

It's blue, good for you, loves the cold and makes wonderful tablecloths...

Flax - Saviour of the universe!

If it was a pill developed by a large pharmaceutical company, you'd have been bludgeoned to death by now with advertising claims for its wonders - cure for baldness, eternal life and universal salvation. Actually, it does none of these things but its extraordinary health benefits have been known since at least Roman times. Flax seed oil is pretty amazing stuff and most of us don't get enough.

So what does it do? It helps prevent obesity, diabetes, inflammatory problems such as arthritis and asthma. It can reduce susceptibility to allergies and possibly avert depression, tackle irritable bowel syndrome, Crohn's disease and ulcerative colitis. It can help prevent and control diabetes while its phytoestrogens can reduce the spread and development of breast, prostate, colon and some other cancers by regulating hormone metabolism. It relieves constipation, reduces intestinal poisoning (toxemia) and there are studies to show that it can improve brain development, with teachers and parents reporting remarkable improvements in children's concentration and behaviour. The reason it is most energetically promoted is for its role in preventing heart disease.

Oh, and it can stop cricket bats from splitting if you oil them with it - at least that's what I found when I was a kid! Just to complete the story, flax plant fibres are turned into crisp, clean, starchy linen - the stuff that marks out a good restaurant. Has it all, really.

Perhaps it's not surprising that a growing number of nutritionists now believe that flax is probably the most important substance you can take for good health - as part of a balanced diet, that is. It's not foolproof against fags and boozing, burgers and lard sandwiches.

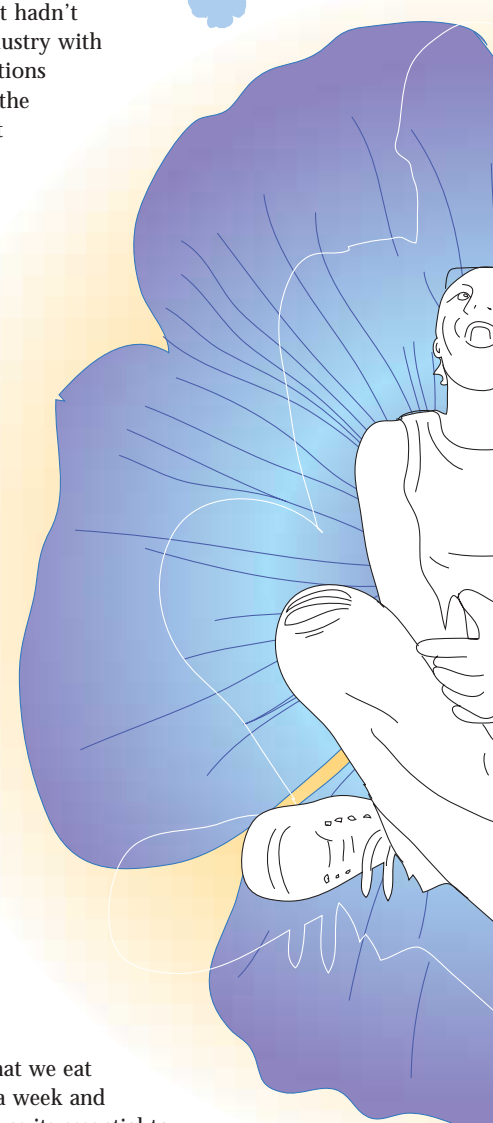
The thing that does the trick is its magic ingredient - omega 3. It's an oil, one of a group of 'essential fatty acids' (EFAs) - essential because your body can't manufacture them. It's the same oil that the Government does its best to get us to eat in the form of oily fish but with a couple of important differences - flax provides about 50 per cent more omega 3 than the equivalent volume of fish oil, has no fishy aftertaste and isn't polluted with traces of the deadly poisons PCB, dioxin and mercury, which are now in all fish. It also contains omega 6 and omega 9 EFAs, B vitamins, potassium, lecithin, magnesium, protein, fibre and zinc.

It would help if the UK Government hadn't confused support for the fishing industry with what's best for health. It never mentions flax and keeps plugging oily fish as the best source of omega 3 despite most people rejecting the advice because they don't like fish. It also begs the question, if everyone did suddenly switch to fish, where would it come from because fish stocks across the globe are crashing because of over fishing.

Government nutritionists defend the policy by claiming that fish omega 3 is a 'long chain' fatty acid which can be immediately absorbed by the body while flax omega 3 is a 'short chain' fatty acid, and isn't so readily accepted. It's complete tosh, of course, as the body has enzymes which convert short-chain FAs into long chain ones.

The big question is - if Julius Caesar knew all about flax, that it's one of the best food stuffs around and can benefit nearly every system in the body, why are so many people going short? American Heart Association guidelines recommend that we eat foods rich in omega 3 at least twice a week and the World Health Organisation reckons its essential to life and health. But people aren't listening!

Research shows that diseases first start in the membranes of cells. EFAs help to build important cell membranes and mitochondria, the structure within cells responsible for respiration and energy production. EFAs are also responsible for communication between cells, regulate the production of insulin and other hormones, influence blood pressure, inflammation and muscle tone and for all these reasons can promote good health and prevent disease. Enzymes in the body



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also need EFAs to work efficiently and do their job - activate the correct hormones.

Now it starts to get complicated! There are two main types of EFAs - omega 3 and omega 6. Omega 6 (linoleic acid -LA) is found in seeds, nuts and vegetable oils. Omega 3 (alpha-linolenic acid - ALA) is found in walnuts, brazil nuts, rape seed and soya oils, green leafy vegetables and flaxseeds. Both omega 3 and omega 6 fatty acids are vital, but in the right proportions. Too much omega 6 and too little omega 3 and health suffers.

For millions of years, people lived on a diet containing approximately equal amounts of omega 6 and omega 3. Over the last 150 years in the West there's been a huge increase in the proportion of omega 6. From a ratio of one to one it's now as high as 20 to one in favour of omega 6. What this does is to reduce the enzymes available to convert omega 3 into a form the body can use. When the ratio is equal, the problem disappears.

And this should be the aim for people who care about their health, which means increasing omega 3 intake and reducing omega 6 intake by cutting down on vegetable oils such as sunflower and corn as well as cutting back on processed foods, hydrogenated fats and meat, which is high in omega 6.

Get it right and the health benefits are enormous. As well as those already mentioned, the lignans in flaxseeds contain phytoestrogens which balance hormone levels in the body and have been shown to reduce the risk of hormone-related cancers, osteoporosis and menopause symptoms. Studies also show that omega 3 helps to lower cholesterol and blood triglycerides and prevent clots in arteries, which can result in strokes, heart attacks and thrombosis. This, of course, is what it is classically used to prevent but its impact on health is far wider than this.

The one word of caution is for people taking anti-coagulants to thin their blood where flaxseed products may aggravate the condition.

Flax, also known as linseed, was central to the growth of Belfast and Dublin where plentiful water supplies



helped the process of turning the plant's fibres into luxurious linen. It's doubtful that the seeds were used for anything other than animal feed but even if the oil had been extracted, its health benefits would have been limited. Flax needs to grow in very cold climates such as Western Canada to produce oils rich in omega 3. It's now an EU subsidy crop and you can see fields of beautiful, inky-blue flowers all over the place but again, it's not the best source of oil.

Flax seeds come in flakes and seeds as well as bottled oils and can be added to most foods, including porridge, muffins, salads and vegetables. You can also take it in capsule form. Interestingly, the seeds need to be ground before being eaten or they will pass through the body undigested. Because it's prone to rancidity, it is important to buy good-quality flax oil which the shop has kept refrigerated in dark-brown glass bottles. And you need to do the same - store at low temperatures in the fridge and use fairly quickly after opening. Warmth and light promote oxidation of the oil and the formation of free radicals - also with seeds once the husks have been broken. The result can be detrimental to health so it's a bit self defeating.

All you need is one tablespoon of flax oil a day for every 100 pounds of body weight, which is probably the optimum for good health - along with a balanced, plant-based diet, limited intake of omega 6 fats and sugar. Not difficult and it should put you on the road to a life with significantly reduced risks of disease. But don't expect instant results as it takes time for the oil to be absorbed and that can take days or even weeks.

One of the UK's suppliers of flax seed oil, Barlean's Healthy & Essential, recently tested public interest in flax oil by bringing over from the US naturapath, Dr Herb Joiner-Bey to launch his new book, *The Healing Power of Flax*. He talked to packed houses everywhere and generated considerable media interest so the word is spreading - and none too soon.