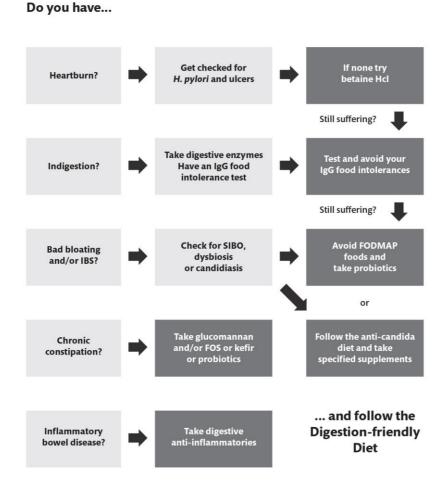
Six Steps to Digestive health

Underlying most digestive disorders is disruption of the fundamental cornerstones of a healthy gut – good digestion, a diverse and healthy gut microbiota, good gut wall integrity, an absence of gut inflammation and food intolerances and good elimination. Most digestive problems are a consequence of one or more of the following issues:

- poor digestion (irritation, intoxication, lack of enzymes, lack of stomach acid)
- poor absorption (increased gut permeability)
- poor protection (dysbiosis, over inflammation, food intolerances)
- poor elimination (clogged up colon, liver detoxification problems).

This common sequence of events is shown in the figure below, together with the remedial actions necessary to get everything working properly again. These form the basis of any programme to restore digestive health.



What goes wrong and how to correct it © Patrick Holford & Piatkus, used with permission

These are common digestive problems which affect almost everyone at some time in their lives, giving exact strategies for their resolution. In fact, one survey found that almost 70 per cent of US households experience a digestive disorder.ⁱ To a very real

extent, digestive problems are a silent epidemic and a major cause of discomfort in our modern world. The consequences of having digestive problems are much more far-reaching than most of us realise. As well as increasing risk for dementia digestive problems can lead to arthritis, chronic fatigue, headaches and migraines, sinus problems, eczema, psoriasis, infections and many other common diseases not usually connected to digestion. Restoring digestive health is, without doubt, one of the keys to a long, healthy and happy life. Here's a crash course in how to achieve it.

IMPROVE YOUR DIGESTION

Step 1 is to eat the right foods, in the right amounts and combinations. This means whole, unrefined, unchemicalised foods that your digestive system is designed to work with, digest and absorb. We will be unpacking what this kind of diet consists of, free from modern wheat and digestive irritants explained in the last part.

The easiest way to test and correct indigestion is simply to take a digestive enzyme supplement with each meal for one week. Find one that provides:

- Amylase to digest carbs
- Invertase to digest sugars
- Protease to digest protein
- Lipase to digest fats
- Alpha-galactosidase to digest pulses
- Glucoamylase (also called amylo-glucosidase) to digest greens
- Lactase to digest dairy products

If you find substantial relief keep going, or adjust to take with main meals only or when you eat problem foods eg when you eat beans or greens if you find them hard to digest.

If you are still experiencing indigestion or heartburn we'll shortly be explaining how to resolve this in an email called 'Passing the Acid Test'.

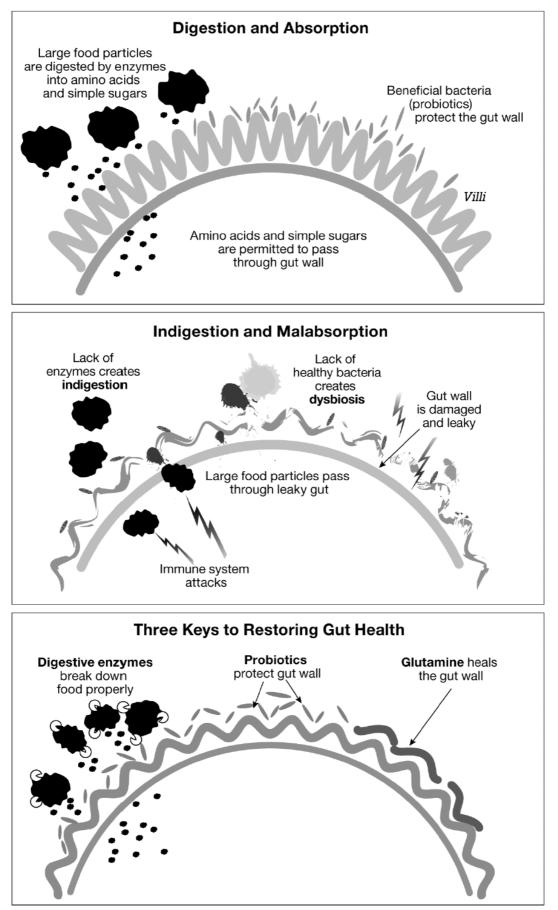
IMPROVE YOUR ABSORPTION - SOLVING LEAKY GUT SYNDROME

Step 2 is to improve your gut integrity. The easiest and fastest way to do this is by having 2 teaspoons of l-glutamine powder, one teaspoon at night, in water, just before you go to bed, and one teaspoon on rising, waiting an hour before you eat. Do this for one week if you think this is a problem area for you.

IMPROVE YOUR PROTECTION – DEAL WITH DYSBIOSIS

Step 3 is to reinoculate your gut with healthy bacteria. The cornerstone of good gut microbiota are Lactobacillus and Bifidobacterium. A simple way to do this is to take a probiotic supplement containing 2 to 5 billion viable organisms a day, ideally twice a

day, for one week. Also, avoid alcohol.



Three steps to digestive health © Patrick Holford & Piatkus, used with permission

CALM DOWN INFLAMMATION

Step 4 If your gut is in an inflamed state the best way to calm it down is to eat a healthy diet, free from food intolerances (next step). What helps to calm down a belligerent hyperactive GALT (gut associated lymphatic system) are:

Omega-3 fish oils – both eat oily fish and supplement, every day, at least 1,000mg of omega-3 fish oil providing at least 333mg (a third) EPA, which is the most antiinflammatory omega-3. Also eat chia seeds. This is especially important for 100% vegans.

Turmeric – of all the natural painkillers and anti-inflammatories this is the best allrounder. While it can act locally in the gut, it is, however, poorly absorbed. Various new forms of turmeric, concentrating the active ingredient, curcumin, and delivering this in an absorbable form, have literally improved its function by over one hundred times. My favourite is turmeric oil, taken with eat meal to literally switch off inflammation.

Quercitin with bromelain – quercitin is a potent anti-inflammatory found in red onions and other foods. A red onion provides almost 20mg but I like to take in between 500mg and 1,000mg, equivalent to fifty red onions, to calm down gut inflammation. I aim to eat a red onion every day. Quercitin's absorption is considerably helped by bromelain, the protein digesting enzyme in pineapple, so combinations of these two work best.

MSM(sulphur) – sulphur, found in onions, garlic and eggs, is vital for healthy methylation, helps to heal a leaky gut and calms down inflammation. MSM is the most usable form of sulphur, readily absorbed, but also immediately helping to calm down an inflammaed gut.

Vitamin C – vitamin C is a natural anti-histamine. Histamine is released when the body reacts in an inflammatory way, so vitamin C helps to calm this down. People with incredibly sensitive digestibe systems may need to take an alkaline form of this slightly acid vitamin, such as magnesium ascorbate. Magnesium also works as an anti-spasmodic.

You can get supplements of the last three, but both omega-3 fish oils and turmeric oil cannot be combined in one pill. So you'll be taking these separately, again, for one week initially to calm down inflammation.

ELIMINATE FOOD INTOLERANCES

Step 5 Your body may have developed sensitivities and intolerances to certain foods that currently trigger an immune-based antibody response. When under attack often the first best step is to surrender to calm down the situation. Get yourself tested for IgG antibody reactions against foods then, in the short-term, eliminate these. We'll be explaining how to do this and when and how you can bring back, and re-test your intolerances, which will decrease as you become healthier.

IMPROVE ELIMINATION

Step 6 Finally, to encourage healthy elimination, increase your intake of soluble fibres. This you can do from diet alone, for example, by eating more oat-based foods and chia seeds. If you get stuck stirring a dessertspoon of chia seeds into a large glass of water, leaving it for 5 minutes, then drinking it, can be effective. However, if elimination is a sticking point for you you might want to take a teaspoon (5 grams), or the equivalent number of capsules, of glucomannan or a glucomannan-based soluble fibre, always with a large glass of water immediately before each meal. This is also a good way to remind you to drink the equivalent of six glasses of water, including what's you use for hot drinks, a day. Vitamin C also helps move things along, taking 2 grams of vitamin C a day.

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ⁱ Drossman, D.A. et al., 'US house-holder survey of functional Gl disorders: prevalence, sociodemography and health impact', *Dig Dis Sci*, vol 38, pp 1569–80 (1993).