthier circumstances, be repelled and eliminated.

The gut becomes leaky in the sense that bacteria, fungi, parasites and their toxins, undigested protein, fat and waste normally not absorbed into the bloodstream in the healthy state, pass through a damaged, hyperpermeable, porous or "leaky" gut.. This can be verified by special gut permeability urine tests, microscopic examination of the lining of the intestinal wall as well as the bloodstream with phase contrast or darkfield microscopy of living whole blood.

Why is leaky gut syndrome important? The leaky gut syndrome is almost always associated with autoimmune disease and reversing autoimmune disease depends on healing the lining of the gastrointestinal tract. Any other treatment is just symptom suppression. An autoimmune disease is defined as one in which the immune system makes antibodies against its own tissues. Diseases in this category include lupus, alopecia, rheumatoid arthritis, polymyalgia rheumatica, multiple sclerosis, fibromyalgia,

chronic fatigue syndrome, Sjogren's syndrome, vitiligo, thyroiditis, vasculitis, Crohn's disease, ulcerative colitis, urticaria (hives), diabetes and Raynaud's disease.

Physicians are increasingly recognizing the importance of the gastrointestinal tract in the development of allergic or autoimmune disease. Understanding the leaky gut phenomenon not only helps us with safe and effective therapies to bring the body back into balance. Due to larger than normal spaces between the cells of the gut wall, larger than usual protein molecules are absorbed before they have a chance to be completely broken down as occurs when the intestinal lining is intact. The immune system starts making antibodies against these larger molecules because it recognizes them as foreign, invading substances. The immune system starts treating them as if they had to be destroyed. Antibodies are made against these proteins derived from previously harmless foods. Human tissues have antigenic sites very similar to those on foods, bacteria, parasites, candida or fungi.

The antibodies created by the leaky gut phenomenon against these antigens can get into various tissues and trigger an inflammatory reaction when the corresponding food is consumed or the microbe is encountered. Autoantibodies are thus created and inflammation becomes chronic. If this inflammation occurs at a joint, autoimmune arthritis (rheumatoid arthritis) develops. If it occurs in the brain, myalgic encephalomyelitis (a.k.a. chronic fatigue syndrome) may be the result. If it occurs in the blood vessels, vasculitis (inflammation of the blood vessels) is the resulting autoimmune problem. If the antibodies start attacking the lining of the gut itself, the result may be colitis or Crohn's disease. If it occurs in the lungs, asthma is triggered on a delayed basis every time the individual consumes the food which triggered the production of the antibodies in the first place. It is easy to see that practically any organ of the body tissue can become affected by food allergies created by the leaky gut. Symptoms, especially those seen in conditions such as chronic fatigue syndrome, can be multiple and severely debilitating.

The inflammation that causes the leaky gut syndrome also damages the protective coating of the IgA family normally present in a healthy gut. Since IgA helps us ward off infections, with leaky gut problems we become less resistant to viruses, bacteria, parasites and candida. These microbes are then able to invade the bloodstream and colonize almost any body tissue or organ. When this occurs in the gums, periodontal disease results. If it happens in the jaw, tooth extraction or root canals might be necessary to cure infection.

In addition to the creation of food allergies by the leaky gut, the bloodstream is invaded by bacteria, fungi and parasites that, in the healthy state, would not penetrate the protective barrier of the gut. These microbes and their toxins, if present in large enough amounts, can overwhelm the liver's ability to detoxify. This results in syndromes such as confusion, memory loss, brain fog, or facial swelling when the individual is exposed to a perfume or to cigarette smoke that he or she has had no adverse reactions to prior to the development of leaky gut syndrome.

Leaky gut syndrome also creates a long list of mineral deficiencies because the various carrier proteins present in the gastrointestinal tract that are needed to transport minerals to the blood are damaged by the inflammation process. For example, magnesium deficiency (low red blood cell magnesium) is quite a common finding in conditions like fibromyalgia despite a high magnesium intake through the diet and supplementation. If the carrier protein for magnesium is damaged, magnesium deficiency develops as the result of malabsorption. Muscle pain and spasms can occur as a result. Similarly, zinc deficiency due to malabsorption can result in hair loss or baldness as occurs in alopecia areata. Copper deficiency can occur in an identical way leading to high blood cholesterol levels and osteoarthritis. Further, bone problems develop as a result of the malabsorption of calcium, boron, silicon and manganese.

The Causes

The leaky gut syndrome is basically caused by the inflammation of the gut lining. This inflammation is usually brought about by the following:

Antibiotics because they lead to the overgrowth of abnormal flora in the gastrointestinal tract (bacteria, parasites, candida, fungi; alcohol and caffeine (strong gut irritants); **foods and beverages contaminated by parasites** like giardia lamblia, cryptosporidium, blastocystis hominis and other food and beverage contaminated by bacteria like helicobacter pylori, klebsiella, citrobacter, pseudomonas and other chemicals in fermented and processed food (dyes, preservatives, peroxidized fats); **enzyme deficiencies** (e.g. celiac disease, lactase deficiency causing lactose intolerance) NSAIDS (non-steroidal anti-inflammatory drugs) like ASA, ibuprofen, indomethacin, etc.); **prescription corticosteroids** (e.g. prednisone); **high refined carbohydrate diet** - (e.g. candy bars, cookies, cake, soft drinks, white bread); **prescription hormones** like birth control pills; **mold and fungal mycotoxins** in stored grains, fruit and refined carbohydrates.

The leaky gut syndrome can cause the malabsorption of many important micronutrients. The inflammatory process causes swelling (edema) and the presence of many noxious chemicals, all of which can block the absorption of vitamins and essential amino acids. A leaky gut does not absorb the nutrients properly. Bloating, gas and cramps occur as do a long list of vitamin and mineral deficiencies. Eventually, systemic complaints like fatigue, headaches, memory loss, poor concentration or irritability develop.

Prescription broad spectrum antibiotics, especially when taken for extended periods of time, wipe out all the gut friendly bacteria that provide protection against fungi and amoebic (parasitic) infections, help the body break down complex foods and synthesize vitamins like B12 and biotin. Since the friendly bowel flora is killed off, the body now has no local defense against parasites or fungi that are normally held in check. This then quickly develops and these may trigger the signs and symptoms of arthritis, eczema, migraines, asthma or other forms of immune dysfunction. Other common symptoms of this bowel flora imbalance and leaky gut syndrome are bloating and gas after meals and alternating constipation and diarrhea. This set of symptoms is usually labeled as IBS (irritable bowel syndrome) or spastic bowel disease and treated symptomatically by

general practitioners and gastroenterologists with antispasmodic drugs, tranquilizers or different types of soluble (psyllium) and insoluble (bran) fiber.

The Leaky Gut and IBS

The mainstream thinking on IBS is that it is caused by stress. Irritable Bowel Syndrome is the number one reason for general practitioner referrals to specialists. In well over 80% of the cases, tests like intestinal permeability test (a special urine test involving the determination of the absorption rates of two sugars called lactulose and mannitol), CDSA or livecell phase contrast microscopy reveal the presence of an overgrowth of fungi, parasites or pathogenic bacteria. The one celled parasite, blastocystis hominis and different species of candida are the most common microbes seen in IBS. The only stress associated with IBS is that which is generated by leaky gut syndrome. If allowed to persist without correct treatment, IBS can progress into more serious disorders like the candidiasis syndrome, multiple chemical sensitivities, chronic fatigue syndrome, many autoimmune diseases and even cancer. If treated medically, IBS is rarely cured. To treat it correctly, natural treatments work best and must include the removal of the cause, improvement of gastrointestinal function and healing the lining of the gut.

How to reverse Leaky Gut syndrome

Band-Aid treatment with corticosteroids, prescription antibiotics and immunosuppressive drugs may be temporarily life saving for acute episode of pain, bleeding or severe inflammation as occurs in lupus or colitis. In the long run, however, none of these treatments do anything to heal the leaky gut problem. To reverse the leaky gut syndrome the diet must be completely changed to one which is as hypoallergenic as possible. Sugar, white flour products, all gluten containing grains (especially wheat, barley, oats and rye), milk and dairy products, high fat foods, caffeine products, alcohol and hidden food allergies determined by testing must all be eliminated for long periods of time (several years in the more severe cases).

Treatment might also include the use of natural antibiotics: (echinacea, colloidal silver, garlic), antiparasitics:(cloves, wormwood, black walnut) and antifungal (taheebo, caplytic acid, grapefruit seed extract) depending on the type of infection which shows up on objective tests. It is rare that victims require prescription drugs for these infections and they should be discouraged. The drugs are usually expensive, have unpleasant side effects and are best reserved for life threatening conditions. Leaky gut syndrome patients can help themselves by chewing their food more thoroughly, following the basic rules of food combining, eating frequent small meals rather than three large ones and taking more time with their meals. Gastrointestinal function can be improved with a juice fast or a hypoallergenic diet and supplements like lactobacillus acidophilus and bifidus as well as FOS (fructooligosaccharides) derived from Jerusalem artichoke, chicory, the dahlia plant or burdock root.

Beneficial supplements for leaky gut syndrome.

Natural digestive enzymes - from plant (e.g. bromelain, papain) or pancreatic animal tissues (porcine, bovine, lamb) and aloe vera juice with high MPS concentration (good brands are International Aloe, Earthnet and Royal); **stomach enhancing**

supplements- betain and pepsin, glutamic acid, stomach bitters, apple cider vinegar; amino acids - L-glutamine, N-acetyl-glucosamine (NAG) **essential fatty acids** - milled flax, flax seed oil, evening primrose oil, borage oil, olive oil, fish oil, black current seed oil; soluble fiber - psyllium seed husks and powder, apple and citrus pectin, the rice derived gamma oryzanol; **antioxidants**- carotenoids, B complex. Vitamin C, E, zinc, selenium, germanium, coenzyme Q10, bioflavonoids, especially quercetin, catechin, hesperidin, rutin and proanthocyanidins (pycnogonals, grape seed extract, pine bark extract, bilberry; herbs **and plant extracts** - kudzu, various high chlorophyll containing green drinks like spirulina, chlorella and blue-green algae, burdock, slippery elm, Turkish rhubarb, sheep sorrel, licorice root, ginger root, goldenseal, bismuth and bentonite.

Colostrum: - Colostrum has been clinically proven to heal leaky gut and increase immune response.

Due to the increasing recognition of chronic fatigue syndrome, the leaky gut syndrome and multiple chemical sensitivity, a number of supplement companies have been marketing powdered hypoallergenic formulations containing most of the nutrients mentioned above in one convenient package. Some brand names include UltrabalanceB, UltraClear, SustainB, UltraClear PlusB, Pro-Cleanse, Pro-Support, and AntiClear. The products are only available through natural health practitioners like chiropractors, nutritional doctors and naturopaths. If you suspect you may be suffering from leaky gut syndrome, the most important thing to do is get yourself tested by a natural health care practitioner. A personalized natural program of diet and supplements can then be instituted to help you reverse this debilitating condition.

Candida Diet

Without strict adherence to the following diet, no anti-candida drug or treatment will succeed.

- (1) **Avoid added sugars** (including fructose, honey, molasses, fruit-juice sweeteners, etc.) **and all sugar-sweet foods and snacks**, including cakes, cookies, candies, desserts, sodas, fruit-juice and ice-cream, **unless they are made with a sugar-substitute like stevia extract**, which is a natural sweetener, available at health food stores. If you can cut out sugars for 3 days, their 'spell' will be broken and you will be able to resist them quite easily, **especially once any thyroid, chromium and/ or manganese deficiencies are corrected**. 1-2 servings of whole-fruits per day (except the very sweetest kinds, like grapes, watermelon and mango) are OK.
- (2) **Avoid white-starch foods**, like white bread, cakes, cookies, white pasta, white rice, potatoes w/o their skins, and all refined flours, etc.. Whole-grain flour, in moderation, is acceptable, unless you are a 'carbohydrate addict'; also potatoes **with** their peels, whole-grain brown or wild rice, whole-grain pasta (usually available in the deli section of supermarkets), etc. We see no reason to avoid other yeasts - they could help to **contain** candida yeast. Avoid dairy products, except live culture yogurts. We believe some of the prohibitions bandied around are "old wives' tales" with no scientific evidence to support them. Avoiding them puts an unnecessary burden on the patient, discouraging adherence to any form of anti-candida diet and derailing the whole treatment-effort.
- (3) **Increase your intake of essential oils**, esp. omega-3 oils, which are very lacking in the Western World's diet. These include: Fish oils, and oily fish, like salmon, mackerel, tuna-in-oil, sardines-in-oil, etc.; our choice is Squalamine, Flax-seed, borage and evening primrose oils. One tablespoon or two 1,000 mg capsules of any of these, **twice** daily, should do the trick. Some of these oils can be used as salad-dressing, instead of olive oil, or on whole-grain breads or baked potato, instead of butter. Avocados, nuts, olives and olive-oil, and other vegetable oils are mostly omega-6, which are also good but not as lacking in our diets.
- (4) **Avoid antibiotics and cortisone-type prescriptions** if at all possible.

Treatments

- (1) **Probiotics** (or Primadophilus or Bifidus capsules), 700-1,000mg (or at least 1 million organisms) after breakfast and after supper daily, either indefinitely or at least for 6 months. Dr. Smith's Probiotic formula contains 700,000,000 organisms. This and the above diet are usually enough to **prevent** - or prevent the **return** of a **previous** - overgrowth of candida yeast in the blood and intestines. A homeopathic remedy called **AquaFlora**, and some herbs, are also said to be effective. If stronger

treatment is required, i.e. when you have elevated candida antibody titers in your blood, we recommend:

- (2) **Caprylic (or Undecanoic) Acid** capsules 700-1,000mg (preferably including herbal anti-candida substances as well), after brkfst and after supper daily, for 3-9 months, depending on the blood antibody titers. The dose for undecanoic acid is 2x50mg after brkfst and supper daily.
- (3) **Colloidal Silver** (<0.001 micron particle-size, **10-17 ppm**), one teaspoonful after breakfast and supper daily, for 3-9 months (until the antibody titers are normal). Some say that a few drops held in the mouth can be as effective as a whole teaspoonful swallowed (and is therefore much cheaper) but, so far, we are not able to confirm or refute that. We have not seen any evidence of 'argyria', a silver-grey discoloration of the skin that is supposed to follow. This substance was used as an antimicrobial agent before we had antibiotics, and was quite safe.
- (4) **Aloe vera** juice. Take ¼ cup in the morning and evening. This effectively “band-aids” the porous colon and gives enough relief for the colon to more easily heal. Any inexpensive aloe vera juice will suffice so it isn't necessary to purchase the most expensive aloe available.

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Company Profile

Old Loft Enterprises, LLC is a Nevada Limited Liability Corporation.

The Manager and Founder is Hugh Smith, Ph.D.

Dr. Smith is an internationally respected and well known researcher in chronic illnesses and mycoplasma infections. Many M.D.'s depend on Dr. Smith for consultation and often refer their "difficult" patients to him for help.

His background in microscopy represents 20 years of research in nutrition, bio-psychology, bio-energetics and **Targeted Nutritional Intervention-TNI**. Dr. Smith writes for several magazines, researches for nutrition companies as well as the design of training programs for health care professionals interested in adding nutritional counseling to their practices. His expertise in nutrition is represented in nationwide seminars.

Based upon his clinical observations, Dr. Smith has developed several innovative products designed to slow the aging process and naturally combat chronic illnesses. Nutritional counseling is effective with ADD/ADHD, fibromyalgia, chronic fatigue syndrome, irritable bowel syndrome, weight loss, arthritis, candidiasis and more.

Dr. Smith specializes in Vital Hematology (or Real Time Microscopy) as a means of observing cell wall deficient forms and the living blood of clients to recommend nutritional interventions to reverse risk factors for chronic disease and nutritional deficiencies. (If an individual is interested in scheduling a consultation, please e-mail for details and fee schedules to hugh@biocytomics.com or call the office at 760-613-8645.

Currently, Dr. Smith's research facility is located at 9833 Pacific Hieghts Blvd. Suite "A", San Diego, Ca 92121. Initial client visit includes the observation of living blood (with a video tape of the observation included), and nutritional counseling for chronic illness and potential risk factors.

Individuals interested in scheduling a seminar or group demonstration of Vital Hematology should address e-mail to Dr. Smith at hugh@biocytomics.com

Dr. Smith's research schedule no longer makes it possible for personal demonstrations. However, several of Dr. Smith's colleagues are available for demonstrations to groups, health food stores and/or practices wishing to offer nutritional interventions to their clients and practice. For details, please call the office.