



How does Aloeride® work ?

The plant aloe vera contains a complex mixture of molecules. The Handbook of Phytochemical Constituents of GRAS Herbs and Other Economic Plants by James A. Duke states that there are as many as 300 different types of molecules in aloe vera. Hardly surprising then that it has multiple effects on multiple tissue types. Unfortunately this broad spectrum of activity also fuels 'academic' scepticism because aloe vera does just too much to be true.

To put that last criticism into perspective, even in Prescription Only Medication (POM) there is not just one thing any drug does. This is why we have monthly editions of MIMS and BNP to show, next to the indications of POMs, their contraindications, warnings, other drug interactions and adverse effects. POMs are as targeted molecules as a pharmaceutical company can make them, yet they affect so much. Imagine a plant with 300 different types of molecules, of course it is going to act broad spectrum.

Aloe vera has been used by millions of people worldwide throughout the ages. Empirical evidence accumulated in accolades like 'miracle plant' and 'burn plant' but for academic validity such a sustained track record is said to be meaningless. But even in today's climate of evidence based medicine (EBM) much of day to day healthcare is characterised by non evidence based practice, variation in practice, inadequate outcome data, inequality of access to optimal treatment and ultimately a lack of evidence base. (Virus Research, Volume 89, Issue 2, November 2002, Pages 175-181). Entrenched sceptics should note that lack of evidence of efficacy should not be confused with evidence of lack of efficacy. The former says that there is insufficient evidence to pass judgement. The latter says it does not work.

Of course good aloe vera works. Quite beside that there is safety and validation in the numbers (millions of people) and in the length of time aloe vera has been used (centuries), there is a lot of good quality research on aloe vera as well as scientific knowledge about what its different type of molecules do. This said, how well an aloe vera product works depends entirely on its quantity of working molecules, the quality of them and purity of product. On all counts Aloeride® is an exemplary product that stands head and shoulders above its competitors.

So how does it work? Aloeride® is mostly taken by mouth but can also be applied to the skin. When taken by mouth, in the fluid environment of the stomach, the Aloeride® capsules dissolve within 1 or 2 minutes giving our powder plenty of time to mix with the ample water (your stomach's mixing waves occur every 15-25 seconds) with which you swallowed the capsules. So you have now rehydrated your aloe vera powder. Only when you have lesions or inflammation in your mouth or oesophagus is there a need for opening the capsules and ingesting the powder with water. This is easy and it does not taste horrible.

With all 300 different types of molecules out of the capsule, Aloeride® goes to work. Broadly speaking the action is threefold and interconnected: anti-inflammatory, immune-modulatory and tissue healing with the target tissue being mostly epithelium (tissue that separates tissue cells from air). Of course the first point of contact of these molecules is the alimentary canal, so it is hardly surprising that Aloeride®'s molecules show their effect there first. Because Aloeride®'s molecules also are absorbed into your bloodstream (via pinocytosis), they also find their way to peripheral tissue. Thus Aloeride® exerts effect way beyond the alimentary canal and causes powerful inside-out healing, which is the only route for safe wound healing and 24/7 skin care. The full phytochemical effect of good aloe vera is much broader than the trio mentioned at the beginning of this paragraph. Just how broad spectrum aloe vera works is underpinned by good research: cell growth, anti-inflammatory effect, anti-microbial effect, effect on burns, anti-diabetic effect, cardiovascular and lipid effect, anti-ageing effect and response to UV light, wound healing, gastrointestinal effects and immune modulation.

Broad spectrum action

Aloeride®'s broad spectrum action is the result of 300 types of molecules as



well as their domino effect. Let me explain the latter, an inflamed intestinal wall for example becomes permeable to (lets through) macromolecules that ought to stay within your alimentary canal. Enterocytes (the intestinal wall's absorptive lining cells) normally determine what may enter the body - via transcellular crossing - and what may not i.e. what should stay inside the intestines. Any inflammatory reaction of the intestinal wall creates leaky gut syndrome where gaps occur in between these enterocytes. Through these gaps indiscriminate,



transcellular crossing



paracellular crossing

paracellular crossing now can happen (see finger/hand example).

Macromolecules now gate crashing into your body can trigger abnormal immune reactions and other trouble. Aloeride® much helps to close the gaps between the enterocytes, thus indirectly changing immune response beyond its direct, researched effect on phagocytosis, lymphocytes and T-helper cells. Beyond that immune modulation, Aloeride® also creates

a more favourable milieu for good gut bacteria which in turn improves normal immunity.

Three hundred different types of aloe vera molecules, working synergistically and causing domino effects, will act broad spectrum and the magic of all this forms the basis for aloe vera's much deserved accolades. Aloeride® is recommended by doctors and therapists, and can be purchased from Niel at 082 266-7248.

Healing ulcers

Ulcers are poorly healing epithelial wounds i.e. discontinuity of the skin (dermatology) or discontinuity of the oro-gastrointestinal mucosa (gastroenterology). The injury of an ulcer (open wound) is tortured by the insult of something rubbing over it (food sliding past ulcerative colitis, body weight onto decubitus). Improving the chances of an ulcer healing is welcome news to anybody who has them.



Two commonly seen skin ulcers are diabetic ulcers and decubitus ulcers (pressure sores). Next to promoting safe (from the inside out) wound healing, it is vital to respectively stabilise the diabetes mellitus and relieve the pressure on the skin. Three commonly seen digestive tract ulcers are mouth ulcers, gastroduodenal ulcers (peptic ulcers) and ulcers in ulcerative colitis.

In diabetic ulcers the first objective is to stabilise the diabetes and a diet (total carbohydrate load) review forms one part of that. Aloeride® aloe vera, next to accelerating wound healing is known to help the blood sugar management. Decubitus ulcers often happen in the elderly and are as uncomfortable as they can be difficult to heal. Beyond the faithful sheepskin, there are many more devices nowadays to ameliorate skin contact. Decubitus often requires specialist wound nursing care and always strict

hygiene. Mouth ulcers can be a local issue but also occur concurrently in Ulcerative Colitis, visit your dentist, mix Aloeride® capsule content with lukewarm water and swirl it around the affected side of the mouth for no less than 5 minutes. Gastroduodenal ulcers (peptic ulcers) are covered in my free ebook which you'll receive after joining the mailing list. Ulcerative colitis is covered in an article on UC in this article.

Wherever the ulcer is and whatever its causal factor, a complex series of events that constitutes wound healing must happen for the ulcer to cure. This happens in three stages:

1. inflammatory phase after initial vasoconstriction and clotting to stop blood loss, blood vessels open (more blood - that should contain molecules necessary for repair - now goes to the affected area), the local heat generated by inflammation kills local heat-sensitive pathogens, finally phagocytosis engulfs and removes dead and body-foreign cells.
2. proliferative phase can take up to 3 weeks during which the fibroblasts lay a bed of collagen, fills any defects and produces new capillaries; the wound edges should pull together and finally epithelialisation takes place and the wound is covered again.
3. remodelling phase new collagen forms which increases tensile strength to wounds.

If you look at the processes that are required to heal an ulcer, then several natural steps you can take become obvious. By the way, there is nothing against combining say triple therapy for a H. pylori infection with natural steps, providing the cart is pulled in the same direction and there are no adverse interactions.

Vasodilation of phase 1

Improving the local circulation for say a leg or an arm ulcer can be achieved by Kneipp alternating hot and cold foot/arm baths. For lower leg ulcers for instance use two washing-up bowls; in each bowl the water temperature varies between approximately 10°C and 38°C but frankly, if you can stand it, then go as cold and as (pleasantly!) hot as you can stand it. Do NOT scald yourself. You may wish to top up the bowl of warm water with boiling water (careful please) so as to keep its temperature up and you may wish to drop ice cubes into the cold bowl. Alternate between the warm bath (for < 5 minutes) and the cold bath (for < 1 minute) and always end with the warm dip. If you can follow it up with some active exercises, so much the better. Large hot packs on the solar

plexus may help the circulation of the upper abdomen as people with digestive disorders may have experienced.

Improving the general circulation can (over time!!) be achieved by taking 10 grams of the essential amino acid L-ArginineM2 thirty minutes before you know you fall asleep (ingest absolutely no food 3 hours before, a low glycaemic status is imperative) which enhances systemic Nitric Oxide production by blood vessel endothelium (i.e. opens vascular bed) but also effects regression of atherosclerosis (i.e. reduces furring of blood vessels thus improves your circulation). Nitric Oxide is successfully used in critical limb ischemia so why not use it to effect safe perfusion in wound healing! Ingested thirty minutes before sleep L-ArginineM2 crosses the blood brain barrier (BBB) and stimulates the pituitary gland naturally into producing more human growth hormone (i.e. do not take it if you are 23 years old or younger). Note that ordinary L-Arginine products may reactivate a dormant herpes simplex virus and that pregnant or breastfeeding women cannot use any L-Arginine supplements. Rather than using Arginine + blind amino acid rider in isolation, we tend to give (always to the elderly) a specific wholemeal powder supplement (healthy, always, for everyone), with a large serving (in lieu of lunch) taken before the midday nap and a normal serving before bedtime, akin to the LAM2 philosophy. To the question why not use Ginko Biloba or Padma28 the answer is simple, long term they will not be as broad acting as L-ArginineM2, and you can only spend your money once. And of course, if this can be done, sustained cardio-vascular exercise also benefits general circulation. Never throw the baby out with the bathwater simply because you stumbled onto something that looks like a clever shortcut.

A short sharp inflammation is a useful response but ongoing inflammation causes damage. Aloeride® provides a host of natural anti-inflammatory molecules and your dosage should reflect the situation that is being dealt with.

Proliferation phase II

A reasonably accurate analogy I use is that Aloeride® stimulates the knitting whilst nutrition provides the wool. Aloeride® being a food

provides wool but is it enough for the job in hand. No one size fits all, some people accelerate safe, from the inside out wound healing with just Aloeride® but in the elderly - who on the whole no longer eat daily truly nutritious meals - additional nutritional support may be necessary. The cell types you want to see working harder in the proliferative phase of wound healing are: fibroblast, keratinocyte and collagen growth (type III > type I), their activity greatly improves by taking Aloeride® and your dosage should reflect the situation that is being dealt with. Any nutritional deficiency of proteins, vitamin A (collagen synthesis, epithelialisation), vitamin C (collagen synthesis) or Zinc will slow down wound healing. This is why in difficult wound healing people can be advised to combine Aloeride® (2-3 cps a day) with a wholefood supplement that contains these nutrients and antioxidants in both good quantity and natural ratios.

Remodelling phase III
Remodelling only happens once the inflammatory and proliferative phases are completed. Whereas you notice the inflammatory and proliferative phase, you'll never know about phase III. It seems wise though to fuel the body with extra nutrition and Aloeride® for a while longer to support this phase too.

Gingivitis

Gingivitis is just an inflammatory reaction and you'll feel pain in and see redness and swelling of the gums. Nothing much to worry about if this is a one off reaction to you being rough with brushing, flossing or using dental bottle brushes. However if blood on your toothbrush, near a tooth or gum area occurs regularly then you had better take action.

Long standing gingivitis (affects gums only) can easily turn into periodontal disease (affecting all the tissues supporting teeth and molars) and, just to put this into perspective, more teeth are lost through periodontal disease than through tooth decay. The action required is simple; visit your dentist and dental hygienist no less than every 6 months (panoramic X-rays may be taken, plaque must be removed because bacteria and plaque go hand in hand) with diligent oral hygiene in between these visits.

To help settle gingivitis, allow the content of 1 Aloeride® capsule to dissolve in 20 - 30mL of ginger warm

water and gently swirl this mixture around in your mouth for 5 minutes (contact time with painful area is of the essence), then you swallow it. Keeping your teeth for life is no fairy tale providing you look after your gums.



Aloeride® is useful when taking Non-Steroid Anti-Inflammatory Drugs.

When you injure yourself and get a painful inflammatory reaction in muscles, tendons or joints, you are likely to be prescribed Non-Steroid Anti-Inflammatory Drugs (NSAID) or you may get some over-the-counter yourself. Per year some 25 million NSAID are prescribed in the UK, some 70 million in the USA and some 10 million in Canada. Some 17 million Americans use NSAID on a daily basis, some 300 million people use them worldwide every day. [UC Davis School of Medicine]



NSAID are overwhelmingly successful in helping acute and chronic pain. However their use has significant drawbacks: adverse effect on kidneys, asthma gets worse in some people and most importantly NSAID as well as Aspirin cause stomach and duodenal erosions. These can become ulcers, some of which bleed and in some folk who have bleeding ulcers, the bleeding is sufficiently severe to result in hospital admission and may cause death. A US study puts the human impact of NSAID-related gastrointestinal deaths into perspective: the rate is higher than that found from cervical cancer, asthma or malignant melanoma. [G Singh. Recent considerations in nonsteroidal anti-inflammatory drug gastropathy. American Journal of Medicine 1998 105(1B): 31S-38S.] Quite an eye opener

by any standards.

Good doctors prescribing NSAID try to balance their benefits and harms. So you may get so called gastroprotective medication (e.g. Misoprostol, PPIs and H2RAs) to try and offset the commonest side effect of NSAID. Proton pump inhibitors (PPIs) and H2 Receptor Antagonists (H2RAs) cause acid-suppression. This means there is less acid to irritate the erosion or ulcer. However, this co-medication does not give your body any tools to heal that iatrogenic NSAID-related lesion. It merely forces a lesser irritant during ongoing erosive onslaught.

Rather than just reducing acidity, which you actually need for a proper digestion of foods, it would be an extremely sensible approach to take a mucosoprotective agent that accelerates the healing of existing gastroduodenal ulcers and may prevent them in the first place. That specific agent is Aloeride® aloe vera capsules at a minimum of 2 capsules a day. There is plenty of good research to support this approach. [Blitz, J.J.; Smith, J.W.; Gerard, J.R. Aloe Vera Gel in peptic ulcer therapy; Preliminary report. Journal of the American

Osteopathic Association. 1963.62.731-735.; Galalee, Kandila, Hegazy E, El Ghoroury M, Gobran W: Aloe Vera and gastrointestinal ulceration, J Drug Res Egypt 7:73-77, 1975.; Gupta MB, Nath R, Gupta GP, Bhargava KP: Antiulcer activity of some plant triterpenoids, Indian J Med Res 73:649-652, 1981.; Kandil A, Gobran W: Protection of gastric mucosa by Aloe Vera, J Drug Res Egypt 11:191-196, 1979.; Koo, M.W.L. Aloe Vera; anti-ulcer and anti-diabetic effects. Phytother Res. 1994. 8(8). 461-464.]

In the UK those 25 million prescriptions resulted in 12,000 NSAID-related hospital admissions which resulted in 2,600 deaths. Those 70 million USA prescriptions resulted in 100,000 NSAID-related hospital admissions which result in 16,500 deaths. Now bear in mind that these figures occurred despite doctors being mindful of the harms and co-prescribing gastroprotective medication in line with present medical guidelines. These numbers represent people who thought they would be alright taking NSAID. And these are only the ones that needed hospitalisation, the number of

people who actually had symptoms of erosion/ulcers but weren't seen beyond Primary Care is of course much higher. [statistical data from Bandolier Journal]

Alternatives to NSAID come in the form of enteric coated proteolytic enzymes and some of these have a lot of good research behind them. All well and good but for sledgehammer effect NSAID remain unbeaten. So the occurrence of NSAID-related stomach and intestinal erosion/ulceration is unlikely to change, and in the famous words of Clint Eastwood (Dirty Harry) you can be asked "Do you feel lucky?" Because for 12,000 people in the UK and 100,000 people in the US it didn't pan out that well and the families of 2,600 Brits and 16,500 Americans now put one less plate on the dining room table every evening. Excellent analgesics and anti-inflammatories NSAID may be, but there is a price to pay.

Present Medical Directive guidelines cause significant cost in human terms as well as in financial terms. In addition to the cost of NSAID themselves, the cost to the National Health Service for NSAID-related gastrointestinal adverse effects is some £331 million in co-prescribing and some £36 million in hospital costs.

A simple decision to make

If you are on NSAID and are feeling slight nausea or abdominal discomfort then you have ulcerative erosion. At this point you can just hope that repair may happen by suppressing acidity or you give your body an (additional) agent that accelerates the healing and may even prevent NSAID-related gastroduodenal ulcers. Sure enough another option is to stop taking NSAID, but then you have to face the painful music of inflammatory reactions in muscles, tendons or joints. Aloeride® is privately prescribed by doctors and therapists but also can be purchased securely [from us here](#).

Acid Reflux and Oesophagitis

If you suffer regularly from a burning feeling which rises from the upper abdomen that is worse after a meal then you may have a hiatus hernia. When burning rises from the lower chest up towards the neck then you may have oesophagitis. You can see why so many admissions to Accident

& Emergency for central chest pain turn out to be digestion related.

Many (older) people know what happens in a groin hernia, the tummy wall ruptures and a bit of the inside pops through the hole. In a hiatus hernia the top of the stomach pops upwards through the diaphragm and stops the



latter from closing properly. Imagine how the shutter on your camera works, well that is pretty much how the diaphragm sphincter muscle works. Your food pipe should be a one way elevator, going down only. When the elevator goes up you are either vomiting (useful eviction) or have acid reflux (damaging).

With acid reflux there are some other additional, fluctuating symptoms such as feeling sick, acid taste in mouth, bloating, belching, burning pain when you swallow hot drinks. And if you cough a lot - causing sharp contractions of the diaphragm - then this may affect the reflux.

It is logical that when pressure below the diaphragm rises, an already hampered sphincter may not be able to withstand it so stomach contents travels up into the gullet. If you are overweight it is the excessive fat in the abdominal cavity that increases pressure. If a



female is pregnant, her uterus size increases, forcing the stomach up (sure, hormonal changes may affect the tightness of the sphincter). If you are constipated or are very bloated the bowel content can raise pressure. Finally, the more you fill the stomach the worse symptoms get (more acid being produced) and worse still if you have

fatty meals that cause food to remain in the stomach for much longer (gastric emptying delay). If you can't close the lid and put a bottle on its side or hold it upside down, you'll spill the content. So, if that shutter function of your diaphragm doesn't work properly, then you may notice acid leaking on lying down, on bending forwards or when hanging upside down (gravity boots and back stretchers). Next to pressure issues, heartburn is more common in smokers and regular / heavy drinkers.

Your doctor may authorise an endoscopy whereby a thin, flexible telescope is passed down your oesophagus into the stomach. One can then see whether the lower part of the oesophagus looks red and inflamed. If it is, you have oesophagitis, if not, then you may be diagnosed with endoscopy-negative reflux disease. Severe and long-standing inflammation may cause cell changes leading to strictures (you would likely be complaining of food 'sticking'), Barrett's oesophagus or cancer (risk is slightly increased compared to the normal risk if you have long-term acid reflux). So recurring heartburn is something you should not ignore but do something about. Prescription only medication (POM) can consist of antacids, acid-suppressing drugs or prokinetic drugs (food passage quicker). Keyhole surgery rarely offers an advantage over acid-suppressing medication. Oesophagitis and issues within the mouth are the only time when I advise you to open the Aloeride® capsules and allow their content to dissolve in lukewarm water (some 20mL per 1 capsule). You swallow the mixture and repeat this as often as is required.

Irritable Bowel Syndrome

Irritable Bowel Syndrome (IBS) is the most common disorder diagnosed by gastroenterologists reaching up to 50% of consultations and is a common disorder seen by primary care physicians. Although only a percentage of sufferers actually visit their family doctor, this condition causes reduced quality of life and represents a multi-billion pound health-care problem. In 2004 the mean annual direct cost of IBS management per patient was estimated to be £90 in the UK, C\$259 in Canada and US\$619 in the USA, with the total annual direct cost related to IBS of £45.6 million

in the UK and US\$1.35 billion in the USA*. In addition to direct cost, IBS results in indirect (non-medical) costs caused by absence from work and reduced productivity. According to the Novartis supported 2003 TIBS survey, IBS sufferers spent an average 3.9 days in bed, 5.5 days off work, 8.4 days seeing a doctor or nurse and 10.2 days when activities had to be cut short per year. Total USA annual productivity cost associated with IBS were estimated at US\$205 million. [data from Aliment Pharmacol Ther. 2003 Oct 1;18(7):671-82.]

There is no doubt about it, Irritable Bowel Syndrome is a huge problem, particularly for those who suffer from it as well as in economic terms. Irritable Bowel Syndrome (IBS) affects 10 - 25% (figures vary from report to report) of the general population and is more frequently diagnosed in women compared with men (approximately 80% of the most severe cases involve women), in young people compared with old and in western countries compared with the developing world. It is often associated with emotional stress and is frequently triggered by life changes. According to consultant neurologist Dr. Jane Collins, Irritable Bowel Syndrome is becoming increasingly common among children, as for that matter is diabetes mellitus and is childhood obesity.

Irritable Bowel Syndrome is also known as spastic colon, mucous colitis, spastic colitis, nervous stomach or irritable colon. It is a functional gastrointestinal disorder (FGID) which means that the bowel doesn't work properly without there being an identifiable structural or biochemical cause for this. According to Professor Robin Spiller (Professor in Gastroenterology and Honorary Consultant Physician, Division. Gastroenterology University of Nottingham) and Professor Nicholas Talley (University of Sydney, Napean Hospital) there is growing evidence that Irritable Bowel Syndrome can no longer be purely regarded as a functional disorder and they prefer to judge the disorder to be a discrete collection of organic bowel diseases, with characteristic morphological, psychological, and physiological changes only now being fully appreciated. Key point remains that the gut becomes abnormally sensitive to its content (visceral hypersensitivity), causing changes in contractions and changes in bowel function. Fortunately enough you can do things to make life with IBS a lot easier. I hope this long article gives you useful advice on IBS.

Irritable Bowel Syndrome Symptoms

There is diarrhoea-predominant IBS , constipation-predominant IBS but in practice, this division between constipation-predominant and diarrhoea-predominant IBS is not clear-cut with another category of patients alternating between diarrhoea and constipation. From feedback it is clear that no one pattern is better than another, each has its own uncomfortable problems. Broadly the symptoms of IBS are:

crampy abdominal pain, often relieved by defaecation/defecation

an alteration in bowel habit (diarrhoea/diarrhea, constipation or alternating) bloating and (painful) swelling of the abdomen

rumbling noises (borborygmi) and excessive passage of wind

increased gastro-colic reflex, this is an awakening of the childhood reflex where food in the stomach stimulates colonic activity, resulting in the need to open the bowels.

urgency - a need to rush to the toilet and incontinence (if a toilet isn't nearby)

a sharp pain felt low down inside the rectum (proctalgia fugax)

right-sided abdominal pain, either low or under the right lower ribs which does not always get better on opening the bowels; or pain under the left ribs (splenic flexure syndrome) and when the pain is bad it may ascend to the left armpit.

sensation of incomplete bowel movement

possible associated symptoms are: indigestion, belching, nausea, headaches, dizziness, ringing in the ears, fibromyalgia, backache, passing urine frequently, tiredness or even chronic fatigue, shortness of breath, anxiety and depression

Irritable bowel syndrome diagnosis

The diagnostic criteria of Irritable Bowel Syndrome always presume the absence of a structural or biochemical explanation for the symptoms and is made only by a physician after gathering a careful medical history and giving a thorough physical examination. Irritable Bowel Syndrome can be diagnosed based on at least 12 weeks, which need not be consecutive, in the preceding 12 months of abdominal discomfort or pain that has two out of three features:

1. Relieved with defaecation; and/or
?2. Onset associated with a change in frequency of stool; and/or ?3. Onset associated with a change in form (appearance) of stool.
Symptoms that Cumulatively Support the Diagnosis of IBS:
Abnormal stool frequency (may be defined as greater than 3 bowel movements per day and less than 3 bowel movements per week);
Abnormal stool form (lumpy/hard or loose/watery stool);
Abnormal stool passage (straining, urgency, or feeling of incomplete evacuation);
Passage of mucus; Bloating or feeling of abdominal distension.
(Courtesy of Rome II Criteria, Degnon Assoc. 2000 © All rights reserved)

You need specific tests (gastroscopy, colonoscopy, ultrasound, barium studies or other) when there is unexplained weight loss, blood in the stools, fever or an abrupt and continuing change in bowel habit. These are red flags for other bowel conditions.

Irritable bowel syndrome causes

There is no single cause for Irritable Bowel Syndrome (IBS) but there are three factors that certainly contribute to increased gut sensitivity namely food allergy / sensitivity, inflammation which may be related to this, and anxiety/stress.

1- Food Allergy and Food Sensitivity

Because symptoms of IBS can be triggered by foods or fluids, it is very sensible to examine this. Allergen specific IgE tests (Total IgE, Skin and RAST testing) do not highlight sensitivity well, so we use a very sensitive ELISA assay instead. Because RAST and standard blood tests so often come back being normal, many gastroenterologists believe that it is not so much the food that is causing the problem, but the sensitive gut that is simply overreacting to its contents. But, because sensitive guts have a more permeable wall, the detection of serum antibodies to common food substances may help in dietary management. Sensitivity and food clearly are a chicken and egg scenario and a recent research paper is of interest here: Food elimination based on IgG antibodies in irritable bowel syndrome: a randomised controlled trial ; W Atkinson, T A Sheldon, N Shaath and P J Whorwell; Department of

Medicine, University Hospital of South Manchester, Manchester, UK; Department of Health Sciences, University of York, York, UK.

Please note that I am not referring to acute allergic reactions here, this is not the dangerous IgE province with anaphylaxis and life saving treatment with a shot of epinephrine (Epi-Pen). This is the province of the delayed type allergies. Nothing you'll die of, but nonetheless able to disrupt your health and your life. ELISA tests aren't cheap but if they can help to reduce your misery, then they are worth every penny. Is a person's sensitivity a constant? Unfortunately no it isn't, it can vary for instance with emotional upsets. These variations are a common and frustrating pattern also seen in Multiple Chemical Sensitivity whereby enzyme availability dictates what biophysical pathways of detoxification will run or not. If you then realise that complex enzymes are in part apoprotein and in part mineral or vitamin, you'll realise that this takes you full circle to nutrients passed on to you from your mother and what you have taken in and especially taken up since.

Nonetheless, for a great many people this ELISA assay has been a great help. Broadly speaking the worst foods for IBS are wheat, dairy, coffee, tea, citrus fruits and lactose, for some potatoes are a problem too (they are part of the Nightshade family of plants, the green part of which contains alkaloid which is an irritant - others in this family are tomatoes, peppers and eggplant). For many IBS sufferers getting their diet right is difficult and you share this plight with CD/UC sufferers and Coeliacs. It will come as no surprise that everybody welcomes a buffer in this walking the wire exercise. Because Aloeride[®] placates the epithelium [optimum quantity & superiority of polysaccharide chains bind to the gut polysaccharide receptors and Peyer's patches] we get feedback from many people that Aloeride[®] provides an effective buffer because whilst keeping away from trigger foods unintentional slip-ups are commonplace.

2- Inflammation

A small proportion of people develop IBS for the first time after a bout of gastroenteritis, raising speculation that, although the infection clears up, this experience might make the gut more sensitive. In support of this, recent research has shown that the small proportion of people with post-infectious IBS also tends to have a mild, ongoing inflammation of the gut which begs the question, why do

some people have persistent bowel symptoms after an attack of gastroenteritis while most others get better? Research has shown that post-infectious IBS is much more likely if the person was anxious, depressed and was experiencing difficult life situations



at the time of the original illness. Psycho-neuro-immunology established that such scenarios lower ones immune response. Perhaps ongoing emotional upset creates the nervous tension that maintains a low-grade bowel inflammation. Alternatively, the memory of the bowel upset was recruited by brain-gut connections to express an unresolved life situation. Similar observations have been made for IBS occurring for the first time after hysterectomy. An attack of gastroenteritis or the antibiotics given to treat it, can alter the balance of bacteria in the colon, reducing populations of beneficial anaerobic bacteria and encouraging the overgrowth of pathogenic species. Although it is not established whether this mechanism can result in chronic symptoms of IBS, restoring beneficial populations of colonic bacteria with good probiotics or live culture containing yoghurts has become a popular treatment of IBS. [much text in this paragraph is from Professor Nick Read, MA, MD, FRCP, consultant gastroenterologist and analytical psychotherapist and trustee to the IBS Network]

For any inflammation to subside you need anti-inflammatory agents plus cessation of any aggravation (i.e. colonic rest). Inflammation often is accompanied by reactive spasms and for this antispasmodics can be used but peppermint oil can be useful too. At the Integrated Medicine Practice we advise patients to take 2 capsules of Aloeride[®] first thing in the morning and 1 capsules (2 only if very severe) last thing at night, both with a good glass of water. As soon as the inflammation settles, patients reduce Aloeride[®] down to their maintenance dosage. The cessation of aggravation comes by way of avoiding foods & fluids that irritate the gut wall (see ELISA assay as mentioned before). Non-steroid-anti-inflammatory drugs (NSAIDs) have the known disadvantage of causing hyperpermeability (leaking) of the gut, so they are not ideal because in

IBS the gut is already leaky and increasing that is undesirable. Well researched proteolytic enzymes preparations such as Wobenzym[®] are an excellent NSAIDs alternative. They may not be tolerated by all IBS patients so, if you want to try them, please do so with caution.

In respect of the (reactive) spasms, Magnesium is known to relax smooth muscles so checking red blood cell magnesium level, or less invasively via hair mineral or sweat analysis, may be a good idea. Note however that Magnesium salts (for instance Epsom salts = magnesium sulphate) are known to induce diarrhoea, willy-nilly ingestion of Magnesium may cause havoc in diarrhoea-predominant IBS. Patients with chronic diarrhoea have a progressive depletion of Magnesium (ditto Potassium - Mg/K are half of the mineral quartet that keeps the autonomic nervous system in balance) but there is a tendency to regain the magnesium status during the convalescent period. [J Trop Pediatr. 1990 Jun;36(3):121-5.] Surreptitious magnesium laxative abuse is a cause of unexplained chronic diarrhoea, so here is a warning for the constipation-predominant IBS sufferer. Magnesium is abundantly available in fresh chlorophyll containing (dark green) vegetable matter. Vegetable & fruit juicing is a useful way to replenish any depletion and maintain normal levels. The advantage of juicing is that you can combine it with IBS-useful fresh garden plants such as mint (*Mentha piperita* or *pulegium*), ginger (*Zingiber officinale*) - in gallbladder disease one should use this herb with some caution, chamomile (*Matricaria chamomilla*), rhubarb (*Rheum x cultorum*) is a liver stimulant and a laxative - best not use in diarrhoea-predominant IBS, yarrow (*Achillea millefolium*), fennel (*Foeniculum vulgare*) and silverweed (*Potentilla anserina*). The amount of fresh herbal juices is 20 - 60mL per serving within any glass of fresh vegetable & fruit juice.

3- Stress

The gut is an important route by which emotion is expressed in the body. If ever you have felt your stomach knot up before a speech, you too know that the brain and digestive tract are holding hands. This constant dialogue is known as the brain-gut axis. Even perfectly healthy people can worry their way to stomach pain, nausea or

diarrhoea. A physician won't find anything wrong but the misery is real enough. It is suggested that patients with IBS have more emotional upset than 'healthy people' or patients with other gastrointestinal diseases and have experienced more traumatic life events and difficult life situations both in adulthood and childhood.

About the brain-gut axis: the digestive tract is supplied by extrinsic and intrinsic sensory neurons which, together with endocrine and immune cells, form a surveillance network that is essential to gut function. The three players for this are gastrointestinal tract (GIT), central nervous system (CNS) and enteric nervous system (ENS) and they communicate with one another via parasympathetic and sympathetic pathways, each comprising efferent fibres such as cholinergic and noradrenergic, respectively, and afferent sensory fibres required for gut-brain signalling. The brain-gut axis is relevant not only to normal digestive function but also to abdominal pain and heightened sensitivity to pain.

The neural network of the brain, which generates the stress response, is called the Central Stress Circuitry (CSC). It receives input from tissue & organ (somatic and visceral) feedback pathways and also from the organ (visceral) motor cortex. The output of this CSC is called the emotional motor system and includes automatic efferents, the hypothalamus-pituitary-adrenal axis and pain modulatory systems. Severe or long-term stress can induce long-term changes in the stress response (plasticity). Corticotropin Releasing Factor (CRF = the fight or flight hormone) is a key mediator of the central stress response.

So what does stress actually do to you? Other than the brain, adrenal-, pituitary- and thymus-gland producing more adrenaline, noradrenaline and corticosteroids... which initially is part of you coping until in time your resources are outstripped. In the gut stress increases the intestinal permeability to large antigenic molecules i.e. molecules venture where they shouldn't and thus may evoke an allergic response. It can lead to mast cell activation & degranulation (i.e. histamine reactions) and colonic mucin depletion (loss of protective barrier). A reversal of small bowel water and electrolyte absorption occurs in response to stress and is mediated cholinergically. Stress itself also leads to increased susceptibility to colonic inflammation. [Stress and the gastrointestinal tract, Bhatia V.,

Tandon R.K., J Gastroenterol Hepatol. 2005 Mar;20(3):332-9.]

A growing number of reports have demonstrated a disordered autonomic function (i.e. nervous system controlling rest - activity) in FGIDs, they point to a generally decreased parasympathetic outflow (PSNS) or increased orthosympathetic activity (OSNS) in conditions usually associated with slow or decreased gastrointestinal motility, while other studies found either an increased cholinergic activity or a decreased sympathetic activity in patients with symptoms compatible with an increased motor activity. [The autonomic nervous system in functional bowel disorders, Tougas, G., Can J Gastroenterol. 1999 Mar;13 Suppl A:15A-17A.] At the Integrated Medicine Practice we use a protocol orthostatic test (Heart Rate Variability) to measure such balance shifts as this objectively demonstrates if your body/mind 'considers' itself to be in stress. HRV also helps us to teach patients effective (i.e. measurable) relaxation techniques.

Irritable bowel syndrome treatment

There is no known cure for IBS but it can be helped. Dietary and drug therapy falls into two categories: end organ treatment (mostly antispasmodic drugs), disturbed bowel habits (antidiarrhoeal and bulking agents) and central treatment (antidepressants, hypnotherapy, psychotherapy). At a gastroenterology conference held in 1999 at the Royal College of Physicians there was a rather disheartening review of the 50 or so trials of pharmacotherapies revealed overall benefit for none. (in similar read makes Quartero AO, Meineche-Schmidt V, Muris J, Rubin G, de Wit N.. Bulking agents, antispasmodic and antidepressant medication for the treatment of irritable bowel syndrome. The Cochrane Database of Systematic Reviews 2005, Issue 2. Art. No.: CD003460.pub2. DOI: 10.1002/14651858.CD003460.pub2.) Reportedly current research is liberating itself from hunting for single explanations, while moving towards closer collaboration with colleagues in a broad range of other disciplines. In different websites by medical consultants you can now see active referrals to medical hypnosis, meditation, acupuncture and Aloeride®. What is clear from research to date is that what may work for one IBS sufferer can fail in another IBS sufferer. Successful management does have some common ground. At the Integrated Medicine Practice we ask patients to making a life event timeline + a symptoms timeline which

then may highlight any possible trigger. It may help identifying what may be associated with remissions. On the Internet I saw IBS paraded as a misdiagnosed *dientamoeba fragilis* infection which is exactly what that is, a misdiagnosis, naught to do with IBS. Also a systemic candida albicans overgrowth should be regarded as a consequence - that has undisputed further implications - rather than a primary issue in IBS proper. Following on from the above listing of three factors contributing to visceral hypersensitivity in IBS, I shall discuss natural treatment in the same order: food, inflammation, stress.

Food

Aloeride®? From feedback we know that many Irritable Bowel Syndrome sufferers have tried an aloe vera before and found their IBS reacting poorly to this. When a product is not very high in potency, does not have the required-for-efficacy polysaccharides, contains laxative anthraquinones and/or unwanted additions, then predictably IBS will react poorly to it. Aloeride® is a 100% pure herbal yet exemplary produced to cGMP standard which explains why in Aloeride® researched phytochemical effects manifest themselves without disappointment. Aloeride® works on the epithelium (which is the barrier between air and body cells i.e. skin and invaginations: lung, urogenital and digestive tract lining) and also modulates the immune response. Adults work your way DOWN in dosage, if your IBS is very bad then you start at 3cap a day i.e. 2 upon waking and 1 just before going to bed, always away from food and with a good glass of water. As symptoms abate you reduce the dosage to your individual maintenance level; special offers are available to make it financially.

Probiotics

Everybody knows that the intestines contain health promoting bacteria as well as harmful, pathogenic bacteria. It is obvious that the balance of these cultures should favour the health promoting species. In 2003 gastrointestinal motility specialist Henry C. Lin, associate professor of medicine in the Keck School of Medicine of University Of Southern California together with his research partner Mark Pimentel of Cedars-Sinai Medical Center, found that 84% of IBS patients were found to have

abnormal breath test results suggesting small intestinal bacterial overgrowth. In this double-blind, placebo-controlled study, patients received either antibiotic therapy or a sugar pill. Patients whose small intestinal bacterial overgrowth was eradicated by antibiotics reported a 75 percent improvement in symptoms. Overprescribing of antibiotics is nowadays recognised by everybody so to correct an imbalance you should look at shifting the balance by introduction of viable health-promoting strains. If you want to know more about this then I suggest you read "The Digestive Contract" by Prof. Dr. med. Micheal Kirkman and Dr. Lennart Cedgard MD (ISBN 0-9543405-0-7) which is a pleasantly thin yet comprehensive booklet. It is well established that probiotic bacteria are helpful for various digestive problems, it is not often appreciated what their knock-on effects are. One last thing on probiotics, not all are good, we only use WasaMedicals who developed a new tableting method which improves the quality and viability of lactic acid cultures more than 5-fold (prebiotics and probiotics) as compared to standard methods. Pre- and pro-biotic (the latter contain fructooligosaccharides cultures and proponents say that it stimulates growth of only beneficial bacteria which is untrue as FOS do stimulate the growth of *Klebsiella pneumoniae* one of the big three gram-negative pathogenic bacteria) help to create and maintain a healthy microflora in the gastrointestinal tract. In the preparations we use, these cultures are first partly inactivated and stabilized in a dried form and become activated when deposited in the stomach. In the gut they will reduce the production of toxic metabolites and, because of their role in enzyme production, they improve the absorption of minerals, vitamins and trace elements. Research by Dr. Jeffrey Bland showed that the use of a product like Aloeride® in conjunction with probiotics (also live culture containing yoghurt or home made 24hr fermented yoghurt) is very beneficial.



Hepatobiliary and hepatoprotective remedies (liver-gallbladder)

A 2001 study published in *Phytother Res.* 2001 Feb;15(1):58-61 reviewed results for Artichoke extract with diarrhoea than placebo. One systematic review found that alosetron hydrochloride (a 5HT₃ Receptor Antagonist) improved symptoms in women with diarrhoea-predominant IBS compared with placebo or mebeverine. As of November 2000, the FDA had received 70 reports of serious adverse effects of Lotronex (alosetron hydrochloride), including 49 cases of ischemic colitis and 21 cases of severe constipation resulting in severely obstructed or ruptured bowels. Of these 70 cases, 34 required hospitalization, 10 required surgery and 5 died. [JAMA, Editor's correspondence, Vol. 162 No.1, January 14, 2002] Consequently Lotronex was 'voluntarily' withdrawn from the market. Dr. Richard S. Kent, Glaxo's chief medical officer and vice president estimated that ischemic colitis occurred in one of every 1,000 Lotronex patients and that "about half are managed as outpatients and half are hospitalized." Although pharmacological serotonergic agents do not come without issues, serotonin is undoubtedly a key player in the management of IBS. Using the direct precursor to serotonin allows the body to convert this precursor on an as-needed basis. Please note that interactions between 5-HTP and prescribed medication may/does occur with: sedating antihistamines, Selective Serotonin Re-uptake Inhibitors (SSRI's e.g. Prozac), codeine/morphine, L-dopa, Monoamine oxidase inhibitors, tricyclic antidepressants, barbiturates and other tranquilisers, botanical and non-botanical ephedrine or pseudoephedrine medication (*Ephedra sinica* is a sympathomimetic that acts directly and indirectly on the sympathetic nerves) and ingested alcohol. If you are in any doubt at all about you using 5-HTP you should consult a well-informed, non-prejudiced physician.

Juicing? We use vegetable & fruit juicing within our household as an extra, concentrated source of fresh vitamins (especially yeast-free vitamin Bs that, as said, are necessary for 5HTP conversion, B vitamins are present in greater abundance in the darker green vegetables), alkaline minerals and enzymes. In this way you take out the fibrous content, so on the whole it is friendly for both constipation- and diarrhoea-predominant IBS. The constipation-predominant can mix a little of the pulp in the juice to raise their natural fibre intake or mix it in their (24hr fermented) live culture containing yoghurt. Lots of possibilities! Juicing remains tolerable even when there is significant inflammation of the gut wall

i.e. when solid matter may cause aggravation. B vitamins, like vitamin C are water soluble and therefore are not stored in the body, they need to be ingested daily so you need to juice daily. In the paragraph about reactive spasm I mentioned some herbs that are appropriate to use for IBS.

Vitamin & mineral supplementation

Why might you supplement? Because a compromised function of the small intestine results in poorer uptake of nutrients. Well spotted, if the uptake is poor, aren't you wasting a lot of money that is not going to be uptaken? Correct. So ensure a better uptake, start with cessation of any aggravation and the gut wall will breathe a sigh of relief. Take Aloeride® daily. And when your gut feels better, it stands to reason that your nutrient uptake will be better too. What to supplement with? If you are an avid juicer of dark green vegetables - with some fruit to soften the bitter taste - then you probably do not need vitamin B complex. Overconsumption or sensitivity to Iron for instance can cause constipation so for constipation-predominant IBS you would do better to take a (multi) supplement without Fe. Overconsumption of Zinc, especially zinc sulphate (> 20mg/day, or > 50mg if taken in conjunction with 5mg Copper), may cause diarrhoea so diarrhoea-predominant patients may need to ingest zinc with some caution (Zn is absorbed via the gut membrane bound to picolinic acid which is produced from tryptophan in the pancreas but it needs B6 for that; it is interesting that conversion of B6 into its biologically active form pyridoxine-5-phosphate <Actinic:Variable Name = 'P5P'/> happens via Zinc-dependent pyridoxine kinase (i.e. uptake and use have a two-way connection). No body can work without zinc, I am proposing that diarrhoea-predominant IBS sufferers introduce a single zinc supplement slowly or better still, use a multi mineral supplement that is well balanced). A really good supplement could be MULTIGENICS WITHOUT IRON = a comprehensive vitamin/mineral formula that includes dedicated nutrients to support liver and adrenal function. Take 1-2 tbl 3x/day with meals. (in the UK order from NUTRI 0800 212 742 / Ref: 187410)

Essential Fatty Acids

Introducing the right type of fats in our diet affects pain and inflammation in a positive way. Omega-3 oils found in cold water oily fish, walnuts, flax and pumpkin seeds reduce inflammation. It may be beneficial to supplement the omega 3 oils with flax oil or fish oil capsules. Olive oil is another type of oil that won't promote inflammation. Oil is very useful for constipation-predominant IBS because it is a lubricant but introduce it carefully if you are diarrhea-predominant or you have difficulty in digesting lipids. Faecal impaction which as you may know occurs most commonly in children and the elderly, is often remedied by taking mineral oil by mouth and enemas. Note that laxatives containing mineral oil deplete fat-soluble nutrients including vitamins A,D,E,K, beta-carotene, Calcium and Phosphorus. Anyway, we use only the purest: ESKIMO 3 = mixture of omega 3 oils and EPA and DHA and natural vitamin E (as a preserving antioxidant). Not recommended for haemophiliacs or patients on anticoagulants. Take 3 capsules 1-3x/day or, if you buy the liquid, take one 5mL teaspoon with every meal. Store bottle in fridge after opening and use within 2 months. (order from NUTRI 0800 212 742 / Ref 187410). Just to make you aware: a recent survey by the Food Safety by the Food Safety Authority of Ireland examined a range of popular European fish oil capsules for the presence of dioxins. Alarmingly, one of the products tested showed the dioxin level to be five times the maximum limit. Eskimo-3 stable fish oil was found to have the lowest levels of contaminants, which included dioxins and dioxin-like PCB's. Concentration of heavy metal contaminants such as cadmium and mercury was below detection levels in Eskimo-3. Not all that is made available to the consumer is good, same problem happens in aloe vera or anything else nutraceutical produced without rigorous quality control. If you want a balanced omega 3 - omega 6 oil then we advise Dr. Udo Erasmus OPTIMAL OIL BLEND 500ml - this is less likely to disturb the balance between omegas 3/6 in long term use. It is important that you keep Udo's oil in the fridge. Mix 1 tablespoon in fruit juice at breakfast time; same at lunch or dinner. (in the UK order from SAVANT 08450 606070 / Ref: vand02)

Diet

Our species, Homo sapiens dates back to some 1.8 million years ago

and we, like every other species on the planet, adapt to circumstances as best we can. A species that doesn't become extinct (in the UK you see this happening with the red squirrel being unable to compete with the grey squirrel that came to the UK in 1876). Problem is the genetic process of adaptation takes place VERY slowly and the human genome is known to have changed little in the past 50,000 years. For our diet this means that our digestive abilities and our nutritional requirements remain pretty identical to that of stone age people. Yet our diet has changed beyond recognition. In 1888 the erudite British physician Dr. Samuel Gee gave a classic description of "The Coeliac Affection" (I know I'm writing an IBS page!) and stated "what the patient takes beyond his ability to digest does harm". This is a lucid example of how some people (coeliacs) fail to adapt to the introduction of grains (gluten/wheat) by (industrialised) agriculture. There is a message in it for the IBS sufferer as well as anybody else struggling with their digestion. The biggest bone of contention are grains. Did you know that grains, that is any grains that are unsprouted, contain phytic acid like nuts and seeds do (soak for 12 hrs and that problem is solved). Phytates inhibit the absorption of bivalent minerals (e.g. Ca, Mg, Fe, Cu, Zn) and block enzyme activity. Unsprouted grains also contain aflatoxins. Just think that diets high in carbohydrates from cereal grains were not part of the human evolutionary process until recently in evolutionary terms. The high phytate content of whole grain cereals can impair mineral metabolism i.e. iron, calcium, and other anti-nutrients have the potential to interact with the gastrointestinal tract and perhaps the immune system as well. The high lectin content of whole grain cereals can bind enterocytes in the small intestine and cause villous atrophy in addition to changing tight junction characteristics thereby allowing intestinal antigens (both dietary and pathogenic) access to the peripheral circulation (i.e. leaky gut). The staple diet for more than 2 million years has been lean game meat, seafood, fish, lean poultry & domestic meat (all need the effort & luck of the chase) plus fresh fruits and vegetables (these do not require chasing) and this at the expense of cereal grains. A 35% plant to 65% animal substance ratio is a good starting point for improving nutrition, sorry I know I am upsetting vegetarians with this. Just to step on another set of toes, lactose intolerance has not been discussed yet. William was brought to my practice when he was 8 months old, he had horrific digestive problems and could not tolerate any formula he had

been given. He was feeding through a stoma line, his growth was stunted and he was losing weight. What do you think the common factor is in all those formulas dissolved in cow's milk? If he was given more than 10cc at any time, projectile vomiting resulted. His parents do not dare take him off milk because the consultant paediatrician reportedly forbade this, William needs all the calcium he can get. Even though Aloeride® has provided an almost surprisingly effective buffer, this is an example to remember for those who think lactose is alright for sensitive digestive tracts.

Fibre

Soluble fibre are carbohydrates (starch) which chemical bonds cannot be cleaved by digestive enzymes. They present no caloric value nor can they feed any bad bacteria in opportunistic yeast overgrowth. It is totally inert and merely stimulates the intestinal wall in passing (if you are being tickled you move, same with gut, it contracts when its wall is being tickled). It is prescribed as an antispasmodic and bulking agent. Although it promotes bowel motility it is not a laxative. An interesting pure soluble fibre product is Heather van Vorous' organic Acacia Tummy Fiber™. Fybogel Mebeverine is psyllium husk based and FiberChoice contains inulin [a non-digestible fructooligosaccharides], both may increase bloating and flatulence. You may wish to know that aspartame - a Fybogel sachet ingredient - consumption may constitute a hazard because of its contribution to the formation of formaldehyde adducts [Life Sci., Vol. 63, No. 5, pp. 337+, 1998] and it only takes a low presence of the enzyme aldehydehydrogenase for you to react badly to aspartame. Linseed could be a good alternative. Please note that any bulking agent taken with too little fluid can cause a bowel obstruction. Activated Carbon has been purified for pharmaceutical use and its enormous adsorptive power makes it the ideal agent for binding toxins from gastro-intestinal tract (in poisoning and diarrhoea/diarrhea) and from the blood (dialysis) and eliminating them from the body. The dosage depends on what patients present with, it is both a safe and a failsafe method to arrest those dreaded moments. It arrests diarrhoea/diarrhea. Do note that you must take activated carbon

away from foods because it binds anything and everything, so if you take it at meal times few of the nutrients will benefit you but instead end up in the toilet, still firmly bound to the AC. Also note that activated carbon should not be used in active ulcerative colitis because its fine carbon particles would mechanically irritate the ulcers; in any other situation of (acute) diarrhoea it is a fantastically quick and dirt cheap remedy. (order online)

Water

Drinking 1.5 - 2.0 L water a day is a normal physiological water intake for an average adult and is one prerequisite for normal faecal transit. If you don't drink enough, your body will get its water via resorption in the large intestine. And you're wondering why that little package cannot exit comfortably... Whilst on the topic of fluids, in an IBS magazine I read with considerable surprise about their group coffee mornings. For coffee is an irritant to the gut wall (why not try Dr. A. Vogel's Bambo as an alternative or 'see-through tea' as opposed to the traditional English brew) and caffeine, albeit not a carbohydrate stimulates the pancreas to secrete a small amount of insulin particularly if you are prone to hyperinsulism. If you want coffee, drink an occasional small cup of real Italian espresso coffee, the high pressure of steam causes the ground coffee to release its flavour in concentrated form without releasing too much caffeine at the same time. Organic green tea (Clipper) can and possibly should form part of this 1.5 - 2.0 L (for average activity adults, if you're physically active you need more) and because of its very high anti-oxidant potential, it is an excellent defence against any onslaught of free radicals. Boil water but leave it to cool a little, pour onto the green tea in the tea egg and leave to brew, stonger green tea has the higher antioxidant value but is an acquired taste.

Inflammation

Two aspects as discussed before 1) reduction of irritation which may be achieved by a judicious choice foods & drinks based upon an ELISA test. 2) anti-inflammatory action for which we use Aloeride® successfully. Omega3 oils also possess anti-inflammatory properties but if your fat digestion is poor then these may not be tolerated well. It is right and proper to point out that most people with IBS rely on pharmacological therapies i.e. prescribed drugs of one kind or another, yet a great many people search for workable alternatives and I

hope that these pages are helping them in this. ???STRESS?? The most commonly accepted definition of stress is that stress is a condition or feeling experienced when a person perceives that "demands exceed the personal and social resources the individual is able to mobilise." In the book *Conversations With God* it is proposed that all human activity is either based on fear or based on love - hate and anger are deemed subversions of fear. Stress clearly is fear based, early work on stress conducted by Walter Cannon in 1932 established the fight-or-flight response. If possible, it is wise to find the 'well' from where your stress bubbles up and to do this, it may be helpful to make a life events ~ IBS start / flareup timeline: memory and feelings of past bad life experience(s) continue to pollute the present day - forgiveness of trespassers and realise you are worthy to move into Love and Light.

bad life experience in the here and now - make a sensible plan and take action, get help and / or support. akin to what happens in torture, the anticipation of bad things to come stresses you out; this may be based upon your perception of reality but frankly when it comes to diarrhoea-predominant IBS, you only need a few mishaps to be very understandably stressed about going out of the house. Looking at the above it is obvious that pharmacological therapy is useful but never addresses underlying issues. It is a coping strategy but a welcome one because it can be very difficult to come to terms with serious life events. If you are born seeing a half-empty glass, how do you change your heart to see that it is half-full. A elderly woman in my practice turned out to have been sexually abused by her uncle as a child, she had spent her whole life coming to terms with that. Life can be cruel and pharmacological therapy can be a blessed help. However, not all antidepressants suit all forms of IBS, tricyclic antidepressants tend to slow gut transit while the specific serotonin reuptake inhibitors (SSRI) tend to produce more rapid transit, particularly in the small intestine. Therefore, SSRIs may be more appropriate in constipation predominant IBS but effectiveness of SSRIs in the management of IBS is yet to be established. Tricyclic antidepressants need to be used cautiously in constipation-predominant patients as they can cause or aggravate constipation.

An interesting non-drug approach is the Emotional Freedom Technique (EFT) pioneered by Gary Craig. It is a seemingly weird technique of facial & chest pattern tapping, eye movements, affirmations and visualization. And the no less weird thing is that it helps. It is

being used to overcome allergies, trauma & abuse or panic & anxiety by 'erasing' memory data. Reportedly its effect lasts too unlike what a placebo effect would achieve in a long-term issue. IBS sufferers have a higher percentage of emotional trauma in their life - in comparison with the general population there is a two to threefold increase in a history of physical / sexual abuse - with presumably their IBS rooted in distant bad memory / memories, EFT may be able to wipe this off your memory. Thus might change how your brain-gut axis works, this should be with less orthosympathic dominance (i.e. less stress). The herb St. John's Wort (*Hypericum perforatum*) is known to help with stress and anxiety, in vivo its extract leads to a downregulation of beta-adrenergic receptors and an upregulation of serotonin 5-HT₂ receptors in the frontal cortex and causes changes in neurotransmitter concentrations in brain areas that are implicated in depression. Another herb of interest is Valerian Root (*Radix Valerianae*). Clinical research to identify the mechanism of action in Valerian suggests that its sedative and anti-anxiety effects occur as a result of direct action on the GABA neurotransmitter in the central nervous system. It is believed that valepotriates and the GABA phytochemical extracts from the root are responsible for this action. In respect of IBS you should note that a small percentage of (non IBS) users experienced transient mild headaches and gastrointestinal disturbances. Significant drug interaction, that is loss of therapeutic effect, between St. John's Wort and Indinavir, a protease inhibitor used to treat HIV infection, has been established (February 12, 2000 Lancet publication (Piscitelli, et al) and it is expected that drugs that are similarly metabolized, including the nonnucleoside reverse transcriptase inhibitors (NNRTIs), are also affected by SJW's cytochrome P450 metabolic pathway induction. This is one of the liver's clean up pathways and because SJW makes that pathway run faster, it lowers the plasma concentrations of pharmaceutical drugs. Not so much true interaction perhaps as making costly drugs less effective. On the note of psychotherapeutic intervention, most prescribed drugs deplete nutrients. Monoamine Oxidase Inhibitors (MAOIs) for

instance deplete B6 which is an essential cofactor for 5-hydroxytryptophan decarboxylase which is an enzyme that catalyses one of the steps in the conversion of tryptophan to serotonin. A vitamin B6 deficiency can limit the brain's ability to synthesise serotonin and low serotonin levels are associated with depression. Biochemically you are now full circle and in need of more antidepressants. How do MAOIs work? The brain's three neurotransmitters - the monoamines serotonin, norepinephrine and dopamine - look after the messaging in the brain. After they've done that, they get burned up by a protein in the brain called monoamine oxidase, a liver and brain enzyme. MAOIs work by blocking that cleanup activity. By halting the destruction of these neurotransmitters they accumulate in the brain and depressive symptoms get less. But also getting less is B6 necessary for serotonin which you need to be happy in the first place. [Drug-Induced Nutrient Depletion Handbook ISBN 0-916589-79-X]

Another excellent way to de-stress is via proper sleep. Sleep is the time when your body repairs itself, it therefore stands to reason that, if you improve the quality and if necessary length of that time, body repair happens better. Which of you wondered how - since IBS is a functional disease with therefore nothing to repair - sleep can possibly help? Sleep may not directly do anything for Irritable Bowel Syndrome but, given that stress and anxiety have a clear relationship to IBS, it seems a good opportunity to explore. Firstly with the parasympathetic nervous system predominantly active when you sleep well, all of your body repairs and rejuvenates better. Secondly when you start the day more rested and with more energy, the challenges of life seem smaller and any anxiety or stress will fade or at least become less. The huge advantage of making sure that your sleep quality is better, is that you do not have to allocate extra time to this. I am pleased to have read this book on sleep by Dr. William Dement MD who makes an excellent, well documented case for looking into smarter sleeping. [ISBN 0-330-35460-4]

?One aspect of sleeping is the role of the neurotransmitter melatonin. Melatonin is produced in the pineal gland from serotonin which, as explained above, is produced from 5-HTP. You are right to recognise two cascades: 5-HTP - serotonin - better gut, and 5-HTP - serotonin - melatonin

- better sleep - relaxed autonomic nervous system - better gut. However, for these biochemical cascades to run properly (or at all) you need ample nutrients such as Mg/B6. Even obliquely these cascades can be torpedoed, a B3 deficiency for instance will force conversion of tryptophan into niacin (B3), leaving little tryptophan available for conversion into 5-HTP and subsequent cascade. Without optimum nutrition you should never expect good health, in failing health it is something you overlook at your peril and also is something that no pharmacological drug - however clever - can replace.

Disclaimer

The above information is for general, educational purposes only and should not be regarded as a substitute for the diagnosis, treatment and medical advice from your own doctor or other licensed healthcare provider. Throughout these pages, statements are made pertaining to the properties and / or functions of nutritional products, these statements have not been evaluated by the Food and Drug Administration and products are not intended to diagnose, treat, cure or prevent any disease. These pages was written by Han van de Braak BSc LicAc MCSP MBAcC AACP - Chartered Physiotherapist, Registered Acupuncturist and Naturopath - for the Integrated Medicine Practice, England.

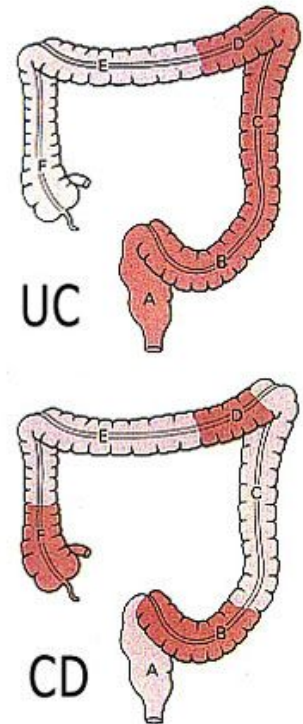


Crohn's Disease and Ulcerative Colitis

Introduction

When I am asked how Crohn's Disease and Ulcerative Colitis can be managed with natural remedies then the answer is never short. These are complicated health problems with no easy answer, so it's a long article. There are a good number of things you can do in a natural way that can make your life a lot easier. Obviously the objectives remain identical to 'standard' medicine namely 1) terminating an acute attack: inducing and maintaining remission 2) management of chronic symptoms. I am going to take you point by point through

the mechanisms how Inflammatory Bowel Disease is thought to come about and give you useful do's and



useful don't's along the way.

Infectious agents

Although no causative bacteria has been cultured (i.e. Ulcerative Colitis and Crohn's Disease are non-infectious), there often is an opportunistic overgrowth of undesirable bowel flora, resulting in a prevalence of bacterial strains that do not promote health. This can only happen when the host condition <Actinic:Variable Name = 'you/'> is such, that it is vulnerable to this and then the opportunistic overgrowth results in additional problems and symptoms. It is a common finding also in people who do not have IBD or IBS and a reliable diagnosis is achieved only by laboratory testing. Note that such overgrowth is reactive and focussing on re-establishing the gut bacteria balance is just one part of the job. Trying to achieve a more optimal bowel flora can be done in several ways. It is best achieved by 'killing' and 'restocking' at the same time. Killing undesirable strains is something that must be done with extreme caution because in IBD the mucosal wall is already irritated (IBS can behave similarly). Therefore measures like Grapeseed or Olive Leaf Extract, buffered Caprylic Acid, Castor Oil or Tea Tree Oil (everybody should be extremely careful ingesting the latter!) are not tolerated. A much better way of gently killing

undesirable bacterial strains is by starving them i.e. stopping to feed them. You use the tried & tested medieval way of laying siege to a walled city (see diet below). Whilst waiting for the white flag to come up, you take Aloeride[®] which is a new product that steadily improves stool microbiology without upsetting the intestinal wall at all. It achieves this on the one hand via anti-microbial action and on the other hand via creating a better grow environment for the good bacteria. Next you restock the gut with good bacterial strains. You should know that some probiotics manufacturers quote the viable cultures before processing but not how many are still viable afterwards. At the Integrated Medicine Practice we use special probiotics as one aspect for Ulcerative Colitis, Crohn's Disease and IBS preferably in addition to the Specific Carbohydrate diet or at least a Low Glycaemic index diet. Those people who are not 100% lactose intolerant - and most of us aren't - can use organic live cultures containing yoghurt such as Yeo Valley. Obviously you do not eat yoghurt with flavourings and / or added fruit sugars. You do however keep away from other dairy products i.e. cow's milk and cheese made from it. Goats milk & goats cheese may be tolerated but this varies from individual to individual. Eggs neither come out of a cow nor out of a goat - the most useful part of the egg is the white i.e. that part on which the growing chick would have fed itself - so eggs are usually well tolerated, they're not dairy although curiously many lay people list them as such.

Genetic markers

About 15 to 20% of people with Inflammatory Bowel Disease have immediate family members with IBD but no genetic marker has been identified. IBD occurs more frequently in western societies with a higher incidence among Jews of Eastern European descent, often within the same families, males and females are equally affected often before age 40. In western Canada the incidence is 150 in 100,000 which is three times the global average. In respect of IBD occurring in the same families the following CAM article is of interest: Nutrition Impact On Gene Expression Shocks Researchers refers to this Suke University paper: Waterland RA, Kirtle RL. Transposable Elements: Targets for Early Nutritional Effects on Epigenetic Gene Regulation. Mol.Cell.Biol. 2003;23(15):5293-5300 (August 1). The Suke University research indicated that it is not just a matter of the double helix of DNA but

its expression. This means that your nutrient base influences what aspects of your DNA actually affect cell replication. So the adage "it is not what you've got but what you do with it" seems true here also, the fact that you have a whole orchestra doesn't therefore mean that all the instruments (genomes) play at the same time. With Ulcerative Colitis and Crohn's Disease causing poor nutrient uptake, you can see where a self-perpetuating cycle may come from despite a genetic marker staying elusive. From an intervention point of view you can 1) ensure maximum possible nutrient intake and 2) maximise the uptake thereof. An irritated gut wall does not uptake nutrients well, so we are back at taking Aloeride[®] twice daily to placate the wall so uptake can become better. More about diet and nutrient supplementation later.

Immunological mechanisms

Meaning impaired cellular immune mechanisms, a lower capacity of body cells to fight back. Quoting Professor J.O. Hunter of Addenbrooks Hospital and Cranfield University: "it is likely that immunological changes are produced after the disease started, rather than causing it". So a faltering immune capacity is not so much the chicken as it is the egg. Autoimmune antibody mediated reactions are discussed below. Are there natural things you can do to improve your immune capacity? Aplenty and this starts with you getting / keeping fit by brisk walking for (much) longer than 20 minutes no less than 3x each week. We use Mycoferon[®], a remedy including maitake and shitake mushrooms that are well known to be immune modulatory but also use Aloeride[®] because of its unique preservation of very long chain polysaccharides (especially aloerides) that are researched potent immune modulators.

Allergic reaction to cows' milk

This always plays a role in mucous formation. Pointers towards this can be always having an uncomfortable tummy immediately after ingestion, having a bit of a snotty nose first thing in the morning, nasal airway obstruction [yes think snoring], recurring sinusitis and of course mucous in stools. The simplest way to find out if you react adversely to cow's milk products is by stopping consuming them for 2 months and change to sensible alternatives like goats milk / cheese / yoghurt, Rice Dream[®] or such like. If symptoms improve then you have identified one helper. Lactose intolerance is very common and can be caused by having too little of the enzyme lactase - so you can convert some lactose but have not

enough lactase to convert all ingested lactose - and this leads to fermentation of any lactose that is not converted in the gut to the body-useful glucose. The best known end product of all fermentation is alcohol which is a known trigger for Crohn's Disease and Ulcerative Colitis, gas formation is equally well known - to you but unfortunately also to all around you. Most mammals produce about 12 - 40 grams of alcohol per day without even drinking alcohol, so lowering the source of your own internal alcohol production is a wise move. In case you wonder about creating an osteopenia or osteoporosis risk by eliminating dairy products, Calcium is in everything and anything that has any structure to it. You will find it in all leafy vegetables as well as in the herbal food supplement Aloeride[®] - which next to calcium has lots of very useful Magnesium in it too. So do not worry about you developing osteopenia / osteoporosis when you give up dairy, if it helps to reduce your IBD symptoms you will increase general nutrient uptake and one of them will be Calcium. And for good measure you ought to know that Calcium does not lock into the bone matrix if there is not enough Magnesium, Manganese, vitamin D, Boron and a good pH balance - the four main blood buffers adhere to the isohydric principle which means that they all run at the same time so the phosphate buffer gets phosphor from bones Ca₃(PO₄)₂ as well as from dietary sources. Finally there are hormones like the parathyroid hormone that regulate Calcium metabolism. For Calcium to become an issue, there are many things more important than you consuming cow's milk and related products to help you manage your IBD. A trial for 2 months is not going to do you any harm whatsoever and just might pinpoint a common trigger for IBD and IBS.

Hypersensitivity reaction

This is true when a cell reacts abnormally to a stimulus. This sentence tells you that it takes two to tango (trigger substance & host reaction) and as such, we can alter the stimuli we present to the intestine. At the Integrated Medicine Practice we use IgG food sensitivity testing (ELISA Enzyme-Linked Immunosorbent Assay) to rule out foods that may evoke irritation and an immune response. Diet modification works well in Crohn's Disease but not so well in

Ulcerative Colitis. Because these tests are quite expensive, it would be wise to start with keeping a food diary to see if & how food types affect your IBD or IBS. If you think any food / drink type influences it then you can consider elimination for 1 - 2 weeks and provoke the issue by eating or drinking a gluttonish abundance of this food / drink type and see if this aggravates your symptoms (if quick allergic IgE reactions are so much as suspected you do NOT try this). If reintroduction does trigger symptoms then eliminate this food / drink permanently from your diet. This is a laborious method but at least there is no cost involved. Sensible for anybody's body is food rotation: the foodstuffs you ingest on day1 you do not ingest again until day3 or day4. This advice is given in mildly positive ELISA tests anyway so you might as well experiment with this. Other than elbow grease & bemoaning a different routine it doesn't cost you a penny. In this section there are also two no-brainers because both affect the lining of the digestive tract, the first is smoking - smoke mixes with saliva and this you swallow into your digestive tract - and the other one is alcohol. When you have IBD, smoking and drinking are the equivalent of shooting yourself in the foot. Alcohol slows gastric emptying, interferes with the action of gastroesophageal sphincters, stimulates gastric secretion and often injures the gastric lining, especially when combined with Aspirin. Alcohol also produces alterations in intestinal mobility and mucosal function that results in malabsorption (Seventh Special Report to Congress, Dept. of Health and Human Services, 1990) Chronic or regular use of alcohol damages the lining of the stomach and the small intestines. It alters gastric-acid secretion, first increasing it and then decreasing it (The Mount Sinai School of Medicine Complete Book of Nutrition, Victor Herbert, MD and Genell J. Subak-Sharpe, 1995). Whilst on the topic of feeding, one way to achieve full remission of Crohn's Disease is via 2-3 weeks of qualified dietitian supervised enteral feeding after which food sensitivity tests are carried out. For most patients with IBD this is not a readily available option.

Autoimmune antibody mediated reaction

This is suggested as a mechanism by extra intestinal manifestations and the fact that treatment with corticosteroids leads to favourable response. As soon as the intestinal wall becomes inflamed, the selective uptake of nutrients by enterocytes (these cells

make up the wall) is compromised because tiny spaces appear in between these enterocytes through which macromolecules enter the system. This is called hyperpermeability syndrome or in common terms "leaky gut". When foreign molecules enter a closed system such as the body, the body responds with an immunological response i.e. it starts to kill the foreign invaders. When there is confusion about cells being 'mine' or 'thine' we speak of auto-immune disorders. Aloeride® helps here in two ways. Firstly and most importantly by sealing the leaky gut it stops those macromolecules from migrating where they should not venture, the aminoacid L-Glutamine is of further help here. Secondly (and only those) very long polysaccharide chains in aloe vera modulate immune response BUT be careful, there is a humongous difference between the various products on the market which is why we exclusively use Aloeride® which has independent laboratory-proven the best immune modulating polysaccharide profile.



Psychological factors

There is no actual proof that stress causes the disease but psychological factors do influence the course of the disease. At the Integrated Medicine Practice we use Neuro-Linguistic-Programming counselling and occasionally herbs or complex homeopathic remedies. Some of our patients have tried medical hypnosis with varying response. A lifestyle review should form part of an integrated approach and a change of perspective could be as 'simple' as for the Type A individual to ask oneself "does this need doing right now or can it wait just a little". The Worrying Type could change perspective by not spending so much of today "drawing the picture of what tomorrow's meeting, exam, interview or workday will be like". And definitely not drawing it as well as colouring it in :-). A Dutch saying translates as: man suffers most from the suffering he fears and that does not necessarily materialises, thus man carries more than God gives him to carry. There may not be research proof that stress causes Inflammatory Bowel Disease and IBS, feedback from

patients makes it clear that psychological influence is very significant. The English term 'gut reaction' pointed at the link between thinking, feeling and the intestines which modern science has validated as the gut-brain axis: the relationship between cerebrospinal fluid and plasma cholecystokinin, regulatory peptides common to both gut and brain etc. Gut reaction points at one way of this linking 'street' - from down to up - but if the other way around is trafficable too, then you can see that sorting out the psychological factors may have good clinical mileage in helping Crohn's Disease, Ulcerative Colitis and IBS. It may not always be an in-your-face sort of an issue and in the IgG scorers it may be a needlessly exploited issue, but it is definitely something not to be overlooked.

Location

In Ulcerative Colitis only the large intestine (rectum = proctitis, descending colon = left sided colitis, when whole colon is affected = pancolitis) is affected with a marked tendency to symptom relapse. Because Ulcerative Colitis does not affect the small intestine, signs like abdominal mass or issues of malabsorption are absent, fistula formation and gross perianal disease do not occur, but fissuring and aphthoid ulceration do. Crohn's Disease is a chronic inflammatory disease, which can affect the whole of the alimentary tract from mouth to anus, the inflammation extends through all layers of the gut wall (transmural) and is characteristically patchy in distribution (skip lesions) with areas of normal tissue in between. To give you an idea of the 'topography', the small intestine has an absorptive surface area of roughly 250 square meters (2,355 sq.ft.) - the size of a tennis court - and the large intestine being some 1.5 metres (5 foot) long and 8 centimetres (3 inches) in diameter again has another huge surface area of 3,768 square centimeters i.e. 37.68 square meters. You can see where this leads to: the potency of the remedy versus the inflamed surface areas to sooth, when you have IBD you really must use remedies that can hit home hard.

Candida

Introduction

Very few females will not have heard of candida overgrowth (a.k.a. candidiasis or dysbiosis) which

basically means opportunistic yeast or fungal overgrowth. Overgrowth, like in your garden, means that one species gains ground at the expense of another. So it is, yet again a matter of a balance having gone astray.

It was Dr. Elie Metchnikoff - Director of the Pasteur Institute, Nobel Prize recipient for his work on the link between the immune system and intestinal flora in 1908 - who coined the phrase dysbiosis and I think his terminology reflects the problem best. As you know, there should be a symbiotic balance of health promoting and opportunistic bacteria and fungi throughout the entire digestive tract (on skin epithelium too as it so happens). Consequently an imbalance can happen throughout the entire digestive tract which, in almost all instances leads to fungal overgrowth. Anyone, especially females, with symptoms such as wind, bloating, disturbed bowel function, rectal itching, non-bacterial cystitis and recurring vaginal thrush (females only obviously) would be suspect to have an abnormal bowel ecology (i.e. have dysbiosis). Let's talk through core issues:

Causes - Milieu

You cannot grow rhododendrons in Market Harborough's own soil, so Nancy Lancaster had cartloads of acid soil brought to Kelmarsh Hall and planted a fine hedge of pink and white rhododendrons that still grace this historic house today. A long enough change in gut pH (acidity/alkalinity balance) allows flora to flourish that likes that particular pH. Next, this flora contributes to and thus perpetuates the environment it likes. In whichever way you kill the harmful bacteria or fungi, you also must improve the gut environment via diet, lifestyle and a probiotics support regime.

Causes - Friendly Fire

Prolonged use of oral, broad spectrum antibiotics may kill an offending bacterium, but these also decimate the health-beneficial bacteria in the bowel ecology, thus shifting the symbiotic balance. Coming back to gardening, weeds for some reason always grow faster than plants. A prolonged prescription of say Tetracycline or Erythromycine for acne neatly paves the way for dysbiosis later on. It is a wise mother who gives her child a substantial course of effective probiotics afterwards (or even during) and a wiser one still who pairs up her probiotic regime with Aloeride®. The contraceptive pill and HRT (hormone

replacement therapy) alter levels of female sex hormones and this may be one of the main reasons why 60% of dysbiosis (candidiasis) sufferers are women.

Causes - Emotions

From Psycho-Neuro-Immunology we know that depression causes the immune system to function less effectively, and a less effective immune system in turn opens the door to dysbiosis, other infections and more.

Also stress and anxiety (in your face or more commonly prolonged in background) depresses your immune system. It triggers the fight or flight mechanism so your adrenal glands increase their corticosteroid output. Now, to put this in perspective, in solid organ transplantation corticosteroids are used for immunosuppression because of their profound effect on the concentration of peripheral white blood cells (lymphocyte, monocyte, basophil counts decrease, while neutrophil counts increase; T-cells lose their ability to proliferate and react to specific antigens). No mistake, stress and anxiety make you immunologically vulnerable.

Increased levels of corticosteroids may cause mood changes ranging from euphoria to depression (just irrational, mini bipolar, pseudo PMS), insomnia (sleep deprivation), jitteriness (pseudo ADHD), impaired glucose tolerance (diabetes), retention of salt and fluid (blood pressure) and increased appetite are common (comfort food eating). In Medicine corticosteroids have long become persona non grata in immunosuppressive regimens. So how are you going to normalise your ongoing fight / flight trigger? If you can't do it on your own, get outside help.

Causes - Diet

Long term intake of excess empty calories (high-energy foods with poor nutritional profiles such as all refined sugars) and excess dietary carbohydrates without proportionate supportive macro- and micronutrients fuel opportunistic growth. And leads to dysbiosis. I talked about this extensively in the chapter 'putting diesel in a petrol tank' in [my ebook](#). Thank goodness the long term solutions are simple and do-able: use low glycaemic index foods, the paleolithic diet or the specific carbohydrate diet. Just stay well clear of bombarding your body with sugary drinks and sugary foods. Ultimately your food intake lifestyle is about making choices, drat that can be so difficult!

Causes - Pathogens

You can have fungal type dysbiosis or bacterial type dysbiosis, the former is generally referred to as "candida" which points a finger at *Candida albicans* but frankly any yeast can ferment as can some bacteria. Did you know that there are some 19 species of *Candida* alone, want to know what 'candida' is precisely?

Candida albicans itself is a ubiquitous commensal yeast of the mouth and gastrointestinal tract which can overgrow into opportunistic infections in various sites, such as the mouth (oral thrush), genital area (genital thrush), intertriginous areas (intertrigo), nails (paronychia) and small intestine. Systemic candidiasis can occur in immuno suppressed patients. Now zoom out for a moment!

Within the genus *Candida*, fermentation, nitrate assimilation and inositol assimilation may occur. Nitrate assimilation is of particular interest because serum levels of nitrate in patients with active Ulcerative Colitis (UC) and active Crohn's Disease (CD) differ statistically (are raised) significantly from normal controls. Also a significant positive correlation was found between serum nitrate levels in UC and red blood cell sedimentation rate (ESR), leucocyte and thrombocyte count. These are key pointers for inflammation. So, the by-products and metabolic end-results of *Candida* are aspect of them causing trouble; in casu more candida - more nitrate - more irritation / inflammation. On a positive note, inositol compounds may inhibit adenocarcinoma development associated in chronic ulcerative colitis. [data from Scandinavian Journal of Gastroenterology, Volume 30, Issue 8 August 1995, pages 784 – 788] Next, the genus *Candida* has the ability to change itself which is called high-frequency switching of colony morphology. *Candida tropicalis* for instance has even more than one strain-specific switching repertoire. This means that one strain, removed from the blood by say Flucytosine (antifungal) or Amphotericin B (a polyene antifungal antibiotic), can reappear several days later at another site of infection. You can start to see why dysbiosis can be so difficult to eradicate. Here are details of 3 out of 19 species of *Candida*:

Candida albicans occurs naturally

as a commensal of mucous membranes and in the digestive tract of humans and animals. It accounts for up to 70% of *Candida* species isolated from sites of infection and has been reported as a causative agent of all types of candidiasis.

Candida parapsilosis is an opportunistic human pathogen which may cause both superficial cutaneous infections, especially of the nail and systemic disease, especially endocarditis. Other clinical manifestations include endophthalmitis and fungemia.

Candida tropicalis is a major cause of septicemia and disseminated candidiasis, especially in patients with lymphoma, leukemia and diabetes. It is the second most frequently encountered medical pathogen, next to *Candida albicans*, and is also found as part of the normal human mucocutaneous flora. Sucrose negative variants of *C. tropicalis* have also been increasingly found in cases of disseminated candidiasis.

Testing

Quite beside that perhaps 60% of the gut flora remains to be characterised, it is impossible to take specimens from all parts of the gut and do precise counts of micro-organisms. The best test to confirm dysbiosis is via the chemical result of fermentation: alcohol. Provoking fermentation - if this happens - results in alcohols in the blood (ethanol, methanol, butanol, propanol and short chain fatty acids) which can be measured by gas-liquid chromatography. Via their particular end-products of metabolism, a Comprehensive Digestive Stool Analysis (CDSA) can provide further information about which organisms are present in the gut (bacterial and yeast cultures in stool samples). At a doctor's special request a CDSA can include parasitology (testing for parasites).

Not everyone uses laboratory tests to determine - after medical interview and clinical observation - a state of dysbiosis. Many practitioners arrive at conclusions via symptom questionnaires, Applied Kinesiology, Electro-Dermal Screening, Radionics, or Live blood microscopy. Symptom improvement following sensible remedying is not necessarily a validation of diagnostics used. The most surefooted test still is the above Gut Fermentation Profile with optional CDSA/parasites.

Consequences - nutrients

Opportunistic yeast overgrowth needs feeding, they feed on all saccharides that did not convert into mono-saccharides uptaken into the blood stream. It is a 'guess who came to dinner' scenario for, next to (functional adaptation!) feeding on remaining di-, tri- and polysaccharides, they also feed on essential macro- and micronutrients. So, a portion of what you put into your digestive system is siphoned off to feed dysbiosis, thus doesn't feed you.

Yeast overgrowth's second reason for malabsorption (of the quantity and quality of nutrients you choose to ingest) depends on quite how much dysbiosis irritates your gut wall. In UC, CD and severe IBS the gut's epithelial membrane gets irritated, thus its protective mucous layer changes and thus absorption of nutrients dwindles.

Thirdly, above impaired uptake of nutrients is aggravated by long term and strict or even dogmatic application of anti-candida diets. Dysbiosis flourishes in people who are compromised, which rarely goes hand in hand with them having a high nutritional bank balance. Feeding people up without triggering the dysbiosis is the way forward.

Consequences - health

Mostly symptoms start with digestive discomforts, a demise of general wellbeing which may include unexplained fatigue in the absence of medical red flags. There are directly related symptoms such as you read under Pathogens, and knock-on symptoms such as hormone imbalance or (multiple) chemical sensitivity (foods, dust, moulds, fungi, yeast, inhalants, chemicals). A woman consulting a family doctor for fatigue and premenstrual stress may get her hormone panels checked, but rarely will she be checked or treated for dysbiosis. Dr. Metchnikoff's dysbiosis falls outside the regular medical envelope.

Remedy: diet include

A hypoallergenic approach (e.g. dairy or wheat free) may help you generally but this does not do anything specific for dysbiosis. What you must do is recolonising your gut with health beneficial bacteria which you achieve by eating natural, live culture containing (double fermented) yoghurt or Kefir, by taking good probiotics such as Probiom Daily® (one difficulty with probiotics is that their survival, both in the product and after ingestion, is difficult to guarantee), and by supporting the whole process with Aloeride® aloe vera as research has shown this to help improve bowel ecology. Increasing levels of

macro- and micronutrients can be achieved with superfoods such as chlorella, spirulina or with dehydrated (sugar removed) raw vegetable, fruit, grapes and berries powder

Remedy: diet eliminate

Avoid all refined sugars and moderate natural sugar intake in proportion to your dysbiosis (like fresh, frozen, canned, dried fruit and fruit juices), all products with yeast in it including baked foods, all fermented products (vinegar, alcohol), mushrooms. I have seen many people who followed a prolonged and strict candida diet, and not only failed to get on top of their dysbiosis but in the process became deficient in macro- and micronutrients. Double trouble!

Remedy: immune modulation

Dysbiosis (especially invasive or systemic candidiasis) finds an easier foothold in immune compromised people than in those with a robust immune defence. A logical intervention therefore is to boost your immune system with natural remedies. Not however with Reishi, Shiitake or Maitake mushrooms as mushrooms are forbidden in the candida diet. Boost it with broad spectrum wholefood nutrition (supplement), plus Aloeride® aloe vera (2-3 cps/day),



plus a favourite immune modulator that fights body foreign cells and fights them hard. Of course I am aware of other 'natural immune system' products; but take note of Status Quo's Francis Rossi who - when asked why they always played the same chords - said "why kill the goose that lays the golden egg".

Remedy: killing 1

Never let a dogma of remedies needing to be natural stand in the way of the most effective way to kill opportunistic yeast. What works fast and always is high dosage anti-fungal medications (Nystatin or Amphotericin) over a period of 3 - 4 months. Alternative one can be prescribed systemic anti-fungal medications such as Diflucan,

Sporanox or Lamisil in conjunction with Nystatin.

Remedy: killing 2

Natural remedies aplenty: grapefruit seed extract (one product contained antifungal preservative - makes one wonder whether the grapefruit seed or the preservative should take credit for any action), caprylic acid, oregano oil, cinnamon, coconut oil, Pau d'arco, garlic, golden seal, tea tree oil, olive leaf extract, treelac / oxygen elements.

Remedy: warning

As a result of killing off pathogens, a liberation of endotoxins-like substances or of antigens (a substance which causes an immune reaction) from the killed or dying microorganisms is likely to occur. This may cause a transient, Jarish-Herxheimer reaction whereby symptoms become worse before settling down. Such a reaction may remain tolerable (put responsible controls in place) and remember that, although not necessarily pleasant, the Herxheimer reaction is actually a sign that healing is taking place.

Conclusion

Dysbiosis, opportunistic yeast overgrowth, candidiasis - whatever label you put on it - often is a very stubborn problem. As you now know, this is partially because of its switching capacity and partially because many people forget to address their general milieu (environment) or relapse into a 'sweet' diet. Minor dysbiosis may well be manageable with natural remedies plus above support. Mostly opportunistic yeast overgrowth is stubborn and keeps coming back, hence my advice of anti-fungal medication plus the quartet of Aloeride®, Carnivora®, Probiom Daily® and dietary modification. The bottom line is that dysbiosis is a problem that can be overcome permanently.

Fantastic facials

In the UK Aloeride® exhibits at health and beauty exhibitions where we stand amidst the magic of curling tongs, liposuction and endless facial products. Reportedly 97% of visitors are women, and in their thousands they seek to find a way to keep their looks and figures as good as can be.

With methods of external anti-ageing and beautification aplenty, we find

that women are very receptive to Aloeride®'s beauty from the inside out approach. Day lotions and night creams tick the sensory delight boxes of touch and smell, but for how long do they actually provide your skin with nutrients and antioxidants?

A big leap up from lotions and creams are freshly prepared facial masks that contain Aloeride®. A quantum leap further still is your bloodstream as the 24/7/365 source of nutrients and antioxidants, providing of course that you put these into your mouth and that they are absorbed.

Two extraordinary and beautiful women are Jane Fonda and Leslie Kenton. Both worked for the beauty industry yet both advocated the beautiful inside out approach in its broadest sense. Both utilise what works around the clock and at Aloeride® this is exactly what we advise you to do. Aloeride® delivers all the right aloe vera molecules in abundance, taken by mouth it works for you 24/7 and in Hollywood Aloeride® is the staple ingredient in many of the A list's facial masks. It would be cliché to say that you are worth it, but seriously, why don't you try out [Aloeride®](#) today, take it by mouth, use it in facials or ideally do both. Beauty from the inside out, look great, feel great... **go fo it!**

Your face is your calling card and an interesting question therefore is what would you like people to see? Beyond the quality of your skin we at Aloeride® hope you will nurture that twinkle of benevolent mischief in your eyes. In addition to you taking Aloeride® by mouth, here are three fabulously easy to do and effective facial mask recipes:

Cooling Facial

Mix the capsule content of 2 Aloeride® capsules with 2 heaped teaspoons of curcumin (turmeric root powder) into 2-3 tablespoons of plain, natural yogurt (no whey as this may make the mask too runny). Apply to your face and neck (avoid eyes) and leave it on for 20 minutes, then gently rinse off with lukewarm water. Turmeric is a member of the ginger family and has potent anti-inflammatory, antibacterial, antiviral, antifungal and antioxidant properties. It overlaps with Aloeride® which provides



an even broader range of constituents. Aloeride® stimulates production of collagen, keratinocyte activity, wound repair, kills pathogens and of course by combining Aloeride® taken by mouth with Aloeride® containing face masks, you help your skin to nutrition from both sides (see diagram). Just relax and rejuvenate.

Dry Skin Facial

Crush the meat of a raw, ripe, organically grown avocado with a sturdy fork, mix in the capsule content of 2 Aloeride® capsules and apply this mixture to your face and neck (avoid eyes) and leave it on for 20 minutes, then gently rinse off with lukewarm water. Avocado contains high levels of unsaponifiable plant steroids (sterolins); vitamins A, D, E, K (fat soluble), B complex, C, beta-carotene; minerals Magnesium, Potassium, Copper, Iron, Calcium; all essential amino acids and then some; Lecithin (the cell membrane component phosphatidyl choline); and more than 20% essential unsaturated fatty acids. This mask may help diminish facial lentigos (liver/age spots) and your beauty inside out approach should include daily ingestion of good oils, a broad spectrum of oil preserving antioxidants and Aloeride® by mouth. Relax and feed your skin back to beauty.



Oily Skin Facial

Blend uncooked oatmeal (absorbent) with an apple (its malic acid dissolves fats) in a blender, add filtered water as necessary with possibly some fresh lemon juice (dissolves fats), mix in the capsule content of 2 Aloeride® capsules and apply this mixture to your face and neck (avoid eyes) and leave it on for 20 minutes, then gently rinse off with lukewarm water. French green clay is another favourite for oily skin, again because of its oil-absorbent property (mix ½ - 1 tablespoon powder to 1-2 tablespoon water). A diet review and hormone balancing should form

part of your beauty inside out approach. Clay masks should be used in moderation. Only the fat-soluble toxins present in the oils these masks remove from the skin are removed.

Aloeride® sunshine, safety and keeping your tan for longer

Our first PR man was a red head who for years had refused to take his family away from England on summer holidays for fear of sunburn. At one point his wife and family forced him to go to Cyprus where he sat under parasols, covered in sun factor 300 and still got sunburned. As summer approached we gave him and his family plenty of Aloeride®. It was the first time he didn't sizzle, he even went as far as venturing out onto the beach on a windy day - the time you don't readily notice that you burn. And coming back to England, his skin didn't immediately peel but instead his tanned appearance stayed with him for weeks.

Many customers with red hair or fair skin - before and since Alastair - use Aloeride® to help them enjoy their holiday more. The helping your skin from the inside out approach is sensible and safe. Over-exposure to sunlight carries the serious risk of skin cancer. This warning puts in the shade the fact that this free and effortless photon energy has equally serious health benefits. Here are some free tips to make sun safer for you:

Mad dogs and Englishmen go out in the midday sun.

Take note of how the natives handle the sunlight. In Spain or Mexico almost everybody holds a siesta in the shade during the hottest time of the day. In France or Italy during that time most people have lunch on a terrace under huge parasols. So when the sun is at its highest position in the sky, get out of the sunlight or at least cover yourself up. And please be aware that wet clothing lets UV light through more readily than dry clothing does....

Skin contains fats that keep it supple.

Sure enough you will apply your sun creams and / or blockers but do not overlook the fact that your skin primarily gets its fats from good food. So increase your intake of good, unpolluted omega 3 fats via your diet whilst concurrently increasing your

antioxidant intake (for even the best fats go rancid if your body has a lot of free radicals, and this is true even when there is no sunlight at all). Make sure you increase omega 3 and not omega 6 oils as the latter and sunlight do not combine well. Fats dissolve in soap, so it is obvious that the more you use soap, the more fats you'll take out of your skin. By the way, ingesting good fats does not make you fat but carbohydrates will, so go easy on the pasta ;-)

Skin contains water

So keep yourself hydrated and in the tropics this may involve taking some salt tablets. An adult needs to drink 1.5 litre of water (this may be via green or white tea also) to replenish the normal physiological fluid loss during a day in the office or at home. So, out in the sun you need to drink much more water than that.

Many seasoned travellers know... that on the beaches in the Caribbean you can get your back rubbed with a freshly cut chunk of aloe vera to soothe the pain of sunburn. However, less of these travellers know that a better effect can be achieved by taking aloe vera before and during your trip as it helps the skin bounce back from a sudden change in sunlight exposure (simply take 1 Aloeride® capsule in the morning and 1 at night). However, it is vital that sun worshippers still follow guidelines about sensible exposure to the sun. Whilst this herb is effective in preventing and soothing sunburn, over-exposure will inevitably result in sore and reddened skin.

However, a word of warning, the wrong aloe vera product may actually cause diarrhoea. So, before leaving on your next holiday, make sure that you take the right aloe vera capsule with you such as Aloeride® to effectively ease the range of ailments that you become prone to when travelling. Taken before and during your trip, it can help to ensure that you make the most of every day of your hard earned holiday.

Is there reasonable proof that aloe vera can help over-exposure to sunburn beyond empirical evidence that since time immemorial people used aloe vera for this? Other than the extensive research on burns, there is good quality research on the anti-ageing effect and effect on UV light exposure by Danhof, McKeown, Strickland and Yagi. But be aware, not all aloe vera products will give you the molecules that help your skin to stand up to UV light or provide enough of them.

So what is the health benefit from sunlight? Sunlight makes vitamin D

which actually is a pre-hormone and its production requires a pre-cholesterol molecule to get UV-B from sunlight onto the skin. Then the liver converts it to calcidiol (storage form) which then is converted by every body cell into calcitriol (a.k.a. activated vitamin D) Vitamin D is the most potent steroid in your entire body.

Steroid hormones enable the manufacturing of proteins and enzymes by your genetic material (genome). Yet after you've produced about 20,000 units, sunshine begins to destroy vitamin D in the skin. In other words, the same sunlight that makes vitamin D in the first place begins to degrade it - a miracle of self control and safety. So the active form of vitamin D acts by enabling the genetic expression of proteins and enzymes crucial to health in hundreds of tissues throughout the body. One of the ways in which to increase vitamin D orally is via good, unpolluted fish oils but these are increasingly hard to find.

To find out whether you are deficient, the best vitamin D test is 25(OH)D - also called 25-hydroxyvitamin D - and optimal levels are 45-50 ng/mL or 115-128 nmol/L (these values are higher than the 'normal' values). The amount of vitamin D produced from sunlight depends on exposure time, latitude and altitude of location, amount of skin surface exposed, skin pigmentation and season. UV-B also stimulates the production of MSH (melanocyte-stimulating hormone), an important hormone in weight loss, energy production, and in giving you that wonderful tanned appearance (?-MSH). However, UV-B does not penetrate very deeply into your skin. The darker the pigmentation or more tanned your skin, the less UV-B penetrates. Remember that glass allows only some 5% of UV-B to enter your home or your car, you must go outside to benefit from sunlight. The take home message is that sunlight has an awful lot going for it providing you avoid sunburn.

According to Professor Michael Hollick, Professor of Medicine, Physiology and Biophysics at the Boston University Medical Centre it is now estimated that the 1,000 IU of vitamin D a day is needed to satisfy the body's requirement and maintain circulating concentrations of calcidiol of at least 30ng/mL. Too much vitamin D over a longer

period of time can be toxic and cause calcification in the kidneys and heart. Fortunately the warning signs are rather easy to notice: anorexia, disorientation, dehydration, fatigue, weight loss, weakness and vomiting.

Dr. Esther John, an epidemiologist at the Northern California Cancer Center, recommends taking a daily 10 to 15 minute walk in the sunshine as it not only clears your head, relieves stress and increases circulation, but also could cut your risk of breast cancer by 50%. Johns Hopkins University Medical School conducted a 10-year epidemiological study that showed exposure to full-spectrum light (including the ultraviolet frequencies) is positively related to the prevention of breast, colon and rectal cancers.

Stay safe with Aloeride®

Our suggestion is to continue your safe exposure to sunlight so as to produce your body's most potent steroid in a fully natural way, relax and look radiant. But keep it safe, we use Aloeride® aloe vera for natural sunburn defence whenever we go on holiday, it helps the whole family.

