Leaky-gut—the cause of allergies, asthma, and auto-immune disease
by
Maurice Cotterell
B.A. (Hons.) MCMI, L.Eng. MIET

SunspotUK@aol.com www.MauriceCotterell.com

SYNOPSIS
causes of Leaky-gut

Dementia Alzheimers Parkinsons
neurological diseases

liver does NOT produce more cholesterol/does not repair myelin
multiple sclerosis

Statins (switch-off myelin repair mechanism)
Porridge (beta glucans) and other grains (reduce cholesterol)

HEADACHES MIGRAINE

XANTHELASMA fatty lumps around eyes

STROKE

blood thinning drugs

CANCER

Cancer cells fail to divide: multiply: STOP
Retinitis Pigmentosis rods & cones fail to replicate every 7 days = blindness

Menstrual problems loss of 28-day rhythm

ADRENAL FAILURE/FATIGUE

watery eyes, especially after eating

AUTO-IMMUNE DISEASES

SJOGREN’S SYNDROME

loss of taste and smell

very fast heartbeat

CATASTROPHIC LEAKY-GUT

Food leaks into bloodstream inspiring release of histamine, producing tears to flush-out antigens

ALLERGIES & ASTHMA

High Cortisol + High Adrenaline

Lower-backache as liver dumps toxins into lower-back muscles and, later, fat-stores

beta glucans trigger immune system & release more white blood cells

LEAKY-GUT deadly toxins, and food, leak into bloodstream

Gut Lining fails to renew (completely) every 5 days

Candida penetrates gut lining, yeast glues down villi causing gut dysbiosis

Inhaler vasodilates gut tissue

Tyramine-containing foods: Chocolate Cheese etc

Metabolic Toxemia toxins released from fat during dieting

NSAIDs (incl. Aspirin)
Serotonin (or Melatonin)

Coca Butter & Coconut Butter

Irritable Bowel

Loss of sleep, Loss of Diurnal Rhythm

Low Melatonin

Stress/Fear

High Cortisol

Biorhythmic desynchronisation diseases

Catastrophic leaky-gut

ADENAL FAILURE/FATIGUE

LEAKY-GUT—blood-poisoning

ENDOCRINE BURN-OUT

GRAVES DISEASE (over-active thyroid)

white blood cells attack sensitive tissue including thyroid & eye areas

loss of taste and smell

extreme thirst/dry eyes

HEART ATTACK

CARDIOVASCULAR DISEASE

liver produces more cholesterol to repair myelin

XANTHELASMA fatty lumps around eyes

STROKE

blood thinning drugs

Asprin (& NSAIDs) burn holes in gut causing Leaky-gut

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.

Available to download, for free, from www.MauriceCotterell.com

© Maurice Cotterell 2005 – 2019
Irritable Bowel Syndrome (IBS)

**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 [and 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-crot 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 pain killers)
Burn holes in the gut wall. [Use, instead, Paracetamol (although largely ineffective with severe toxemia-type headache)]

**Aftercare:** Multiple attacks of Toxemia 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 harmless 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 and other pulses (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 benzone). Tar based shampoos. Wood preservative, Turpentine etc. [on the skin]. Ingesting/absorbing very small quantities of these will cause lower back pain.

---

**Leaky Gut Disease**

**Effects**
- Crohn's Disease
- Ulcerative Colectis
- Myasthenia gravis
- Autoimmune diseases
- Glandular fever
- Frequent sore throat
- Overactive thyroid = Grave's disease
- Food allergies

**LEAKY GUT**

**Endocrine Burn-out**
- Damage to Pituitary, Hypothalamus, Pinea1 & Adrenal glands; loss of diurnal rhythm; reduction in Cortisol = thrist, joint pain and muscle twitching

**Toxemia**
- Blood-poisoning, organ failure, fever & death [figs. 1–6]
  - First symptoms: severe lower-back (muscular) pain & severe headache

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

**Metabolic toxemia**
- Dieting releases toxins (stored in fat) that re-circulate in blood.
- Long-term damage: toxins burn-off myelin insulation from nerves. Nerves short-circuit, causing extreme systemic pain and localised tremors (lips/eye-lids etc). Liver produces more cholesterol to repair myelin resulting in fatty-lump deposits over eye-lids. Treatment: Gain weight quickly to re-'store' toxins in new fat. Sweat and bath often.

---

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 the 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.

Irritable Bowel

Cortisol malfunction
Fatty acid deposits

Adrenal
malfunction

Melatonin
malfunction
Insomnia

Pineal
malfunction

Pituitary
malfunction

Bacterial Putrefaction; Guanadine Histamine Other organic Toxins
Watery eyes (esp. after eating)

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 (malfunction)
endocrine burn-out

Intestinal Toxaemia

Persistent Headaches (after c. 6 weeks)
Delirium

Severe lower back muscular pain
Secondary symptom of return

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.

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 injection (bacteria) found in bloodstream (i.e. a 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.

Figure 2. © Maurice Cotterell 2005 – 2013
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, skatol, phenol, cresol, indican, sulphured hydrogen, ammonia, histidine, neurin, cholfin, muscarine, butyric acid, urrobin, methyl, mercaptan, tetramethyl, disulphide, putrescin, cadaverine, neurin, cholfin, bera-imidazooxythine, methylglyoxal, promaropine, butulin, tyramine, agmatine, tryptophane, sepsin, idioethylamine, sulphiglobine.

**Destroy Toxin-producing bacteria**
- For really ill (dying) patients
  - Raw Garlic: To Keep in check (every 7 days)
    - Peel, finely chop and swallow 1 segment of 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). Pantotheinic 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**

**Regulate**
- Diet
- Lifestyle
- Therapy

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

**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 crisps, banana and milk; lunch: 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

**SCENAR [Bio-feedback [USA]]**
[Self-controlled Neuro-Neuro Adaptable 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
Metabolic (recirculating) Toxaemia

caused by consuming toxins 
stored in fat [when dieting]

---

**Cholesterol makes:**

- Hormones (e.g., Adrenaline & Cortisol)
- Bile Acid: makes mucus lining in gut = healthy gut
- Myelin: protects nerves

---

**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

---

**Mineral relationships**

- Iron
- Copper
- Calcium
- Magnesium
- Potassium
- Zinc
- Manganese
- Sodium
- Cobalt
- Cadmium
- Phosphorus

---

**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 the stomach) for absorption.

---

Supplements for Myelin production: PUFA, Vitamin B12, Calcium, Zinc, Magnesium

Supplements for Adrenalin 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; Cadmium, Zinc, Selenium

Hence supplement regime of: Vitamin C, Vitamin B5 (Pantothenic Acid), Vitamin B12 and Calcium (with Magnesium), Magnesium (for energy), Zinc (with copper), Selenium

---

Recirculating toxins attack Myelin [the fatty sheath that covers the nerves—an electrical insulator] resulting in acute systemic pain (severe suicidal headaches)

---

Toxins from each episode of intestinal toxaemia [assuming the patient survives] are relegated to the fatty tissue of the body where they are painlessly stored [because the fat contains no nerves]. However, if the patient dies, or loses weight, then the toxin-laden fat is consumed by the body and the toxins are once again released to re-circulate throughout the body. The liver attempts to cleanse them from the bloodstream and once again dumps the toxins in the muscles in the small of the back causing pain in that region. On previous occasions of intestinal toxaemia the toxins were then relegated to fatty tissue. But this time there is no fatty tissue [it having been consumed during the diet]. This time neither garlic or antibiotics can help the patient, because the problem is not arising from a flow of toxins from gut bacteria. The recirculating toxins then attach the myelin sheathing around nerve pathways causing excruciating pain from which there is no refuge. In an emergency, in the short term: Calcium bentonite clay [1 tsp in morning + 1 before bed] evacuates toxins rapidly [detoxes] reducing pain. Supplement with magnesium and zinc. The only way to remove the toxins in the medium term is for the patient to gain weight; produce more fatty tissue where the toxins can once again be stored. In the long term toxins removed by a detox using chelettes (zinc, selenium, calcium bentonite) and/or a profuse sweating regime; 1-hour walk daily, to sweat, followed immediately by a hot long soak in the bath, or sauna therapy, to wash toxins from skin.
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.


**Bi** (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.

**Zinc.** Release vitamin A from liver to aid pituitary, adrenals, testes. Required for nervous system and brain. Reduces blood fat levels.

**Selenium.** Antioxidant. Detoxes arsenic cadmium and mercury.


**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 potassium, however, note;

**Potassium.** 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 Vitamin 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, antibiotics, wrong diet</td>
<td>Irritable Bowel Syndrome (IBS)</td>
<td>SCENAR + rice-based diet + no yeast/gluten/wheat or histamine (citrus) products</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 2</th>
<th>IBS</th>
<th>Leaky-gut syndrome (food allergies, watery eyes)</th>
<th>rice-based diet + no yeast/gluten/wheat or histamine (citrus) products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-immune diseases e.g. Grave's disease (see stage 2A)</td>
<td></td>
<td>Can take 8 months to rebalance gut</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 3</th>
<th>Leaky-gut</th>
<th>Intestinal Toxaemia (blood-poisoning by toxins released by gut bacteria)</th>
<th>1 tsp chopped raw garlic weekly to kill gut bacteria</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>lower back muscular pain, severe headache, aches, palpitations, delirium, death (if unattended)</td>
<td>walk, sweat and bathe to clean body of toxins or antibiotics (every 6 weeks)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>damages myelin sheathing on nerves burns-out glands</td>
<td>body produces cholesterol to repair nerves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>horrendous systemic pain as nerves short circuit</td>
<td>(takes about 5 months) 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 4</th>
<th>recurring episodes of intestinal toxaemia</th>
<th>Cortisol deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Damage to adrenal cortex results in cortisol deficiency. Causes extreme thirst, joint pain &amp; muscle twitching</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Awaken at 0300 hrs (hence unable to produce any more Cortisol)</td>
</tr>
</tbody>
</table>
| | | [Cortisol can be measured using the Adrenocortex Stress Profile test (saliva test) available from Genova Diagnostics (London) via a GP [this is the only reliable cortisol test].]
| | | (2) After Dr Sarah Myhill www.DrMyhill.co.uk |

<table>
<thead>
<tr>
<th>Stage 5</th>
<th>Adrenal burn-out, Pineal Burn-out</th>
<th>Cortisol supplementation 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 <a href="http://www.DrMyhill.co.uk">www.DrMyhill.co.uk</a>]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>[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 supplementation]</td>
</tr>
</tbody>
</table>

| Stage 2A | 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 | Anti-thyroid drug Carbimazole 40mg per day for 28 days. Blood tests required every 21 days. Dosage reduced when Thyroid hormone returns to normal range [12 – 22], then 10mg/day for 18 months. Nebilbet beta blocker (to prevent heart attack) 2.5mg/day for 60 days, 1.25mg/day for 14 days, then 1.25mg every other day for 14 days. [Caution: Cortisol-based eye-drops [for eye inflammation] will turn-off cortisol production and may cause insomnia and reduced cortisol] |

Figure 7.
The cause of Auto-immune disease (1)

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 in sensitive areas of tissue, like eyes, throat and thyroid. Endocrine dysfunction can occur in many ways: (i) Circulating blood-based toxins, from Leaky-gut, tobacco smoke etc. can damage the endocrine organs directly making them hypersensitive 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 adrenaline together with high levels of cortisol are used to activate the immune system, and the HH combination can be caused by various malfunctions (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 diseases 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 Auto immune 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 Auto Immune Disease

Salbutamol inhaler (adrenergic receptor stimulator) → vasodilation of bronchi (in lungs) and gut → Leaky-Gut → Histamine ↑ → Adrenaline ↓ "feedback loop insufficient adrenaline, increase adrenaline to H" activates immune system.

Figure 9. © Maurice Cotterell 2005 – 2013
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 untreated, can be easily diagnosed using a simple clinical test costing around 10 pence.

Leaky-gut leads to a runaway histamine cycle that reduces systemic adrenaline. The reduced level of adrenaline is sensed by the adrenal 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 toxemia 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 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.

Toxemia [dirty blood], further, prevents the hypothalamus from monitoring and controlling physical parameters resulting in all kinds of symptoms, such as severe headache, 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 leaching 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 exacerbation; IBS and Leaky-gut can be rectified by the removal of stress and/or dietary changes that remove inflammatory antagonists from the gut. Toxemia 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 toxemia’, 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

Figure 10b.

References: (1) After Dr Leo Galland, www.MDHeal.com ‘Leaky-gut—breaking the vicious cycle’  (2) After Dr Sarah Myhill, www.DrMyhill.co.uk
EPILOGUE (II): How to manage Leaky Gut (Summary)

Leaky-gut caused by Candida
Leaky-gut caused by inhaler, or melatonin or serotonin or histamine supplementation
Leaky-gut caused by stress
Leaky-gut caused by yeast, gluten, histamine, ingested bacteria or foods containing tyramines

Stress produces adrenaline which inflames and damages the intestine, causing it to leak. Remove source of stress.

Yeast, and bacteria burrow-through the gut wall, allowing the gut to leak toxins. Gluten and dairy (tryptophan/tyramine) is a significant cause of leaky gut.

Histamine and tyramines dilate blood vessels allowing gut to leak. Avoid food and drink containing yeast, bacteria (dairy), histamine (citrus/blue cheese) and tyramines.

Inhaler or melatonin or serotonin or histamine vaso-dilate gut causing gut to leak. If possible don’t use inhaler or above supplementation

Candida fungus punctures gut wall causing gut to leak. Treat using anti-fungal drugs

Irritable Bowel Syndrome (IBS)

TOXAEMIA—deadly toxins leak into bloodstream

If not managed will lead to either death or Chronic sickness, including: Allergies, Asthma, Auto Immune diseases including Grave’s disease, Alzheimer’s, Dementia, Parkinsons and to Cardiovascular disease

To cure/manage: 7 days Flagyl antibiotics (to kill all gut bacteria) then 1 teaspoonful of chopped raw garlic per week (to minimize bacteria) forever. No food or drink containing yeast, gluten or histamine (citrus/blue cheese), or bacteria. No inhaler. No Candida

Long-term circulating toxins migrate and are stored in fat reserves

Metabolic toxemia caused by recirculating toxins

If dieting exercise for 1 hour to sweat-out toxins & wash-off immediately in bath

EPILOGUE (III):

Normally, a healthy gut lining sheds, is replaced by a new gut lining every 3–5 days. So, following our analysis, one question remains: If the source of the leaky gut [Candida, Stress, Diet, Inhaler, or Metabolic toxemia] has been addressed and ameliorated why does the new gut lining leak?

A similar observation may be made in the case of the menstrual cycle where the womb lining, which is designed to shed every 28 days, often malfunctions. In this case the medical approach calls for the surgical removal of the womb, a solution which is not available in the case of gut malfunction.

It is not known why a gut, without inducement, should leak in the long-term. Conjecturally, it could be that the new gut lining is failing to fully mature within the 5-day cycle— which might, conceivably, be caused by a high haemoglobin—the blood may be too thick to flow through the very fine capillaries of the gut, resulting in poor nourishment and a failure of the new lining to mature within the critical 5-day cycle window. Or, perhaps it is because the old gut lining is shedding too early in the cycle, before a replacement lining is ready. Or, it may be because the endocrine system has suffered permanent damage, from toxins, so that it no longer performs as it should, in regard to the timing of gut-lining replacement. Or it may, simply, be due to a genetic defect. These and other possibilities require investigation.

Figure 12.

page 11.

© Maurice Cotterell 2005 – 2017
Hormone levels are finely balanced. A normal amount of copper produces a normal amount of Monoamine Oxidises (MAOs) which produce a normal amount of the hormone precursor 'tyramines', which produce a normal amount of Thyroid Hormones (T4 and TSH) and a normal amount of the Catecholamine Hormones. MAOs regulate both tyramines and, hence, levels of new hormone production and also the levels of old-used circulating hormones. The system should stay in balance because an increase in copper, or MAOs, leads to an increase in production of new hormones and, at the same time, to an increase in the destruction of old hormones, and vice versa. However, certain foods contain natural tyramines that can lead to an increase in new hormones but not to the increased destruction of old hormones which then leads to an increase in hormone levels, hyperthyroidism, high blood pressure, headaches, stress, less breakdown of MAOs in the gut and increased leaky-gut.

When the tyramine level becomes too high—from the ingestion of tyramine-containing food—it increases production of serotonin which inhibits gastric secretion and, behaving like histamine, vasodilates gut tissue, inspiring an episode of leaky-gut; toxins from the gut then enter the bloodstream and begin to burn-off myelin insulation from nerve pathways in the brain resulting in the electrical short-circuiting of nerves and pain in the brain [migraine]. It could take 18 - 24 hours, after consuming tyramine-containing food, for the myelin depletion to cause migraine-level-pain. It could then take the liver a further 3 days to clear the toxins from the bloodstream, by which time the food that inspired the problem has passed through the gut and the migraine subsides.

Tyramine containing foods: chocolate, yeast, beer, ale, wine, choose, yoghurt, banana, nuts, beans, liver, figs, prunes, raisons, canned pineapple, soy sauce MSG, vanilla, pickled/salted fish.

Tyramines (amino acids, precursors to some hormones) too high?

Catecholamine hormones

Serotonin Inhibits gastric secretion Regulates mood/depression
Dopamine/Noradrenaline/Adrenaline Regulate blood pressure (and headaches) Dopamine affects Parkinson's Disease Melatonin Regulates Sleep circadian rhythms

Thyroid hormones

T4 & TSH regulate metabolism

Affects the breakdown of MAOs in the gut Behaves like histamine, worsening Leaky-gut

High Tyramines cause high blood pressure and, hence, 'headache', and depression

High Tyramines cause hyperthyroidism

Figure 13.
page 12.
The high Haemoglobin hypothesis could be checked by comparing haemoglobin levels of those with ‘high haemoglobin levels having heart-attacks’ to those with ‘low haemoglobin levels having heart-attacks’.

The high haemoglobin serotonin hypothesis could be checked by comparing the incidence of heart-attacks/stent-implants with serotonin levels in heart-attack patients.

The Leaky-gut-cholesterol-inhaler heart-attack mechanism could be checked by comparing the number of heart attack patients who use an inhaler to the number of heart-attack patients who do not use inhalers.

The leaky-gut/xanthelasma mechanism could be checked by comparing the number of heart-attack patients with Xanthelasma to those without Xanthelasma.

The efficacy of the cholesterol-myelin-rejuvination mechanism could be checked by comparing the number of those with Alzheimers, etc. who take statins [that switch-off the myelin repair mechanism and cause Alzheimers, etc.] to those who do not take statins.