Leaky-gut—the cause of Allergies, Asthma, and Auto-immune disease

by

Maurice Cotterell
B.A.(Hons.) MCMI, I.Eng. MIET

SunspotUK@aol.com
www.MauriceCotterell.com

Introduction
Humans are complex beings, comprised of a physical body, an emotional body, an intellectual body, and a spiritual body. The physical body is comprised of up to 75% water, which itself is made from hydrogen and oxygen atoms. Hydrogen atoms radiate gravity waves that control every other type of atom in the Universe, including oxygen. The human body thus vibrates at the hydrogen frequency: 1,420 million times per second. Ill-health results when the body does not vibrate at the correct frequency. The vibration frequency of the physical body is affected by the emotional body [for example heart-ache, or jealousy], the intellectual body [for example, anger, fear, or stress] and the spiritual body [for example karma, or guilt]. Physicians concern themselves only with the physical body and, hence, ignore 75% of the available information when attempting to diagnose dis-ease. It is thus easy to see why medical palliatives that work for one individual may not work for another.

Disclaimer
The information in this document was found to be effective for one individual but may not be effective for others. Individuals with physical ill-health should contact a qualified Medical Physician.
Irritable Bowel Syndrome (IBS) → Leaky Gut Disease

**Causes**

**Alcohol**
Kills friendly bacteria in gut leading to imbalance and inflammation in gut [avoid alcohol]

**Chlorine in Water**
Kills friendly bacteria in gut leading to imbalance and inflammation in gut [boil water to destroy chlorine]

**Antacid tablets**
Neutralises stomach acid allowing undigested food to enter gut where it rots, leading to imbalance and inflammation in gut. [Prevent indigestion through moderate eating/drinking]
Use baking soda [1/2–1 tsp in water] for indigestion

**Stress**
Stress is fear. Fear stimulates production of adrenaline. Adrenaline irritates and inflames gut lining. Gut lining becomes diseased providing a haven for bad bacteria that release deadly toxins. Bad bacteria [bad good bacteria] killed by antibiotics, or 1–2 raw garlic segments washed down with water [note: overdose of garlic will cause migraine-like headache for 2–3 days]. Repeat garlic treatment every 7 days.

**Food Allergy [usually Yeast and/or Gluten in Grain (and fermented products)]**
How the yeast organism causes leaky-gut: a) shows the single-celled yeast organism. b) In order to replicate it firstly grows twice as long. c) Then it divides into two, to become 2 yeast cells. Yeast organisms, glued to micro-villi [velvet-like hairs that line the small intestine] by the sticky protein gluten, found in wheat, puncture the gut wall as they double in length (b) and replicate, causing the gut to leak.

**Candida Fungus in gut** (spreads like dry-rot in an acidic gut, puncturing gut wall allowing gut toxins to leak into blood. Caused by compromised immune system and also by over-use of antibiotics (one symptom = white/yellow-coated tongue)). Thrives in acidic environment. Requires prescribed anti-fungal drug Diflucan, 200 – 400mg per day for 42 days. Killed (on tongue) by alkali (e.g. Sodium Bicarbonate [baking soda]). Try to keep internal alkaline environment (vegetarian, and a low sugar/low carbohydrate diet). Very difficult to eliminate. More insidious than other causes of leaky-gut. No refuge from pain until gut fungus killed-off.

**Non-steroidal Anti Inflammatory tablets** (including Aspirin-based painkillers)
Burn holes in the gut wall. [Use, instead, Paracetamol (although largely ineffective with severe toxemia-type headache)]

Aftercare: Multiple attacks of Toxaemia cause permanent damage to lower-back muscles leaving less muscle in that area to soak-up and store new toxins ingested normally from food. Previously harmful foods now cause lower back pain. [note: cooking at boiling point destroys chemical chains of many toxins]. Avoid the following: Raw kidney beans (contain phytohemagglutinin; 3 raw beans can kill). [note: canned beans have been soaked overnight and cooked for 2 hours at boiling point and are safe to eat]. Raw broad beans (cook at boiling point for 10 minutes). Raw or green potatoes. Chilies (contain capsaicin). Dried fruit (sultanas, raisins, apricots, peaches etc). Grapes. Seeds of fruits (contain cyanide). Nuts. Cashews. Some artificial Sweeteners are pure poison. Dark chocolate (contains toxic theobromine). Mouthwash (contains toxic boric acid). Soft drinks (contain benzine). Tar based shampoos. Wood preservative, turpentine etc. [on the skin]. Ingesting/absorbing very small quantities of these will cause lower back pain.

**Effects**

- Leaky gut
- Ulcerative Colitis
- Myasthenia gravis
- Autoimmune diseases
- Glandular fever

**Endocrine Burn-out**
Damage to Pituitary, Hypothalamus, Pineal & Adrenal glands; loss of diurnal rhythm; reduction in Cortisol = thirst, joint pain and muscle twitching

**Bacterial toxemia**
Toxins from gut bacteria leak through gut into blood.
Treatment: Antibiotics, or raw garlic, kill gut bacteria allowing liver to cleanse blood.

**Metabolic toxemia**
Diets releases toxins (stored in fat) that re-circulate in blood.

**Candida-inspired toxemia**
Candida fungus punctures gut wall allowing toxins to leak from gut into bloodstream. Treatment: Diflucan antifungal drugs: 200mg per day for 42 days.

**Food allergies**
Food from gut leaks into blood inspiring release of histamine causing watery eyes (worse after eating), more leaky-gut, and a runaway histamine/adrenaline cycle

*Figure 1.* © Maurice Cotterell 2005 – 2014
Recurring bouts of Intestinal Toxaemia—caused by Leaky Gut Condition

**Leaky Gut Syndrome**
Inflammation of the lining of the small intestine causes damage to microvilli. Large spaces arise between the cells of the gut wall permitting bacteria, food and toxins, to leak into bloodstream. As this process continues, over time, substances bigger than particle size, such as undigested food, bacteria and other potentially toxic molecules pass through the weakened villi cell membrane into the bloodstream where they activate antibodies to fight the foreign invaders (antigens). Cytokines then act as messengers alerting the white blood cells to fight the particles that have managed to escape through the intestinal lining.

With Leaky gut Syndrome the antigens enter numerous tissues producing toxic oxidants that cause increased inflammation and allergic reactions throughout the entire body. Eventually antibodies are continually built up against the particular proteins in formerly harmless foods, and lie in wait to attack the antigens whenever they enter the body, leading to the allergies and inflammation becoming chronic.

**Impaired Liver Function**
Toxins accumulate in the liver. When the liver can no longer cope with the level of toxins it pushes them back into the bloodstream. The circulatory system responds by pushing them into the connective tissue and lower-back muscles where the body stores them in order to prevent extreme damage to the organs. Being so overworked the liver does not get chance to return and cleanse the tissues of the toxins.

**Hypothalamus (malfuction)**

**Intestinal Toxaemia**

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**Recovery Cycle:**
- Raw garlic or antibiotics kill toxin-producing bacteria in gut. Toxins cease to be produced. Liver is then able to cope with the reduced level of toxins and begins to cleanse the blood of poisonous toxins (takes about 2 days). 'Time' [2+ days] also allows toxins to migrate to fat stores where they are stored painlessly [note: toxins are re-released, en-mass, during a diet, leading to 'metabolic (recirculating) toxaemia']. Hence, no infection (bacteria) found in bloodstream (i.e. blood test for bacteria is useless).
- Symptoms (blue) cease. Toxaemia will return approx. every 6 weeks unless cause of Leaky Gut ascertained and removed and then gut restored to balance by change of diet/vitamins and minerals + 1-hour walk/sweat daily followed, immediately, by bath—to wash-away toxins contained in the sweat from the skin.

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**Tonsillitis-type sore throat**
First symptom of cyclical return of Intestinal Toxaemia. Leaky gut inspired antibodies begin to overwhelm the body and attack lymph follicles in the tonsils and small intestine [these common cells are connected through the lymph system, which affects the production of T-lymph cells and the autoimmune system]. Over the long term the antibodies attack and stimulate the thyroid gland causing Graves' disease and death, if unattended.
Stress (fear) inspires adrenaline. Adrenaline inflames intestine causing Irritable Bowel Syndrome which leads to Leaky Gut disease. Leaky gut produces histamine. Histamine causes gut to leak more leading to runaway histamine cycle. Leaking gut leads to intestinal toxaemia. Toxaemia interferes with Hypothalamus. Hypothalamus is unable to control adrenal gland and fails to regulate the production of Adrenaline causing bouts of diarrhoea and (in-between times) constipation. Irregular Cortisol production causes loss of control over fat distribution leading to unregulated distribution of fat (evident in eyelids). At the same time, the Hypothalamus fails to regulate the Pituitary and the Pituitary fails to control the Pineal, allowing variations in melatonin, consequential insomnia resulting in cortisol deficiency.

Figure 3. © Maurice Cotterell 2005 – 2013
Leaky Gut Disease —recovery cycle (I)

Adrenaline v Histamine
Irritable Bowel Syndrome

Leaky Gut Disease

Toxaemia

Identify Toxin (difficult/expensive)
- Indol, skarol, phenol, cresol, indican, sulphureted hydrogen, ammonia, histidine, urin, cholin, muscarine, butyric acid, urroblin, methyl, mercaputan, tetramethylleadamin, pentamethyldiamine, putrescin, cadaverin, neurin, cholin, bera-imidazolotetra-lamine, methylaminidine, promaropine, botulin, ynatine, agmatine, tryptophane, sepsin, idolethylamine, sulphuretted hydrogen.

Destroy Toxin-producing bacteria

Raw Garlic: To Keep in check (every 7 days)
- Peel, finely chop and swallow 1 segment of a garlic clove (1 heaped teaspoonful). Wash down with 2 glasses of water.
- Side effects: raw garlic immediately kills gut bacteria resulting in MORE toxins being released, resulting in a severe headache + blocked nose for approx. 3 days. Destroys good bacteria as well as bad, therefore supplement with Biotin [normally produced by good bacteria] and Zinc (to heal intestine), Pantothenic acid and Vitamin C (for adrenal glands). [Vitamin C also kills off gut bacteria (causing headache)].

OR [if garlic doesn’t work]
Flagyl antibiotics 3 x 200mg per day for 7 days taken with food. Avoid all alcohol.
- Note: Antibiotics destroy vitamins: B5 (biotin), B12, B6, C, magnesium, good bacteria and bad bacteria.
- Side effects of antibiotics include Candida; clear with Diflucan antifungals.

Produce & administer antitoxin antidote (impossible)

Toughen Gut

to restore integrity of gut
After 7 days on flagyl antibiotics;
Adopt a yeast-free, gluten-free and low-histamine Diet
(no alcohol, vinegar, citrus juices, bread, cakes, biscuits, blue cheese)
- [take vitamins and minerals to replace those destroyed by antibiotics] and rice-based diet for 3 weeks—[B’fast: rice crispies, banana and milk; lunch: and dinner: boiled rice; (add mashed potato with butter for variety) and rice pudding, then; Vegetarian diet—for 3 months; no lumps of meat; fish or fowl; stock soups, gravies, sauces, eggs, some cheese (not blue), OK]

Boil freshwater [to evaporate chlorine]—8 pints/day. No tea/coffee.
- Rice pudding/boiled rice/mashed potato & gravy-soothes IBS Minimal fruit (bananas & avocados OK)
- Zinc & selenium tablets daily to chelate toxins.

Regulate
Diet | Lifestyle | Therapy

Reduce stress
- Rest, Sleep, Relax, Exercise, Fresh-Air

SCENAR (Bio-feedback [USA])
- [Self Controlled Energo Neuro Adaptive Regulator]
- Developed by Russians for cosmonauts in 1970s. Like acupuncture but without the needles. Uses pulsed electromagnetic stimulation on nodes and meridians. Balances voltage levels at nodes. When voltage balanced body heals itself. IBS stopped after one 1-hour session.

Figure 4. © Maurice Cotterell 2005 – 2013
Recirculating toxins attack Myelin [the fatty sheath that covers the nerves—an electrical insulator] resulting in acute systemic pain (severe [suicidal] headaches)

Myelin is made from: Cholesterol, Polyunsaturated fatty acids, phosphatidylcholine, [the lipid] sphingosine, and requires Vitamin B12 to synthesise

Liver produces more and more cholesterol to make myelin to repair damaged nerves

Excess cholesterol causes the build up of fatty deposits over eyelids and in cardiovascular system

Metabolic (recirculating) Toxaemia caused by consuming toxins stored in fat [when dieting]

Cholesterol makes:
- Bile Acid makes mucus lining in gut = healthy gut
- Myelin protects nerves
- Vitamin B12 + Polyunsaturated fatty acids (PUFA) essential for production

Reduce excess Cholesterol
- Vitamin B12 but, for absorption, B12 requires Calcium [and Calcium destroys Zinc and Magnesium, see chart]. B12 also requires intrinsic factor (made in stomach) for absorption.
- Vitamin C reduces cholesterol, protects nerves
- Porridge for breakfast precludes high cholesterol foods (eggs, bacon, sausages, butter etc) & reduces cholesterol
- Lecithin (contains Choline) reduces cholesterol, protects nerves

Supplements for Myelin production: PUFA, Vitamin B12, Calcium, Zinc, Magnesium
Supplements for Adrenaline and Cortisol: Vitamin C, B5 Pantothenic Acid
Supplements to reduce excess Cholesterol: Vitamin B12, Calcium, Zinc, Magnesium, Vitamin C, Lecithin, Zinc, Magnesium
Supplements to detox Arsenic, Cadmium, Mercury, Selenium
Supplements to detox Lead, Mercury, Aluminium and Cadmium: Calcium, Zinc, Selenium

Note: Minerals affect each other as shown above. Antibiotics destroy some vitamins (B, C, and biotin), and magnesium. Magnesium affects calcium. Calcium requires Vitamin D for absorption. Vitamin C increases take-up of iron (=bad). Vitamin B12 requires intrinsic factor (made in stomach) for absorption.
Vitamin A (Retinol) for mucous membranes and eyeball pain. Best source; fish oil, cheese, eggs.
B1 (Thiamine) converts glucose into energy. Good for nerves and muscles, fatigue, digestion. Best source; yeast, grain, pork, [hence need supplement in form of 'B complex']. Destroyed by antacid tablets, alcohol.
B2 (Riboflavin). Converts protein, fats and sugars to energy.
B3 Nicotinic Acid (Niacin). Co-enzyme. Produces energy from sugars, fats and proteins. Maintains healthy skin, nerves, brain, tongue, digestive system. Best source: yeast, bran, pig's liver, fish, cheese, eggs [hence—when avoiding yeast—need to supplement in form of 'B complex']. Excess can cause pounding headaches.
B6 (Pyridoxine) For nerves (maintains myelin sheath), energy, reduce swollen abdomen, puffy fingers. Detoxes cyanide and tobacco smoke. Best source; yeast, [hence need supplement in form of 'B complex']. Destroyed by alcohol.
Bc (Folic acid). For DNA/RNA, fatigue.

Biotin. For stress and energy and muscle pain. Manufactured only by good gut bacteria. Destroyed by antibiotics.

C. Good for cholesterol absorption. Anti-stress hormone. Good source potatoes [citrus contains histamine, which makes leaky-gut worse]. Destroyed by antibiotics and in cooking.

D (Sunshine vitamin) aids take-up of calcium for energy. Made from Sunshine on skin. High levels in oily fish.


Calcium for nerve transmission, muscle function. Requires vitamin D and magnesium for take-up.

Magnesium aids take-up of B1 and B6. Good for nerves. Destroyed by antibiotics.


Garlic; natural gut cleansing-antibiotic—but kills good bacteria as well as bad

Ginger; natural gut cleansing-antibiotic—but kills good bacteria as well as bad

[Cold] New Zealand Manuka honey (UMF 25/30); natural gut cleansing-antibiotic [turns to hydrogen peroxide and cleanses gut]—but kills good bacteria as well as bad

Bananas. Good source of vitamins E, B vitamins. Good source of essential pottassium, however, note;

Pottasium. Good for nerve impulse transmission and intestinal tract but excess amounts are dangerous (depresses adrenalin and cortisol), causes ulceration of small intestine. Sources; dried fruit, bananas, chips, cereals.

Adrenal gland needs Vitamins C and B5 (Pantothenic acid) to make adrenalin and cortisol.
### The chain of causation: from Irritable bowel to Adrenal failure

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>cause</th>
<th>effect</th>
<th>remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>stress</td>
<td>Irritable Bowel Syndrome (IBS)</td>
<td>SCENAR + rice-based diet + no yeast/gluten/wheat or histamine (citrus) products</td>
<td></td>
</tr>
<tr>
<td>antibiotics</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>wrong diet</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 2</th>
<th>IBS</th>
<th>Leaky-gut syndrome</th>
<th>rice-based diet + no yeast/gluten/wheat or histamine (citrus) products</th>
</tr>
</thead>
<tbody>
<tr>
<td>food allergies</td>
<td></td>
<td>Can take 8 months to rebalance gut</td>
<td></td>
</tr>
<tr>
<td>watery eyes</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Auto-immune diseases e.g. Grave’s disease (see stage 2A)**

<table>
<thead>
<tr>
<th>Stage 3</th>
<th>Leaky-gut</th>
<th>Intestinal Toxaemia (blood-poisoning by toxins released by gut bacteria)</th>
</tr>
</thead>
<tbody>
<tr>
<td>lower back muscular pain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>severe headache</td>
<td></td>
<td></td>
</tr>
<tr>
<td>aches, palpitations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>delirium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>death (if unattended)</td>
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<td></td>
</tr>
</tbody>
</table>

**Stage 4** recurring episodes of intestinal toxaemia

<table>
<thead>
<tr>
<th>Stage 4</th>
<th>damages myelin sheathing on nerves</th>
<th>body produces cholesterol to repair nerves</th>
</tr>
</thead>
<tbody>
<tr>
<td>burns-out glands</td>
<td></td>
<td>(takes about 5 months)</td>
</tr>
<tr>
<td>horrendous systemic pain as nerves short circuit</td>
<td></td>
<td>gain weight to provide fat to store toxins. Walk, sweat and bathe to clean body of toxins</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 5</th>
<th>Adrenal burn-out</th>
<th>Cortisol deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pineal Burn-out</td>
<td></td>
<td>Damage to adrenal cortex results in cortisol deficiency. Causes extreme thirst, joint pain &amp; muscle twitching. Awaken at 0300 hrs (hence unable to produce any more Cortisol)</td>
</tr>
</tbody>
</table>

Cortisol supplemenation reduces pain by c. 60% [Cortisol is made from 0300 – 0600 hrs daily hence supplementation should be taken in the morning only. 10mg (2 blobs the size of garden peas) of 1% over-the-counter Hydrocortisone cream, at 0800hrs and 5mg at noon + low/zero carbohydrate diet allows adrenals to rest and regenerate over several months](2) After Dr Sarah Myhill www.DrMyhill.co.uk |

**Caution:** Cortisol, supplementation, after 3 pm may activate immune system causing flu-like symptoms and/or insomnia. Magnesium supplementation also reduces pain by c. 20%, but destroys calcium—which is necessary to pick-up ACTH and create cortisol—so is not recommended when on cortisol supplemenation.

<table>
<thead>
<tr>
<th>Stage 2A</th>
<th>(overactive thyroid)</th>
<th>Grave’s disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-immune antibodies attack thyroid. Thyroid produces too much thyroid hormone causing hyperactive metabolism; heartbeat very fast [130-140 beats per minute]; rapid weight loss, loss of heart muscle, palpitations and/or possible heart-attack. Antibodies may attack eyes resulting in swollen eye-lids, eye-bags, ‘google-eyes’ or blindness and/or throat causing sore throat</td>
<td>Anti-thyroid drug Carbimazole 40mg per day for 28 days. Blood tests required every 2 f days. Dosage reduced when Thyroid hormone returns to normal range [12 – 22], then 10mg/day for 18 months. Nebilet beta blocker (to prevent heart attack) 2.5mg/day for 90 days, 1.25mg for 14 days, then 1.25mg every other day for 14 days.</td>
<td></td>
</tr>
</tbody>
</table>

**Caution:** Cortisol-based eye-drops [for eye inflammation] will turn-off cortisol production and may cause insomnia and reduced cortisol.

Figure 7.

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The cause of Auto-immune disease (I)

The endocrine system produces Cortisol to ameliorate inflammation and, together with Adrenaline, switches ‘on’ and ‘off’ the immune system, which produces antibodies to fight infections. Unfortunately, antibodies also cause inflammation of their own. Auto-immune disease results when too many antibodies are released for too long a period, causing inflammation to sensitive areas of tissue, like eyes, throat and thyroid. Endocrine dysfunction can occur in many ways: (i) Circulating blood-borne toxins, from Leaky-gut, tobacco smoke etc. can damage the endocrine organs directly making them less responsive to activation from very minor inflammation caused by normal bodily wear and tear. (ii) Damaged organs may not detect feedback shut-off signals and remain ‘on’ continuously, keeping the immune system ‘on’ continuously. (iii) High levels of adrenalin together with high levels of cortisol [HH] are used to activate the immune system, and the HH combination can be caused by various malfuctions (see figure 8b). Normally, the hypothalamus responds to ‘significant’ levels of inflammation, from injury or infection, and instructs the adrenal gland (via the pituitary) and adrenal cortex to produce more Adrenaline AND more Cortisol. Thus HH activates the immune system; antibodies are released to kill the infection. The increase in Cortisol negates the effects of the increased inflammation caused by the immune system and the original inflammation. When the inflammation falls, and the crisis is over, Adrenaline returns to normal, which switches-off the immune system and stops the release of antibodies, reducing inflammation further. The ‘increase cortisol’ signal, falls, switching-off the hypothalamus. Cortisol and Adrenaline return to normal. In auto-immune disease, the hypothalamus and/or pituitary send-out an ‘increase cortisol’ and ‘increase adrenaline’ signal continuously, which keeps the immune system activated continuously resulting in sustained tissue damage from antibodies.
The cause of Autoimmune Disease (II)

Leaky-gut → Histamine → Adrenaline → feedback loop

- Insufficient adrenaline, increase adrenaline to H’ Activates immune system

The cause of Allergies

Antigens, such as food particles, dust, pollen and smoke, enter the bloodstream via the gut, nose, eyes, lungs or hyperdermic needle...

and activate the immune system. Antibodies are prepared to recognise and kill the invaders, leading to ‘auto immunization’ by the body against those antigens.

Later incursions of antigens are recognised by the immune system which releases previously prepared antibodies that rapidly attack them, causing inflammation and the release of histamine that causes runny eyes and more Leaky-gut, if antigens entered via the gut.

The cause of Asthma

Antigens such as dust and smoke enter the bloodstream via the lungs and activate the immune system to recognise and ‘kill’ them leading to ‘auto immunization’ by the body against those antigens.

Later incursions of antigens are recognised by the immune system which releases previously prepared antibodies that rapidly attack them, causing inflammation in the lungs and constriction of airways. Breathlessness causes panic, and a surge of adrenaline suppresses any systemic histamine, hence the absence of runny eyes and nose.

How Salbutamol can cause Allergies, Asthma and Autoimmune Disease

Salbutamol inhaler (adrenoreceptor stimulator) → vasodilation of bronchi (in lungs) and gut → Leaky-Gut → Histamine → Adrenaline → feedback loop

- Insufficient adrenaline, increase adrenaline to H’ Activates immune system

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Conclusion

Allergies, Asthma, and Auto-immune disease are caused by gut dysbiosis (IBS) that leads to 'Leaky-gut', which allows antigens to enter the bloodstream directly, resulting in 'auto-immunization' of the body against those substances. Diagnosis of Leaky-gut disease, that leads to these diseases, if unattended, can be easily diagnosed using a simple clinical test costing around £10 per case.

Leaky-gut leads to a runaway histamine cycle that reduces systemic adrenaline. The reduced level of adrenaline is sensed by the adrenaline feedback loop which sends out an 'increase adrenaline' signal continuously, which activates the immune system continuously (if an 'increase cortisol' signal is sensed at the same time).

Leaky-gut also leads to toxaemia which, if unattended, causes death through blood-poisoning, in around 6 weeks. If the ingress of toxins is checked by the use of raw garlic, or antibiotics, the patient will survive to experience another episode within 6 weeks. [Note: antibiotics, although life-saving in the short-term, will exacerbate gut dysbiosis in the longer-term and therefore should be avoided if at all possible].

Long-term presence of toxins in the bloodstream can burn-out the endocrine system, in particular the adrenals, resulting in reduced levels of cortisol. This reduced level of cortisol is sensed by the cortisol feedback loop which sends out an 'increase cortisol' signal, continuously, activating the immune system (if an 'increase adrenaline' signal is sensed at the same time).

Cortisol deficiency can cause thirst, severe muscle twitching, palpitations, sleeplessness, insomnia and a vicious cycle of further cortisol reduction and possibly death, if unattended. Adrenal function may be restored by using hydrocortisone supplementation and by adopting a low carbohydrate diet to allow the adrenals to recover.

Toxaemia [dirty blood], further, prevents the hypothalamus from monitoring and controlling physical parameters resulting in all kinds of symptoms, such as severe headache, severe lower back ache, hot and cold sweats, delirium and flu-like symptoms, palpitations, and alternating bouts of diarrhoea and constipation.

The presence of circulating toxins, in the long-term, can also burn-off the myelin insulation from nerve pathways causing excruciating pain. The only refuge from this pain is for the patient to gain weight quickly, to re-store toxins in fatty tissue where there are no nerves, until the burden of toxins can be expelled in a controlled way, slowly. When nerve myelin is damaged the liver increases cholesterol production, in an attempt to repair the myelin. Excess cholesterol can lead to cardiovascular disease and heart attack. Damage to myelin insulation can result in multiple sclerosis if the body does not repair the myelin coating of its own accord.

Auto-immune disease ensues when the immune system senses a continuous demand for adrenaline and cortisol, as aforementioned.

Leaky-gut may also be caused by candida, in the gut, that punctures the gut-wall allowing the leaking of toxins into the bloodstream.

The chain of causation from IBS through Leaky-gut disease to the above-mentioned diseases may be checked at any stage by appropriate remedial action prior to escalation; IBS and Leaky-gut can be rectified by the removal of stress and/or dietary changes that remove inflammatory antagonists from the gut. Toxaemia can be managed through either antibiotics or garlic once per week, to keep bacterial endotoxins under control, plus exercise, followed by bathing, to remove toxins from skin. Rapid dieting should be avoided to preclude the en-masses release of toxins stored in fat deposits that can cause 'metabolic toxaemia', which, again, can be managed by gaining weight rapidly to enable the short-term re-storage of toxins, safely.

Continuous activation of the immune system will result in an overactive thyroid that leads to Graves' disease and symptoms of a very fast metabolic rate, and rapid weight loss that weakens the heart. This urgently needs to be brought under control with the use of thyroid controlling medication and beta-blockers. Corticosteroid-type anti-inflammatory eye drops should not be used on those with cortisol issues. The Antithyroid drug [Carbimazole] and blood thinning drug [Plavix] may depress white blood cells and seriously impair immunity.

Epilogue