

## Cure diabetes - do you have a hungry beast inside?

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### Abstract



One of the worst modern inventions must be high fructose corn syrup, it is cheaper and sweeter than even refined sugar and is virtually everywhere in processed foods from packed soup to hamburgers. But it is addictive - the same as tobacco, alcohol and the drugs. This is the hungry beast inside.

For a healthy twelve year old sugars and carbs are great, it give them a massive burst of energy as the body produces bulk insulin to release the energy. But this takes a toll as the body becomes resistant to insulin and the pancreas (that produced the insulin) has to work harder leading to insulin deficiency and intolerance. Diabetes here we come.

The excess sugar is then converted to fat in the liver leading to the sister illnesses - heart attacks, strokes and cancer - here we come again.

Many professional doctors and dieticians say that this can be stopped or even reversed simply by changing the diet to include fresh green vegetables - so easy right? But the fact is that diabetes and the sister illnesses far from going away are increasing at an alarming rate making them the greatest health issue of our time.

There is a major gap between theory and practise. Why?

While virtually all doctors and dieticians recommend eating more vegetables changing diet is easier said than done.

These articles aims looks at why and what can be done about it using wicking baskets to grow your own food and how to cook it so it actually tastes good.

### Why processed sugars and carbs are so dangerous.

Carbs and sugars, (particularly high fructose corn syrup) are addictive and dangerous - but they need not be. Our bodies need sugar - there is nothing intrinsically bad about sugar - it is simply that the sugar hidden away in supermarket food is so highly processed that it is immediately absorbed by our bodies leading to a sugar spike.

Our bodies respond by going berserk and pumping insulin to counter the sugar, in a healthy body this insulin is so effective that it rapidly mobilises the insulin so this high is followed by a 'low'. We feel hungry again and will eat more sugary food. This is the hungry beast at work.

However if this goes on and on we can become insulin resistant - we have diabetes - get fat and are prone to heart attacks, strokes, cancer and other horrors.

The cause is the sugar **spike** rather than the sugar itself.

Worse - often a sugary diet is lacking vitamins and minerals. Technically this is easy to solve - eat more green vegetables grown in nutrient rich soil. Green vegetables, particularly those with a lot of fibre, slow down our digestion so avoiding the sugar spike.

All sounds good but there is a gap between what the medical text books say and the real world. People on a high sugar diet just don't like eating a lot of vegetables. They know full well they are healthy and they should eat them - but they don't.

What makes it worse is that a lot of supermarket vegetables are genetically selected for transport and storage and are force fed so they simply do not taste good or contain the essential vitamins and minerals.

## This is personal



This is a real problem I have faced at a personal level, my wife Xiulan is diabetic and recently broke several bones in her foot which started to turn black - not at all good. Diabetes is the most common cause of amputation and blindness.

But Xiulan is a highly intelligent lady; she is a qualified surgeon and well understands the issues. She is in considerable pain with her foot so has every reason to be motivated.

Yet she still craves after the high carb foods and simply will not eat the needed vegetables to balance the carbs. This is not a question of science or logic, at an intellectual level she fully understands but there is a fundamental difference between the intellect and the emotions.

This is a problem that not just we face - it is at the heart of why diabetes and its sister diseases are expanding so rapidly to become the world greatest health hazard. Here I want to analysis why. How is it when the best brains in the business agree and when the solution appears to be so simple - that the world seems unable to resolve the problem.

## Contradictory advice

Google alerts may be no substitute for formal training in a particular discipline but they do give an enormous range of views. Nowhere is this more evident than in diet.

The first conflict is between fats and sugars. It may seem obvious that eating fats will make you fat but that is not necessarily true, sugars - it turns out - are greater source of people becoming fat, particularly in the critical organs like the liver.

This has led so some extreme diets such as the Atkins diet and its offspring which advocate the almost complete elimination of sugars and carbs. The theory is that the body still needs energy and if there is no sugars or carbs will break down fat in the body to provide this energy.

See how well this theory works at [https://www.youtube.com/watch?v=3I02aVkdi\\_M](https://www.youtube.com/watch?v=3I02aVkdi_M). Another video in which experts from the various camps debate is <https://www.youtube.com/watch?v=mdxVfi632Xw>

Just watching google alerts on diet and health will show the number of weird and wonderful diets. Some like the Paleo diet are quite comic in their logic ignoring the fact that in the paleo times the life span was only twenty eight years. Most died younger with just a few reaching old age. Their role was to look after the young - a key role which explains why human life extends well beyond the child rearing age - the parents were simply too busy getting food.

On top of that there are the clear quacks offering typically some magic potion obtained from some exotic plant from some remote country. But the quacks are easy to spot. It is so simple - look for an abstract or summary that give you the key information up front.

The producers of these videos are obviously unaware how their high pressure promotion - trying to keep you in suspense until almost the last minute - clearly identifies them as quacks. The very last minute (if you watch that long) is when they ask you for money.

## **People are intrinsically different**

Very few experts or quacks recognise the variety among people - what works for one person may be totally inappropriate for others.

Just look at some of the vast numbers of papers published on diet. The serious scientific papers are all subject to statistical analysis. (The papers showing Mrs Pumpkin from Memphis lost 100Kg in after two months are meaningless. It may be true that Mrs Pumpkin did loose 100Kg but that does not mean that you will.)

The genuine statistical analysis may show real trends - but they are still trends and they often not that strong. Maybe the numbers of cases of overweight or diabetes are reduced by 20%.

The net results is simply confusion and disbelieve among those looking for real help with their diet so most do the obvious and just ignore the huff and puff.

Diets based on some magic formulae rarely work - you have to spend the time working out how your body works.

## **Learning how you work**

Diets which aim to restrict calorie intake rarely work. Eventually people just get hungry and pig out. This craving for food is not even us; it is the microbes in our stomach sending chemical signals (neurotransmitter) to our brain. These neurotransmitters are incredibly

difficult to resist - you just crave for that particular food. These cravings are part of the survival mechanism - and the vast majority of people eventually give in.

These are very difficult to resist.

We have to self-experiment and find out which food sets up the cravings and which foods suppress the hunger. I know for me that I have an addiction to Pizza. Surprisingly I find that dark chocolate (without sugar) is a hunger suppressant. But that is just me - it does not mean that it will apply to you.

We also have to recognise that these cravings come from the bacteria in our guts sending out neurotransmitters. It can take several weeks of a revised diet for us to change our gut bacteria from those that cause harmful cravings to those that stop us feeling hungry.

I have no solution for this - for a few weeks you just have to sweat it out.

The aim must be to substitute with a non-fattening food. For most people it seems that vegetables really do work. We know that the fibre in vegetables act as a hunger suppressant.

The message is clear, forget about slimming diets and eat more vegetables.

## **Food obsessions**

Patient compliance is a term which is widely used in the medical profession and seems to ignore just how deeply ingrained our food preferences are. For example my wife Xiulan just will not eat uncooked vegetables. It is not a question that she does not understand the health benefits - she simply cannot put them in her mouth - there is some overriding force preventing her. I have an ingrained fear of wobbly ladders - it is not a question of logic - it is the way we are.

I could put this down to simply obstinacy on her part but it is not - there is some ingrained physiological factor which prevents her - presumably some form of primitive protection system. On reflection I can relate to this - I am a typical omnivore who can eat almost any food - but there are some exceptions. My Chinese granddaughter looks on fish eyes as some form of delicacy - but there is just no way I could put an eye of a living creature into my mouth - however good or beneficial I am told it may be.

Xiulan will quite happily scrape the brains out of a lobster head and thoroughly enjoy them - but cannot eat a lettuce. Humans are all different and a bit weird - it is not a question of logic but innate feelings, we just have to design diets around these.

This was brought home to me in the period when I was involved in looking to provide sustenance food in Ethiopia. My involvement was how to overcome water shortage and this is how the wicking bed system evolved - as a cheap way of providing water in times of drought.

But a co-worker with me had what I thought was a major advance in food security. He had isolated some trees growing in Central Australia which were used by the native population as a reliable food resource. The climatic conditions were similar to Ethiopia and he did trials which showed that once established they would grow well. To me this seemed a major breakthrough. Yet the sad truth is that the bulk of the people just were not prepared to accept this plant which was new to them as a food source.



Now to me this was pretty amazing. Before this I had no experience of starving people. Mothers were watching their babies die because they had no food and hence no milk. For me this was a highly emotional experience yet this food prejudice was so strong that they just would not change their diet.

## The economic juggernaut

Google alerts will show the high level of aggression from the public towards our food industry - which is the world's largest industry controlled by a small number of international giant companies. They are portrayed as some form of giant evil empire.

This is not true - they are in business to make as much money as possible for their shareholders - typically dominated by the large financial institutions. If the boards fail to make enough money they are simply kicked out and replaced by others that will. This is the rules of the game. They are not in business to protect our health - that is every individual responsibility - and if we buy it they will continue to supply it.

True Governments are there to provide some level of protection but in reality there is not much that they can do against the power of these international organisations. They can ensure standards of hygiene - give some protection against the use of toxic chemicals and ensure some conformity of labelling. But that is really as far as it goes.

The net result is food that is high in sugars – (particularly the toxic high fructose corn syrup), low in nutrients and with varieties selected (or in some cases genetically modified) for the benefits of the food system - e.g. shelf appearance, long shelf life, resistance to damage in transit etc.

The net result may be highly undesirable with a spiral health problem starting from excess fat in our organs and leading to the deceases of diabetes, heart attack, stroke, cancer etc. But it is not *'their'* fault – however *'their'* is - it is our fault (or largely our fault) because we buy the stuff they want to sell.

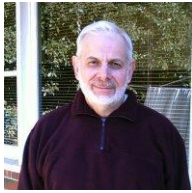
That's the system and in reality we cannot change it.

## So what do we do about it?

People are already doing something about it. Farmers markets are well established, there is a viable organic food industry, many people with large gardens are growing their own food and there are various food cooperatives and a health food industry (sometimes genuine sometimes a con).

And how well are they working? Well for some - particularly the more affluent who can afford to pay two or three times the price of supermarket food - quite well. But it is clearly

not working for the majority of people. The statistics show the ever expanding increase in diabetes and its sister deceases.



So what could I do about this? The answer to me was a system which would enable anyone to grow their own food.

My life's work has been in innovation. My pioneering work with Moldflow changed an industry and my work on wicking beds has helped thousands of people around the world to grow their own food.



Now my current work is on the wicking basket - a system which I want to make as simple, cheap and reliable that anyone can grow healthy food.

This is the subject of my next article.

However I really understand that people will only start eating vegetables if they really taste good. Now I am no Jammie Oliver but my third article in this series will focus on my attempts to prepare and cook vegetables so they actually taste good. This is a typical innovation project - lots of failures with the occasional success.

Colin Austin