

## Herbal Treatments for Leaky Gut Syndrome

By Geoff D'Arcy, Lic. Ac., D.O.M.

Leaky gut syndrome or, “altered intestinal permeability,” is a condition gaining more conventional appreciation and has been found to be an important common denominator underlying many chronic health problems. Conditions such as toxic headaches, fatigue or malaise, parasites, candida, chronic autoimmune diseases including lupus, rheumatoid arthritis, multiple sclerosis, fibromyalgia, chronic fatigue syndrome, vitiligo, thyroiditis, vasculitis, Crohn’s disease, ulcerative colitis, hives and Raynaud’s disease all may have “Leaky Gut Syndrome” as an underlying cause.

When the gut become “leaky” or porous, it allows passage of toxic materials to flow into the bloodstream creating a host of chronic problems. These toxic materials could include: undigested proteins, bacteria, fungi, parasites and their toxins, and undigested fats and wastes that are not properly absorbed.

Our society’s overuse/abuse of NSAID’s (aspirin, ibuprofen, etc.), antibiotics, steroids, and alcohol, combined with inadequate nutrition and stressful lifestyles are all contributing factors to the degradation of colon health and contribute to leaky gut.

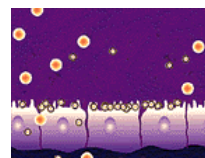
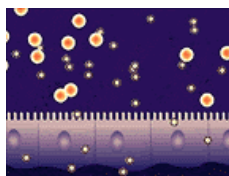
Herbal medicine, can play a major role in restoring health to the colon and flushing toxic build-up from the body. We will discuss how targeted herbal protocols used with colon hydrotherapy can help the body restore balance at the core. How to build protocols to handle candida, rheumatoid arthritis, multiple sclerosis, fibromyalgia, chronic fatigue syndrome, Crohn’s disease and ulcerative colitis will be covered.

Modern uses of Traditional Chinese herbs, including *atractylodes*, *pinellia*, *coptis*, *phellodendron*, and *isatis* will be presented. And we’ll also discuss Western herbal approaches as well covering the more familiar herbs such as, *slippery elm*, *marshmallow*, *garlic* and *pau d’arco*. Natural Supplements that work include those made with *grapefruit seed extract*, *oregano oil*, and *berberine* herbs. Most patients can benefit enormously with herbal supplementation.

The function of the gastrointestinal lining is to absorb our nutrients and at the same time act as a barrier to toxins. This is via the action of the the intercellular tight junctions (TJs), the gatekeepers to the blood, in the wall of the small intestines. “Leaky gut” is an ailment of the intestines which allows bacteria, fungi, parasites and their toxins, undigested protein, fat and waste to leak through the TJ’s into the blood stream, contributing to a large number of serious ailments. The official definition is an increase in permeability of the intestinal mucosa to luminal macromolecules, antigens and toxins associated with inflammatory degenerative and/or atrophic mucosal damage.

Approximately 80 percent of all pathogens enter the body through or attached to mucosal surfaces; and the largest of the mucosal surface is the gastrointestinal (GI) tract. The GI tract is also where most infectious organisms enter the body and where the antibodies and many different beneficial bacteria are produced and work to disarm invading pathogens and stop diseases before they take hold.

The GI tract is the foundation of the body’s good health. It has a HUGE surface area - the intestinal tract, while only 20 feet long, has a folding, undulating wall that maximizes surface area. A surface area of over 100 square yards is generated by this design, allowing tremendous mechanical, chemical and absorptive efficiency.



Healthy mucosa allows nutrients to pass the barrier while blocking toxins	With leaky gut, the barrier is dysfunctional, blocking nutrients at the damaged villi while permitting toxins to enter the blood stream
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**Some possible causes;**

Leaky gut is basically caused by the inflammation of the gut lining, usually brought about by the following the following causes:

- Overuse of antibiotics, steroids, NSAIDS
- Poor diet
- Heightened exposure to environmental toxins.
- Stress
- Contaminated Foods and Drinks
- Prescription corticosteroids
- Prescription hormones

**Antibiotics:** because they kill off beneficial bacteria and lead to the overgrowth of abnormal flora in the gastrointestinal tract (bacteria, parasites, candida, fungi), they contribute to the chronic inflammation that leads to leaky gut syndrome. Beneficial bacteria also break down hormone secretions from the liver; their deficiency can lead to these estrogens reentering the system, causing PMS, fibroids and even tumors.

**NSAIDS:** (non-steroidal anti-inflammatory drugs) like Celebrex, ibuprofen, naproxen, etc). Long-term use of NSAIDs may weaken the intestinal barrier and cause tiny pinpoint perforations in the surface of the small intestine, directly increasing intestinal permeability. This allows allergenic substances to pass through, which may actually promote inflammation in the joints.

**Parasites** (from foods and beverages contaminated by *giardia lamblia*, *cryptosporidium*, *blastocystis hominis* and other bacteria like *helicobacter pylori*, *klebsiella*, *citrobacter*, *pseudomonas*): these attack and inflame the intestinal wall.

**Processed food diet** (e.g. candy bars, cookies, cake, soft drinks, white bread): we clog and irritate the lining of our digestive tract with a high intake of sugars, food additives, refined flours, herbicide/pesticide residues, alcohol and caffeine. This regular irritation results in chronic inflammation of the GI tract that leads to leaky gut syndrome.

**Prescription hormones & corticosteroids:**

- These drugs create conditions that help feed fungi, which damage the lining
- Additionally: if you lack the bacteria to break down estrogen and the intestinal permeability has been altered, hormones (birth control pills, hormone replacement therapy (HRT) and hormones from foods and meats) are reabsorbed into the blood, contributing, if not causing, PMS, fibroids and tumors.

**Stress:** Our intestinal lining replaces itself approximately every 24 hours. This means that every cell that the lining is composed of is digested or sloughed off, and a new one grows to take its place. All this activity

means the gut uses more blood when it is resting than any other organ but it is also the first to lose its blood supply when in a fight or flight situation, which is what stress is. If you have a lot of stress then your gut will always be starved for blood and the lining will be denied regeneration.

**Heightened exposure to environmental toxins:** Daily exposure to hundreds of household and environmental chemicals puts stress on our immune defenses and the body's ability to repair. Our immune systems can only pay attention to so many places at one time. Parts of the body far away from the digestive system are affected. Connective tissue begins to break down, and we lose trace minerals like calcium, potassium, and magnesium.

#### **General Leaky Gut Program**

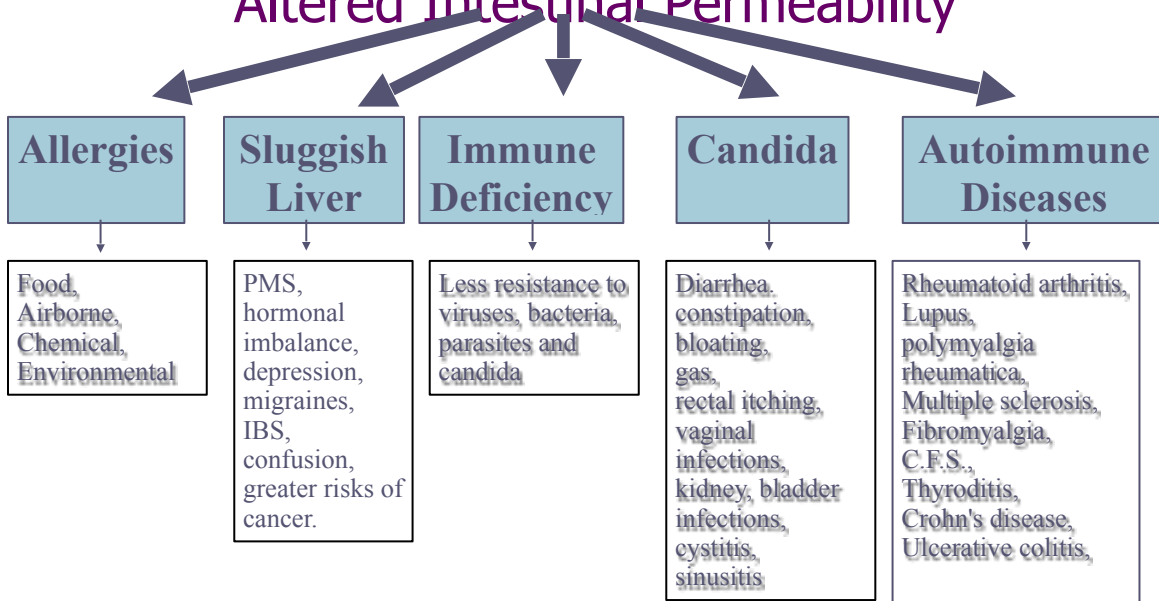
1. Strengthen intestinal membranes. Astringe and repair and/or rebuild the mucosal lining of the intestines, restoring a healthy gut with a balanced healthy intestinal mucosa.
2. Reestablish the normal flora of the intestines. Replenish and strengthen colonies of beneficial bacteria to better regulate and protect and prevent bacteria, fungi, parasites and their toxins, undigested protein, fat and waste to leak through the intestinal wall into the blood stream. This prevents carcinogens, organic amines and high level of toxins building up.
3. Reduce oxidative damage. Free radical damage contributes to inflammation and can lead to cancer.

#### **General Supplement Program**

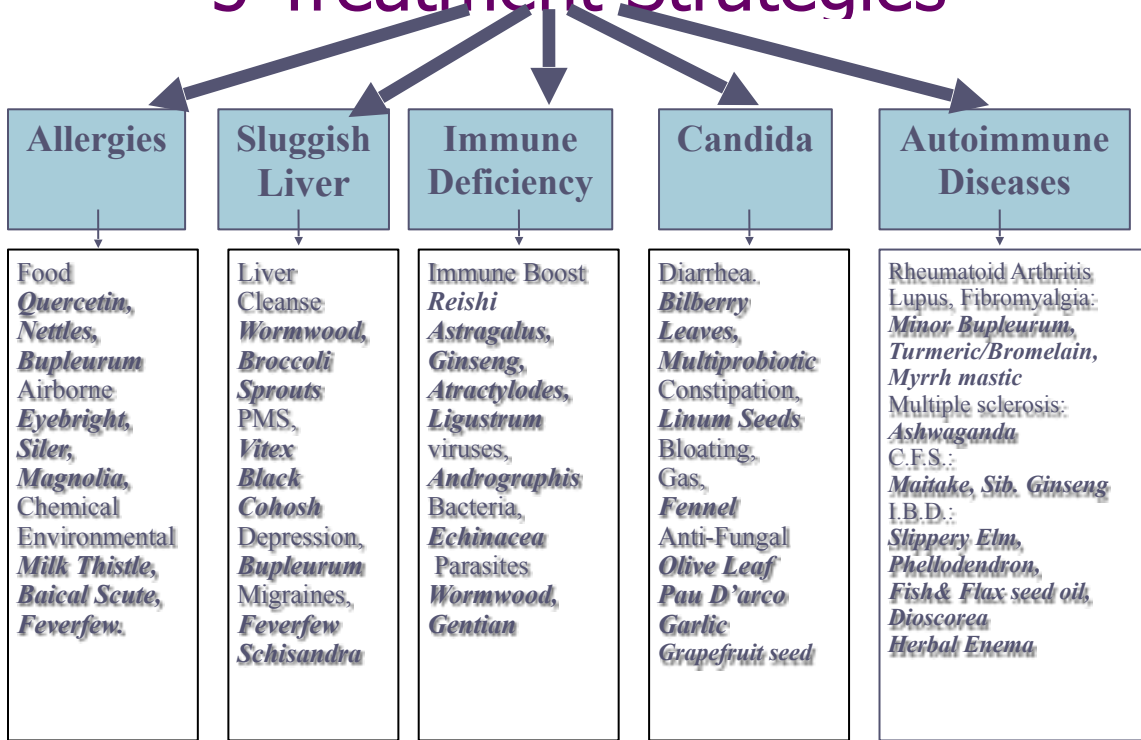
1. Multi Probiotic restore bacterial balance. Improves intestinal wall integrity. L. Acidophilus L. Rhamnosus A, L. Rhamnosus S. Lactis Bifidobacterium Longum, B. Bifidum S. thermophilus
2. Gut-building herbs: *Tienchi Ginseng*, *Licorice*, *Gotu Cola*, are membrane-strengthening herbs. *Slippery Elm* a mucilaginous herb that soothes and coats. *Cornus* and *Schizandra* to astringe the gut wall.
3. Six Gentlemen Formula *Atractylodes & Ginseng*, *Pinellia*, *Tangerine Peel*, *Poria Mushroom*, and *Licorice*. Classic Chinese herbs to strengthen digestion.
4. Multi Vitamin

# LEAKY GUT

## Altered Intestinal Permeability



# 5 Treatment Strategies



## 1. Allergies

Allergies are the body's reaction to "foreign" substances which can be inhaled, eaten, drunk or touched. In good natural health, the body's the Immune system can handle these substances without problem. The complicating factor in Leaky Gut Syndrome is that of acquired food allergies. The process of food allergens being absorbed from gastrointestinal tract and initiating an aggravating immunological reaction is starting to be commonly accepted. As the intestinal mucosa is irritated by *Candida* yeast, foods are absorbed before they are completely digested. The body can tag these as foreign by using specific antibodies. When those foods are eaten there is an inflammatory response at the intestinal epithelia, which keeps Leaky Gut going. If *Candida* is effectively eradicated but the food allergy problem is not addressed, the various illnesses will continue.

The inflammation that is caused by food allergies can increase the permeability of the intestinal lining even further. 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, setting into motion a food allergy. Gastroenterology by Walker & Isselbacher (Gastroenterology 1974;67:531-50).

Imagine what would happen to your body if you tried to inject milk directly into the muscle or vein. You would develop a massive reaction to the raw proteins, fats, carbohydrates and other ingredients in the raw milk.

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.

### Allergies: Treatment

**Food** Find the hidden food allergy and stop it with a two-week elimination diet. Slowly reintroduce foods to confirm every 48 hours.

- *Quercetin*: take with vitamin C. Quercetin, a bioflavonoid, acts as a natural antihistamine. It is apparently able to block both the manufacture and release of histamine, reducing inflammation in the airways and lungs.
- *Bromelain* is a major anti-inflammatory often combined to potentiate Quercetin.
- *Nettles*: From a Traditional Chinese Medical viewpoint, the eyes are ruled by the Liver, and nettles help to nourish the 'Liver Yin' and thus calm the Liver's hyper-reactivity. This in turn calms the allergic reactivity and flare-up.
- *Bupleurum (formula)*: Smooths a reactive liver, helps digestion by increased bile flow.

### Airborne

- *Eyebright, Siler, Magnolia* 'clear heat' and tone down the allergic response.

**Chemical & Environmental** Eliminate exposures to allergen triggers at home and work with air purifiers, dust mites, animal dander removal.

- *Milk Thistle*: Protects the liver from damage by chemicals
- *Baical Scutellaria, Feverfew*: herbal antihistamines, reduce inflammation

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.

Toxins are re-circulating from the leaky gut. Those toxins travel to the liver where they are detoxified. The liver has phases of detoxification to deal with eliminating foreign substances (phase I and II), but when the detoxification processes of the liver are impeded, it results in manifestation of disease, depending on where the toxins exert their effect. If the liver is overloaded and can't remove the toxins, they can recirculate or deposit in the body. Either way, they will upset the apple cart of balance. The toxins can recirculate to the intestinal area where they increase the permeability of the intestinal lining even more. The relation to toxic overload on the liver and leaky gut is a positive feedback loop: a leaky gut will allow more toxins to enter the system, and the subsequent toxic overload of the liver conversely aggravates the leaky gut, leading to ever more toxic buildup.

## **2. Sluggish Liver**

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.

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**A toxic or sluggish liver** can be the causative factor in a wide range of ailments. Common symptoms include:

- Eye problems, with the eyes becoming sore, gritty and easily tired;
- Low energy, with general listlessness;
- Nausea, bloating and flatulence;
- Bowel disturbances.

Symptoms may include: PMS, hormonal imbalances and menstrual irregularities, depression, headaches, migraines, irritable bowel syndrome, confusion, impaired nervous function, respiratory allergies and greater risks of cancer.

Some substances limit the liver's ability to detoxify and are suspected in toxic reactions involved in inflammation, arthritis, skin disorders, and chronic fatigue. Immune dysfunction such as allergies, inflammatory states, swollen glands, recurrent infections, chronic fatigue syndrome, fibromyalgia or autoimmune diseases. Some of the more common autoimmune diseases are systemic lupus erythematosus (SLE), sclerosing cholangitis, primary biliary cirrhosis, Hashimoto's thyroiditis, vasculitis and rheumatoid arthritis. Weight gain due to chronic inability to lose weight, with those having trouble digesting fats.

### **Sluggish Liver and Environmental Toxins**

A sluggish liver inefficiently filters and neutralizes external toxins

- **Water.** Significant portions of our groundwater and surface water are now contaminated with pesticides, herbicides, fungicides and fertilizers, as well as their metabolites. These contaminants find their way into groundwater, wells, cisterns, and reservoirs, eventually coming out in home faucets. A 1995 study tested tap water for weed killers in cities across the U.S. corn belt and showed that major agricultural weed killers are routinely found in tap water at levels that exceed federal health standards.
- **Air.** The Environmental Working Group performed independent air monitoring in eight California counties and found that toxic pesticides routinely drift from farm fields into surrounding neighborhoods and schoolyards.

- **Indoors.** The EPA has ranked indoor air pollution among the top five environmental risks to public health. According to the EPA, indoor air levels of many pollutants may be 2-5 times, and sometimes more than 100 times, higher than outdoor levels. A 1990 EPA study detected 32 different pesticides in air samples taken inside and outside homes. Indoor air had much higher concentrations. They estimated that 85% of the total daily exposure to airborne pesticides come from breathing air inside the home. Most products used in homes contain either organophosphate or carbonate pesticides which are acute nervous system toxins.
- <http://www.purefood.org/toxiclink.html>

## Sluggish Liver Treatment Herbs

### Liver Cleanse

- Broccoli Sprouts : Sulforaphane glucosinolate (SGS) is the compound found in broccoli which has far greater concentrations in the broccoli sprouts. These compounds increase the body's own defense system against carcinogens and greatly increases the bodies and the liver's detoxification.
- Dandelion and barberry root stimulate bile secretions, cleansing the gall bladder.
- Recent studies of schisandra berries have demonstrated an ability to help liver cells regenerate.
- Blessed thistle clears inflammation, removes stagnant 'qi' energy and congestions from the liver, and promotes bile production and digestion.
- Gentian is the European digestive aid, it is cooling and stimulates secretions.

### Add also:

- PMS: Vitex, Black Cohosh to smooth and regulate menstruation.
- Depression: *Minor Bupleurum formula*, to smooth liver energy and increase protection of the liver's immunity
- Migraines: Feverfew, Schisandra.

### A Six Week Cleansing Protocol

Weeks one to two: --Herbs for Parasite Cleansing.

Weeks one to four: --Herbs to stimulate Gall Bladder and Liver Cleansing.

Weeks three to four: --Specific Herbs for Gall Bladder and Liver cleansing.

Weeks five to six: --Specific Herbs to support the immunity and regeneration of the Gall Bladder and Liver.

#### Weeks one to four

Herb for Gall Bladder and Liver Cleansing - Milk thistle

Cautions: None known

Milk thistle has been used for hundreds of years in Europe to promote liver health and positive mental attitude. The first written references can be traced to the Roman physician Pliny the Elder (23-93 a.d.), who noted that milk thistle's juice was excellent for carrying off bile; Culpeper (1616-1654 a.d.) used it to remove obstructions of the liver and spleen and against jaundice.

Modern German research into this herb now concentrates on flavanoligans, a group of compounds that are collectively referred to as silymarin. It is this substance within milk thistle seeds that has been found to be highly protective of the liver, supporting its functions and preventing damage from compounds that are highly toxic. For example, severe liver damage from a poisonous mushroom may be prevented if silymarin is ingested within the forty-eight hours prior to eating the mushroom. This protective action is thought to come from the powerful antioxidant activity (ten times greater than vitamin E) that prevents certain toxins from entering liver cells, while actually stimulating regeneration of damaged cells. Pliny the Elder once claimed and it now seems confirmed through scientific research that milk thistle helps prevent and treat gallstones through its ability to increase the solubility of the bile and lower biliary cholesterol.

#### Weeks three to four

Specific Herbs for Liver & Gall Bladder cleansing

Herbs to be discussed: Barberry bark, blessed thistle herb, dandelion root, fennel seed, marshmallow root, gentian root, schisandra berries.

Cautions: None known



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Cleansing herbs have been defined as 'blood purifiers', herbs that facilitate and support the elimination of wastes from the blood through the skin, kidney, and bowels. Dandelion is a great cleansing herb that supports liver function (as does blessed thistle), stimulating bile production and flow. Dandelion root opens up perspiration and is a wonderful diuretic; both dandelion and blessed thistle help excrete wastes. The yellow-flowered 'weed' is the only diuretic that actually helps replace potassium, often depleted by all other diuretics, herbal and pharmaceutical.

### **Weeks five to six**

Herbs for the immunity and regeneration of the Liver and Gall Bladder.

Herbs to be discussed: TCM formula Minor Bupleurum, andrographis paniculata, schisandra, milk thistle  
For regeneration and immunity building of the liver/gallbladder I recommend a combination of a TCM formula, Minor Bupleurum with Milk Thistle, Schisandra and Andrographis Paniculata. This is the corner stone of the Gall Bladder/Liver Cleanse Program. The value this combination brings to the long term health of the liver, and thus the over all health of your patients, cannot be overstated.

\*See the Hepatitis paper at [www.darcynaturals.com/hepatitis](http://www.darcynaturals.com/hepatitis)

- *Minor Bupleurum*, Xiao Chai Hu Tang (300 b.c.)
- The usefulness of this formula in hepatitis treatment has been confirmed by dozens of studies in Japan. One study states "over 90% of chronic hepatitis patients [in Japan] take this formula". In another, it was estimated that 1.5 million hepatitis patients in Japan take this formula. Studies show the effectiveness of minor bupleurum at nearly every stage of infection, to hinder and even stop
- Minor Bupleurum, has demonstrated ability to improve levels of interleukin-1, a compound which acts to improve the immunity of the liver. Japanese researchers have identified

steroid-like ingredients, saikosaponins, that enhance the activity of cortisone and prevent adrenal atrophy. *Bupleurum*, the main herb, also displays non-steroidal anti-inflammatory activity and has been shown to potentiate prednisone. \*

\*See the Hepatitis paper at [www.darcynaturals.com/hepatitis](http://www.darcynaturals.com/hepatitis)

### **Herbs to promote Liver regeneration & immunity**

*Andrographis*, *Andrographis Paniculata* acts by blocking an enzyme known as reverse transcriptase, which the virus uses to translate its genetic information in order to replicate. Acclaimed for its ability to help the liver regenerate itself, it has the added benefit of hindering viral replication by altering cell-to-cell transmissions. The ingredient *andrographide* is suspected of destroying the virus' communication mechanism by modifying cellular signal transmission.

*Schisandra*, *fructus schizandrae*, has demonstrated great promise in liver protection against viral hepatitis as well as toxic chemicals, even when activated into a poison in the liver, such as with carbon tetrachloride. There are no toxic reactions reported even at huge dosages. Schisandra is a well-known Chinese herb, widely used in ancient China. During recent decades, it has been found to be effective in viral and chemical induced hepatitis and repair of injured liver cells.

*Milk Thistle*, *Silybum marianum*, has the active principle, silymarin, that has been demonstrated in animals to protect against various hepato-toxic substances. One study of 170 patients with cirrhosis "indicated that treatment was effective in patients with alcoholic cirrhosis."\*

### **Dietary Guidelines for Liver and Gall Bladder Detoxification.**

- The diet should include plenty of organic, unrefined, unprocessed foods, as fresh as possible and in their natural state. Fresh vegetables, fruits, whole grains and unrefined carbohydrates should make up the majority of the diet. Red meats, animal fats, sugars and refined foods should be avoided as should caffeine, other stimulants and alcohol.
- No 'hot spicy', greasy, fatty, oily, fried foods.

- Drink plenty of bottled water or diluted juice, at least two litres per day.
- A minimum of one daily serving of cruciferous vegetables and at least five servings of fresh fruit should be included in the daily diet.
- Protein sources can be obtained from lentils, soy, beans, nuts, seeds and fish and organic chicken.

### **3. Immune Deficiency**

Current research indicates that 70 percent of the immune system is located in or around the digestive system. Called **gut-associated lymphatic tissue**, it's located in the lining of the digestive tract and in the intestinal mucus. NGI lining makes up a major part of our immune system by furnishing secretory IgA and white blood cells to attack foreign invaders. Lowering of the immune system will allow or aggravate further many auto-immune responses.

This leaves us much less resistant to viruses, bacteria, parasites and candida.

The gut is considered the largest immune organ in the body. When the intestinal mucosa is disturbed or disrupted the result is

- 1) impaired digestive and absorptive functions and
- 2) vital immune responses are compromised leading to food allergies, etc.

Gut-associated lymphatic tissue (GALT) gives your body specific immunity in the form of secretory immunoglobulin-A (sIgA) while specialized cells in the mucosa (such as macrophages, natural killer cells, mast cells and intraepithelial lymphocytes) protect against the absorption of intestinal toxins and pathogens.

### **Immune Boosting Herbs**

Immune Building: 'Fuzheng Herbs' - As long as the 'normal qi' is adequate, adverse influences, including pathogens, cannot disrupt the bodies functions. *Rieshi, Astragalus, Condonopsis, Ginseng, Atractylodes,, Siberian Ginseng, Licorice, Dioscorea, Ligustrum, Rehmannia, He Shou Wu, Cornus*

#### **Add for:**

- Viruses: *Andrographis*, Bacteria, *Echinacea* 10 days on/off do not want to over-rev the immune system and exacerbate Auto-Immune problems
- Parasites Some say 70 to 90 % of the adult population of the United States is infected with parasites. Parasitic worms usually live in the intestines but can and often do move at will throughout the body. However, while they are in the intestines, these parasites for the most part have no choice but to eat whatever happens to come through the intestines. Some suck blood (i.e. hookworms) but most eat food stuffs (you or your food). When a worm eats the partially digested food substances present in your intestines and then gains access to the general circulation, this worm may be accidentally carrying potent food allergens into remote tissues. Such may be the case when the roundworm *Ascaris* carries wheat protein into joint tissues. If the worm defecates in the joint, the body's antibody system will attack both the worm waste and the allergenic food stuffs present therein. The result is swelling and inflammation which can go on for long periods of time leading to rheumatoid arthritis. *Wormwood, Gentian, Areca, Garlic.*

### **Parasite Cleansing**

Parasites are not limited to Third World countries. Improper cooking of meat at home (usually on the grill), in restaurants as well as travel abroad are oft-cited reasons for contracting intestinal bugs. *A recent study at a hospital in an affluent New Jersey community found that 70% of those randomly tested harbored some kind of parasite.* In fact, the 5,200-year-old mummified body of a man found in the Alps revealed eggs of a parasite; it was further revealed that he was carrying herbs identified today as anti-parasitic. Both Chinese and Western herbalism have grappled with parasite problems for thousands of years. Different herbs have been found to expel or eliminate different parasites.

Dysbiosis, candidiasis and the presence of intestinal parasites have been linked to a number of chronic illnesses. Pathogenic *E. coli*, *Enterobacter*, *Klebsiella*, *Pseudomonas*, *Sertia* and *Bacteroides* are common intestinal pathogens which are often involved in endotoxemia. Endotoxins can cause local and systemic inflammation

### **Herbs for Parasite Cleansing**

- Wormwood leaf *Artemisia absinthum* has long been recognized as effective against parasites. The bitter action of this herb stimulates the digestive system, helping indigestion,. It's one of the best herbs for treating parasites.
- Gentian root, *Gentiana lutea* Gentian Root helps stimulate circulation, strengthen the system, and strengthen the muscles of the digestive organs help the absorption of the other herbs
- Melia root bark, *Melia Azedarach* or *M. toosendan*, Noted by TCM to Especially target roundworms, research has identified toosendanin as its effective ingredient. Also roundworms (and externally pinworms). Contraindicated where gastric ulcers are present.
- **Areca seeds**, *Areca catechu* over thousands of years of Chinese usage have shown this herb especially effective against tapeworms, intestinal parasites such as fasciolopsis, pinworms, roundworms and blood flukes. Its energetic helps to drain the downwards useful for expelling.

#### **4. Candida. Yeast overgrowth**

In a normal state Candida lives in harmony with all the other bacteria in a concentration of 1 million of bacteria to one. *Candida albicans* is the scientific name for a yeast, a type of fungi, that inhabits the intestine, genital tract, mouth and throat. It is usually a comparatively harmless parasite inside the digestive tract of people. However, when out of balance with 'good bacteria', Candida becomes the predominant microorganism of the digestive tract. Because it is a rhizoid which attaches to the gut lining, Candida can eventually drill small holes in the intestinal mucosa, causing increased intestinal permeability (leaky gut syndrome).

Stress, poor diet, the use of broad-spectrum antibiotics, corticosteroids or oral contraceptives, and even contamination of the food we eat can affect the Candida balance. Diets high in sugars, juices, yeasty foods and beverages can feed your Candida and encourage its expansion. The process is similar to the feeding of brewing yeast with sugar (malted barley or grapes) to create beer or wine. Some predisposing factors for candidiasis are not so easy to control. The high blood sugar level of people with diabetes puts them at risk while the hormonal changes that accompany pregnancy and precede menstruation sometimes help candidiasis. A compromised immune system from stress, deficient nutrition or illness seems to also help Candida growth.

#### **Candida Symptoms**

Fairly obvious ones: white patches of oral thrush and the discharge and itch of vaginal yeast infection.

Others are more difficult to diagnose and maybe involved in athletes foot, nail infections, jock itch, anal and groin itch and other rashes which can also be associated with other fungi and causes.

Intestinal candidiasis: expect bloating, bowel changes, fatigue, headaches and mood changes, chronic bowel irritation, skin disorders, insomnia, "brain fog," food sensitivities, halitosis, burning urination, and sugar cravings.

#### **Candida Treatment**

- Identify and address the root cause(s) of the candidiasis.
- Take a product that is recommended to kill off the 'bad guys'.
- Build up the 'good guys' -- lactobacillus flora in the gut -- with supplements or yoghurt.
- Adopt a healthy diet and lifestyle.

#### **First Stage 'Kill Off'**

Use **anti fungal herbs** *Olive Leaf, Pau D'arco, Garlic, Grapefruit seed, Gentian*

to kill off the candida yeast and restore balance. This may be uncomfortable, as 'kill off' may cause some symptoms. Also restrict **corticosteroids** and **oral contraceptives** and the **diet**. It should be fruit free, sugar free, and yeast free. Eat vegetables, yogurt and meat instead. Take only hypoallergenic foods. Avoid chemical household products and cleaners, chlorinated water, moth balls, synthetic textiles, and damp and moldy places such as basements. Fiber in the diet is important.

#### **Second Stage 'Kill Off Parasites'**

As covered before.

#### **Third Stage 'Build -up'**

In my experience, not building up the digestive processes is where nearly all Candida treatment protocols fall short. Strengthen the Digestive system Six Gentlemen Formula

*Atractylodes & Ginseng, Pinellia, Tangerine Peel, Poria Mushroom, and Licorice.* Classic Chinese herbs to strengthen digestion and rid the body of ‘Dampness’ that supports candida growth.

#### *Cats Claw*

After using Cat’s Claw in working with approximately 150 patients between 1988 and 1992, Dr. Brent Davis reports that "Uncaria tomentosa has the ability to break through severe intestinal derangements that no other available products can touch." He refers to the herb as "the opener of the way" because of its remarkable ability to cleanse the entire intestinal tract and help patients suffering from many different stomach and bowel disorders including leaky bowel syndrome, irritable bowel syndrome, Crohn's disease, diverticulitis, hemorrhoids, fistulas, gastritis, ulcers, parasites and intestinal flora imbalance. By cleansing the intestinal walls, Cat’s Claw enables the body to better absorb nutrients, thus helping to correct nutritional imbalances created by digestive blockages.

"The Ashanika Indians of Peru have long regarded una de gato tea as a sacred beverage. It is used as a cleansing and tonic herb for the immune, intestinal and structural systems.

In traditional medicine of Peru, una de gato is for inflammations including arthritis, gastritis, asthma and dermal and genito-urinary tract inflammations.

#### **Candida Diet Book Resource List**

- Gail Burton has written *Candida, The Silent Epidemic: Vital Information to Detect, Combat and Prevent Yeast Infections* and *The Candida Control Cookbook: What You Should Know and What You Should Eat to Manage Yeast Infections*.
- *The Candida Diet* is a book with a collection of recipes and other tools compiled by a doctor with a success record in dealing with Candida. Also video tapes and a downloadable version of the book.
- Professor Steven Rochlitz has [www.wellatlast.com](http://www.wellatlast.com) where he sells a book: "Allergies and Candida." In it learn how 80-90% of "Candida" is really protozoan parasitosis. Learn how parasites and viruses make the body PERMEABLE causing food and chemical allergies and all the subsequent symptoms.
- Ray Audette has a web site for his book NeanderThin. A description of the book, with a complete bibliography. Has a paleolithic diet that cuts out grains, beans, potatoes, milk and refined sugars. See [Amazon.com](http://Amazon.com) for the new edition. Also see reviews on the out-of-print edition.
- At [Amazon.com](http://Amazon.com) you can do a search on Candida. More than 100 books will be found.

#### **5. Autoimmune Diseases**

Leaky gut is also highly implicated in autoimmune diseases. Some people have more of a genetic tendency than others to activate normal resting T-cells, which then attack cells. These cells are supposed to be foreign invaders, but sometimes T-cells are activated against the body’s own tissues, as in autoimmune disease. J. Hoofar implicated the leaky gut and undigested proteins in this T-cell attack when he said, "It is thought that some dietary proteins escape the enzymatic digestion in the gastrointestinal tract and could possibly launch a polyclonal activation of the resting T lymphocytes in susceptible individuals" (Hoorfar J et al., *Diabetes Research*. 1992;20:33-41, p. 38).

With leaky gut, foreign and beneficial proteins are both attacked by your own antibodies. These antibodies can get into various tissues and create inflammation - in joints this inflammation is arthritis, in brain-chronic fatigue syndrome, in the lining of the small intestine - colitis or Crohn’s disease.

The immune system malfunctions and fails to differentiate between harmful body invaders (like bacteria and viruses) and healthy body tissues. In **arthritis** it’s cartilage, bone, and muscle in and around the joints. The immune system literally attacks these healthy tissues, causing their degeneration.

#### **Autoimmune Diseases**

On-going allergic reactions trigger a hyper-immune response, resulting in an attack on the body itself. Substances that cause autoimmune responses are the same substances that cause allergies. They are known as allergens and are linked with leaky gut syndrome. Healing the direction of an autoimmune disease depends upon the resolution of leaky gut syndrome, and on the regulation of an overactive immune response.

“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, chronic fatigue syndrome may be the result. If it occurs in the blood vessels, vasculitis 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.”

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

### **Leaky Gut & Immune Deficiency Herbs**

#### **Rheumatoid Arthritis, Lupus, Fibromyalgia:**

- *Minor Bupleurum*
- *Turmeric/Bromelain*
- *Myrrh mastic*

#### **Multiple sclerosis:**

- *Ashwaganda*

#### **C.F.S.:**

- *Maitake,*
- *Sib. Ginseng*

#### **I.B.D.:**

- *Slippery Elm*
- *Phellodendron*
- *Fish& Flax seed oil*
- *Dioscorea*
- *Herbal Enema*

### **Crohn's and Colitis Herbs**

- *Marshmallow root:* the essential herb for IBD sufferers. Its is very soothing for digestive disorders, gastritis, stomach ulcers and colitis. It helps regulate intestinal flora. Very nutritional, a wholesome sustaining food, well tolerated by GI tract. It supplies Vitamin K (deficient with colitis) and mucilage. A demulcent, diuretic, emollient, expectorant, antibacterial, anti-tumor, and natural antacid.
- *Yarrow:* It increases appetite, helps reduce effects of flatulence and stomach cramps, regulates bowel movements and inflammation of GI tract especially when used with chamomile. Has a soothing and healing effect on mucous membranes.
- *Dioscorea or Wild Yam:* Researchers have found, that dioscorea has significant antioxidant activity, and is very useful to spasming in the intestines also as an –anti-inflammatory
- Slippery Elm is another wonderful demulcent best known for inflammation and irritation of the alimentary canal.
- *Licorice:* to soothe irritated mucus membranes and promote the secretion of mucus.
- *Chamomile:* Chamomile has been used throughout Europe since Roman times as a sedative and antispasmodic. Today most of us know this herb helps calm upset stomachs caused by either emotional or physical stressors. Chamomile is a gentle relaxant of tensions, containing spiroether, a strong antispasmodic that eases tense muscles and menstrual pains, calms irritability, and promotes sleep. Bisabolol is another of chamomile's numerous chemical constituents that produces the antispasmodic and anti-inflammatory effects.
- *Peppermint oil* (enterically coated): for gas pains and spasming

### **Chronic Fatigue Herbs**

- *Four Gentlemen Decoction, 'Si Jun Zi Tang'.* Asian ginseng, a powerful tonic for energy. Atractylodes improves transformation of food into nutrients, licorice harmonizes the digestion, and poria clears away dampness.
- *American ginseng* to gently nourish the lungs and bodily fluids
- *Siberian ginseng* for endurance and is the focus of a study for treatment of CFS. This study is conducted by investigators from the Department of Family Medicine at the University of Iowa,

College of Medicine and the study is sponsored by the National Institutes of Health. Siberian ginseng has been used successfully for CFS and has finally attracted research attention

- *Astragalus* increases energy (Qi), strengthens the immune system (it has been shown to boost T-cell restoration) and promotes tissue regeneration.
- *Ginkgo* has been shown to increase short-term memory and alertness by increasing cerebral circulation
- *Gotu kola* is an Ayurvedic, mind-enhancing, relaxing tonic.

#### **Rheumatoid Arthritis & Fibromyalgia Herbs**

- *Bupleurum*: Traditionally used with alternating fever and chills, and muscle tenderness with or without heat. Research indicates that, a Chinese ‘release the exterior’ herb, has antiviral, anti-inflammatory properties while also protecting the liver. Its active components are steroid-like saikosaponins that enhance the activity of cortisone and prevent adrenal atrophy. (Corticosteroid drugs are often used for autoimmune diseases.) *Bupleurum* is helpful to patients trying to wean themselves from prednisone-like medications.
- *Ginseng and licorice* appear to potentiate *bupleurum*.
- *Ginger*: The antioxidant and anti-inflammatory properties of ginger have been used in Traditional Chinese Medicine for rheumatics since the fourth century b.c.
- *Bromelain* is a potent anti-inflammatory enzyme. Scientific evidence shows that bromelain (a proteolytic enzyme of pineapple) breaks down fibrin, a substance that builds up around inflamed areas, blocking blood supply. It has been shown to actually digest inflammatory compounds.
- *Turmeric* has an active ingredient curcumin, which inhibits several inflammatory compounds including nitric oxide, interleukin -1, tumor necrosis factor, lipoxygenase and cyclooxygenase. Curcumin has antioxidant free radical quenching properties. These have unique anti-inflammatory properties with therapeutic action comparable to aspirin.
- *Myrrh* is an unusual combination of chemical compounds. Technically it is an oleo-gum-resin whose constituents include volatile oils, terpenes, resin acids, mucilage, and tannins. The resin is thought to be the most effective component in killing various microbes, while the tannins may be the astringent agents. Terpene compounds found in myrrh species have been shown to relax smooth muscles.

#### **M.S.Herbs**

- *Ashwaganda*: Ayurvedic superior rejuvenative herb for the muscles, bone marrow and semen. Classically for anemia with emaciation and nervous exhaustion; it is anti-inflammatory, has free-radical scavenging activity, immunomodulating. Stimulates the immune system.
- Other Herbs: *Yogaraj Guggul gum resin, European Elder berry, Asian Ginseng root, Tienchi Ginseng root, Hawthorn leaf and flower extract, Shilajit mineral resin, Bromelain, Amla fruit extract, Indian Olibanum gum resin, Licorice root, Ashwagandha root, Chinese Salvia root, Turmeric root extract, Hericium erinaceus, Astragalus root extract, Bacopa plant extract, Black Pepper fruit, Ginger root, Long Pepper fruit.*
- Planetary Formula’s CNS Myelin Sheath Repair. This formula was developed by herbalist Alan Tillotson.

#### **Tests**

- Great Smokies provides an intestinal permeability test.
- The Intestinal Permeability Test requires an overnight fast. Nothing, including water, should be consumed after 11 p.m.
- The patient drinks a liquid containing two measurable sugars, followed by the collection of urine for 24 hours. It accurately shows the degree of Leaky Gut. Again, it is helpful for patient education and compliance, as well as making your case with medical doctors.
- Great To Part Article ‘Leaky Gut Syndrome’ by Jake Paul Fratkin, OMD at <http://www.gsdl.com>

#### **Dosage**

- Most recommendations are based on three grams a day (for the average 150-200 lb. adult). We are all different, some more robust, some extremely sensitive. Use common sense when working with dosage levels. In my own practice, I suggest that patients experiment and intuit their own dosage levels to achieve results.

- After using a formula for some time, you may notice results and want to decrease or even halve the dosage. In others cases, you may want to increase slightly. Use the suggested dosage, based upon 500 mg. per capsule, only as a starting point.
- When combining formulas, try not to use more than two or three formulas at the same time as this sends too many messages into the body-mind. Programs are suggested under combinations as collected experience of combining formulas into protocols of treatment for chronic health problems.

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