

# The food revolution

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## The flash of inspiration and hope for the future

Sometimes life seems very depressing with all the violence, social and political unrest, the environmental damage and sustainability of our planet, the rise of extremists and in my case the current health epidemic. Then along comes that inspirational flash which restores confidence and says yes it is going to be alright.

Like that momentary flash of TV when Jacinda Ardern, Prime Minister of New Zealand wearing a Muslim scarf, cuddled and comforted a crying young girl - the look on Jacinda's face was truly inspirational - no PR stunt just an emotional 'I feel with my people'. Not for my people but with my people.

Why can't us Assies have a PM like that rather than a string of professional politicians who think the only things we are interested in is the rate of economic growth rather than we want to live in a compassionate and equitable society. The Kiwis beat us in sport, they get rain and now they beat us on having a better PM. Perhaps we better give her the job as our PM at the next election.

For a long time I have been feeling depressed about the state of our food and health, with people suffering from a long list of chronic diseases just so a few executives in the mega companies, (and there financial backers) which dominate the food and health industry can get rich while we plebs suffer the ill health.

But I now see a light at the end of the tunnel, I am actually optimistic that we may actually have found the answer and I would like to tell the story. At worst it is a good yarn and at best it may inspire you to join me in my project to get health from food.

## Once upon a time ... they all live happily ever after

When my kids were young I used to tell them a good night story (one of the nice things about having kids, but the little B's grew up) It used to start once upon a time and end they all live happily ever after with a different middle bit every night.

Now I am old and you are not kids so I am going to jump about a la Steven Spielberg. Also I am going to use a lot of hyperlinks to fill in the technical stuff so the story remains a story and not a technical encyclopedia.

So let's jump right into the middle of the story when my wife Xiulan got diabetes, started to loose her sight consequently fell down a flight of stairs breaking multiple bones in foot. After a successful operation her foot started to turn black and the doctors started talking about amputation.

That was after they told us that diabetes was an incurable progressive disease, it just gets worse and worse, going blind and having your legs chopped off were part of the course but the good news (?) was that you would probably die young from a heart attack.

## The blind cripple and soon to be dead wife

Now let me tell you that having a blind cripple wife who may not be around to wipe the dribble of my chin when I get really old is about a big a motivation as you can get. You can read all about the saga in [paradigm](#) which is a long and detailed explanation of how they got it so wrong.

The fact is that in almost all cases you can avoid becoming diabetic if you catch it early enough and even most people can reverse their diabetes, even though they may have been diabetic for many years, if you just eat the right amount of healthy food.

Lets just talk about this a bit more.

## The health epidemic

Modern society is experiencing a major health epidemic, overweight, diabetes, strokes, heart attacks, dementia, depression and more. This epidemic is new, it did not occur fifty years ago and it still does occur in traditional societies. Fortunately we can study traditional society to learn why.

In these traditional societies peoples natural life span is longer. It is true that lacking an adequate medical system death from sickness and accidents are higher than in an industrial society but in the traditional society people who die of old age have not just lived longer but are fit and healthy into old age.

It is a common sight to see people in their eighties and nineties out working in their fields which contrast dramatically with how weak and infirm older people are in modern societies.

So what is the fundamental reason for the difference between modern and traditional societies? In one word **food**.

This starts with the soil. Plants growing in a traditional society are growing in soil which is high in organic content and biology as it is fertilised with compost and manures. It has not been intensively farmed so is full of minerals and trace elements. By comparison modern soil are largely dead with limited organic material or biology and have been drained of essential trace minerals.

Estimates put the drop in trace minerals over the last fifty years of intensive chemical industrial agriculture as high as a factor of thirty - we are just deprived of trace minerals.

Traditional people eat a much wider range of plants. It is a common sight to see old ladies going to the woods or mountains with their baskets collecting a whole range of different plants and herbs. By comparison in modern society we only eat a very limited range of plants and have probably never even heard of the plants that traditional societies are eating.

There is freshness. Traditional societies will probably eat many of their plants within hours of picking. Of course some plants such as the roots crops and tubers will be kept for winter food but they eat a lot of fresh greens. - genuine pick and eat. By comparison many modern foods have been harvested long before they are ripe and have matured over an extended period of time as they move through a complex distribution chain. Despite what the adverts say there is fresh and fresh.

## Food - health or sickness

But how does this modern food lead to the current health epidemic?

Humans have been evolving over hundreds of thousands of years and have evolved a highly intelligent control system to manage these traditional foods.

This control system is centred on the gut brain axis and it releases hormones to tell us we are either satisfied and should stop eating or are hungry so we better eat something - and that something in a traditional society will be more natural food. And this worked very well for us and other animals who have very effective control over how much food they eat.

By contrast modern food is high in sugars and fat - nothing particularly bad about sugars and fats - as long as we eat the right amount - they are our basic energy sources.

But modern food is also low in essential mineral, fibre and phyto-nutrients and our bodies which have evolved a highly intelligent control system (in the gut-brain axis) senses this lack of essential nutrients so creates hunger hormones leading to irresistible food cravings so we have to eat something. - anything.

I think we have all had that feeling 'I have got to eat something but I don't know what'.

Our bodies do not signal what particular nutrient we need - terrible design you may say - but we weren't designed - we evolved to survive and the evolutionary process did not occur with an abundance of energy bars and nutrient deficient food.

So instead of eating nutrient rich food we go and eat what is readily available - sugary fatty food. So we get fat, then the serious diseases, diabetes, strokes, heart attacks, dementia etc. come along.

No worries - you may be told - just go and pop a few pills and true if you are short of magnesium (as many people are) then popping a magnesium pill will work. And if your sex life is a bit on the dangly side then a zinc pill may give you a good night out (or in).

But what a waste - if you eat good food you automatically have a balance intake of nutrients rather than the spikes from pill popping.

## Chemical or biological farming

The essential difference between modern and traditional farming is that modern farming is chemical based while traditional farming is biological based.

Chemical farming is very efficient - producing vast amounts of food and makes a lot of money for the mega food corporations and people like cheap and abundant food - even if it is slowly killing them.

By contrast people have become so divorced from how food is grown we have become scared of biological farming - and for good reason - there are bad bugs which can kill us. Every year many people die or get seriously sick from bad bugs like E-coli.

But understanding biological farming requires a totally different way of thinking. The chemical approach to bad bugs is to try and kill them off with toxic chemicals or antibiotics. And this works - at least in the short term. But bugs are incredibly resilient and breed very rapidly into new bad bugs which are resistant to the chemicals.

Long term it simply does not work - chemical warfare kills off the biology in the soil making it totally dependant on yet more chemicals which is bad but what is even worse is it kills off the biology in our guts which act as a control system regulating our appetites and how much we eat - so we put on fat and succumb to all those chronic diseases.

So how is it that for thousands of years we were totally dependent on biological farming with all those bad bugs and we have survived to tell the tale? Now this is a critical question.

The answer is that the biological system fell into an equilibrium state with the good bugs out competing the bad bugs and keeping them under control - they basically starved them out because the conditions were right for the good bugs to win.

People may not like the idea but the simple fact is that virtually everyone has dangerous E-coli in their stomachs. Then why don't they get sick? Because the conditions are right for the good bugs (they have plenty of food) so they simply out compete the bad E-coli so they do not do us any harm.

It is a question of ecological balance which is the only way for long term survival.

This may not be a pleasant thought but it is the way humans and all animals have survived on this earth for millions of years. Our ancestors were not experts in gut biology with an intimate knowledge of the thousands of different species of bugs which live within us - they simply created the right conditions by eating nutrient rich food full of fibre to feed the good bugs so they did more than just survive but out competed the bad ones so they did us no harm.

But they do more than that - each bug is like a memory in a computer so together they form an intelligent network which automatically controls our appetite so we don't over eat on sugary fatty high energy foods.

You can read about this in [paradigm](#) which explains about our control system and how we need to change the paradigm from just killing off the bad bugs to creating an ecological balance so the good bugs protect us.

The simple truth is that we are totally dependant on the good bugs. The good bugs in our bodies control our digestion while the good bugs in the soil reprocess the organic waste and turn it back into nutrients.

We may not like the idea that we are totally dependant on a bunch of bugs but it just happens to be totally true and vital for the survival of our species.

So if we are going to survive we have to rejuvenate the traditional biological farming - almost certainly against the wishes of the powerful mega corporation in the food, drug, supplement and medical industries who have literally billions of dollars to spend on promotion and (unfortunately) influencing our Governments who theoretically are there to protect our interests.

## Lets Spielberg back to the beginning

It is always difficult to recall accurately what happened when you were a kid but I don't recall being a particularly bad kid - OK I wagged kindly and went to play in the creek a few time - but not really bad. But for some reason Hitler just didn't like me, and even with hindsight, overreacted and tried to starve me - among a lot of other bad things to other people.

But, and maybe this was part of his long term strategy, it meant I grew up in the era of Victory gardens and feeding yourself my getting out there with a spade and growing your own food.

Above all one things that sticks in my mind was lowering plant pots into a giant vat of a smelly chicken shit broth - and I was terrified of falling in. But as far as I can tell not to the point of developing a phobia - far from it. So I really understand about the benefits of flood and drain into organic stews. This is very much the basis of the Gbiota beds which are a development from Wicking beds.

But before I tell you the Wicking Bed story let me tell you about the bit of missing brain

## The missing bit of brain

All people have their capability profile, good at somethings bad at others. If I sing I get complaints from the frogs saying can't even croak in tune.

Most normal sensible (and very lucky) people have a bit in their brain that filters out stupid ideas before they even reach the conscious brain so they only have normal sensible ideas and live normal sensible and happy lives. Now something, maybe it was the fear of falling into the vat of smelly chicken shit, has meant that that bit of my brain is either missing or does not work.

That means I have lots and lots of very stupid ideas, most of them don't work, even if they do work no one wants them. As an act of kindness I made my big sister a motorised doll 'spram. It worked fantastic, the only problem was that she couldn't keep up with it so it ended up crashing into the furniture and crash testing her dolls. She was not impressed.

But if you have enough stupid ideas then simply by the laws of statistics then just one in a thousand just has to be a good idea that actually works and is so useful that someone actually wants it.

## The failed bum

That's happened to me on a few rare instances in my life. One was a computer simulation of plastic flow which I wrote in my spare bedroom. At that time I was heavily into permaculture and self sufficiency but I actually like music, books and cars that go brmbm when you twist the key. I had this crazy idea that this computer simulation may change my status from a derelict self sufficient bum to a just coping derelict bum.

And I was wrong - on my resume (if I ever had delusions of being employable) I would enter **failed bum**. For the simple reason the company I formed (Moldflow) grew to become Australia's leading exporter of technology - a multi million multi national company which was recognised as a world leader in its area of technology.

But hey - I was still failed at being a bum and had to go back and reverse this status by devoting my lunatic brain to the impending catastrophe of soil and water. At long last, despite the ranting of a few right wing extremists people are actually beginning to recognise that climate change may really be an issue. But there are other issues which threaten humanity and one of those is the way we are destroying our soil and water resources.

They are of course linked because if we were smart we would realise that the soil can hold huge amounts of carbon which would not only reduce atmospheric carbon it may actually give us something to eat if we survive.

So I sold my company which continued to grow and prosper and was eventually bought by a US software giant for \$500million while I went back to my business of reversing my status as a failed bum, fortunately with enough money to try a whole range of totally stupid ideas on how to conserve soil and water.

## Ethiopia and the birth of Wicking beds

As a result of my somewhat bizarre range of environmental experiments I was invited to go to Ethiopia to see if I could come up with another bizarre idea which may provide sustenance food in times of drought for people where the affluent were earning \$2 a day.

My solution had two parts. The first everyone knows about as the now ubiquitous Wicking Bed with an underground water reservoir. The storage problem was attacked by simply digging a hole, lining with plastic and back filling. Of course plants need water but they also need food if they are to provide us with food. The second part of my solution was weeds.

The lack of nutrients was attacked by noting that weeds somehow still manage to grow and extract nutrients and water from the soil while the more delicate food plants could not. So let the weeds grow and put them into the bottom of the Wicking bed and let them decompose - pretty simple and worked great.

Most people hate weeds but they do have one thing going for them, they are incredibly efficient at extracting nutrients from the ground - that's why weeds are such a pest. So to give our plant food the idea was to collect up all the weeds (which were growing everywhere) and put them in the bottom of the Wicking Bed. Works fine in a dry place with hardly any water so the beds are not water logged for long periods.

## Back to Australia and the internet explosion

This is going back some twenty five years before the internet took over the world but a friend of mine did write an article about Wicking Beds in one of the green magazines. This seem to catch the imagination of a green trendy who published this on the web.

I have learned two very important lessons about the web.

First how quickly and fast information can travel, within a very short time there were posts and webs all over the net on Wicking Beds, and as I travel around the world I find people from the most remote corners of the world who are using Wicking Beds.

Second how information and technology can get distorted. You see the person who first posted on the web didn't like my idea of using weeds as nutrients deciding that the water container should be nice and clean and not go smelly, so the recommendation was to fill with stones. Now that is just plain wrong, if you go to the [library](#) section on my web and look through the Wicking Bed section you will see article after article where I have got frustrated with answering questions from people who have Wicking Beds that aren't working - either not wicking or going pongy - and I have written article after article in sheer frustration.

## Home v commercial growers

But my aim is simple, every twenty minutes in the working day in Australia someone has a limb chopped off from diabetes complications. On a global scale that probably means about every thirty seconds there's another cripple.

Now Xiulan and I have been to the cliff top but by understanding the causes of diabetes (Xiulan is a qualified doctor and I am a technical entrepreneur) we were able to avoid leaping off the cliff by eating the right sort of food with the essential minerals and phyto-nutrients.

Let me tell you it is not fun - and if you don't understand that you have serious mental problems so if we can we would like to help other people going through this trauma.

And the answer is very clear find an effective way of giving people access to food rich in trace minerals and phytonutrients at an economic price. Money matters and cost should not make diabetes the curse of the poor.

But I am a granddad and have learned a lot from being able to observe the child bearing process a little more calmly than going through it ourselves. It is not just the old and diabetic who need healthy food, expectant and new mothers need to eat healthy food if we are going to have a healthy next generations.

I have had the privileged of being an unpaid Uber driver for my grand kids from school and it is really concerning just looking at the health of the kids as they pour out of school. My grand kids make sure I have plenty of time to observe this by always staying behind chatting with their friends so they are always the last ones out.

It is not enough to have home growers - we need to get commercial growers - even if small specialist growers - involved in growing nutrient rich food.

While Wicking Beds have become popular with the home grower they have not been adopted by commercial growers who can produce on a much larger scale.

For that to happen we have to resolve two problems. We have to create the technology so the principles of the Wicking Bed can be applied on a much larger field type scale - and that means killing this problem of putrid beds once and for all. Also we have to make it economic for the grower to invest in improving his soil which is the key to achieving higher nutrient food. Growers have to live too.

## The two part plan

So we need to do two things, first work out a way of applying the Wicking Beds principles to larger in ground beds and secondly find a way of making it economic for both grower and buyers to have the benefits of growing and eating nutrient rich food.

Some two years ago I formed the Gbiota club setting up a group to develop and share technology to produce what I call the Gbiota beds. Gbiota being short for Gut biota which is the key to controlling our health. And we struggled away making improvement and refinements until that magic day when I had one of my totally crazy ideas which I never thought would get past the first test but wham bham thank you mam it just worked so well I spent the next thirty minutes banging my head against the wall for not thinking about it before as it was so blindingly simple and obvious.

This simple idea was one of the those one in a thousand of my ideas that turned out to be good, the banging my head against the wall for thirty minutes has been classified as not a good idea.

We have now to get this technology out to growers without the corruptions that occurs when things go viral on the internet. The manual for this technology is available free of charge on my web site but only for members of the Gbiota club, but anyone can join the Gbiota club but working under the creative commons system and respecting the source of the technology and only sharing within the Gbiota club.

Gbiota™ is now a registered trade mark and growers using the Gbiota system can promote and sell their produce under the Gbiota name.

That the technology side sorted out - now we have to develop a system to make this economic for both the grower and the consumer.

Lets have a quick overview of the message we need to get out.

## Healthy food from healthy plants from healthy soil

Health starts with healthy food and healthy foods comes from healthy soil.

The way to get good food is to buy **directly** from a grower committed to healthy soil. Here we describe an app where people can cut through the costs and delays of the middlemen and buy healthy food **directly** from a grower committed to growing healthy plants in healthy soil. You can buy while the plants are still in the ground so pick and eat it is. The web is pickandeat.shop.

It is like having your own private garden without having to do the digging. Fresh is more than an advertising slogan.

We also summarise how the grower improves the soil by the Gbiota system using organic waste and mineral dust as inputs so while you eating healthy you are preserving rather then destroying the environment

## The plan to change the world - stage 1 the technology

It would be totally delusional of me to think that an old man (me) - **by himself** - approaching his eightieth birthday can possibly change the world's powerful food and health industries.

Well before you write me of as some doddering crack-pot just think on these facts.

**First** I am not alone - there are thousands - or more likely millions - of people around the world - growers and consumers who fully understand the importance of food to health and biological and regenerative farming. What I can do is give them a methodology so they can work together on a united front to make the change.

I call this the grand kid plan because I am too old to benefit from this plan myself but I would like to think that before I go off to the great compost bin in the sky that my grand kids can enjoy and participate in a healthier and more sustainable world.

**Second** we do not have to challenge the mighty mega corporations head to head. If people want to buy food full of sugars and fats, toxic chemicals and lacking essential nutrients and fibre then it is a free world and they can carry on as before.

But for those of us who actually want to be part of a society where the farmers can get a fair return by adopting biological - or as it is often called re- generative farming - so we can eat food that makes us healthy then we can create a sub-culture what I call the altfood movement. I have actually reserved the web name altfood.info as a source of information in the future.

**Third** I have done it before. Whey back in time 1975 to be precise - well before Bill Gate and Microsoft - I stumbled across the early computers and realised what they meant - so I formed a company and working from my spare bedroom I started to write simulation software which taught me that the way the paradigms in the plastics industry were just plain wrong and I started to promote a new set of paradigms.

Eventually these became accepted and the company became the leading exporter of technical software In Australia and I became internationally recognised as a lead innovator in my field. That company was eventually bought (long after I had move on) by one one of the US software giants for half a billion dollars which indicates that I have some capability as a technical innovator

In 1995 I was getting older and thinking that I should devote my energies and innovation capacity to preserving our soil and water. I had the time and financial resources to carry out a raft of totally way out experiments which eventually led to the current technology of the Gbiota bed.

This pumps a nutrient rich biologically active tea through the roots zone. I call it a modern version of traditional farming but it is highly productive, the plants are growing in a nutrient rich biologically active soil - just like traditional farming but is highly automated so nutrient rich toxic chemical free food can be grown at a competitive price. But realistically, still not as cheap as intensive chemical industrial farming.

But farmers are simply not going to adopt this new technology for regenerative farming unless their are customers willing to pay a fair price - they have to live.

## The plan to change the world - stage 2 the market

Just look at how bizarre the current system of distribution for fresh fruit and vegetable is. The majority of produce is controlled by the supermarkets who custom contract large growers to grow food which looks like it has been produced in plastics factory just to look good. It has probably been picked before it is mature, travelled great distances to major warehouses before it is placed on the store shelf.

The waste in this process is horrific - on farm any produce that does not meet a strict appearance standard is discarded with further waste during transport and if it is not sold it is again discarded.

It is not much better for food passing through the conventional green grocer chain, the farmer grows at his risk and sells at the wholesale market and eventually the produce ends up at the local green grocer where again if it is not sold in time it ends up in the special offer basket for next to nothing.

It is estimated that some 40% of the food actually grown on farm ends up as waste with all the nutrients that went into that plant being lost to the system. The grower typically ends up with only receiving a small percentage, may be just 15 to 20% of the retail price, so although he may want to use regenerative growing methods there is simply not enough money.

It is not good for the buyer either - she has no idea how the produce is grown, when it was picked or what chemicals were used in growing.

## Pickandeat.shop virtual market

The pickandeat.shop web site is a virtual market - it does not sell anything itself but provides a place where growers and customers can trade with each other.

A grower makes his home page which typically will be a picture and brief description of his farm - just for background information.

He then enters a picture and description of all the plants he is prepared to grow with a price. The customer can then communicate working out when and where the produce will be picked up, at the farm, a food hub like a market or health store and a pick up time.

The plants stays in the ground until just before the agreed pick up time.

Conversely a consumer may want a particular plant but cant find it in conventional shops. She can put up a wish for all growers to see hoping that there will be a grower willing to custom grow, as I say like having your own private garden without the hard work.

Payments are made electronically for a total shopping basket which may cover purchases from several farms which are then group boxed for convenient pick up.

There is no payment to place a listing but there is a small commision (10%) on completion of a deal.

Growers are expected to be members of the Gbiota club and all plants labelled as '**Gbiota Grown**' are grown to a specification, agreeing to use the flood and drain system of organic mix with minerals and avoid the use

of toxic chemicals. The Gbiota flood and drain system means that the roots are being flushed - on a regular cycle - with a nutrient rich biologically active solution - probably the most effective way of getting nutrients into the plants.

All growers are expected to be members of the Gbiota club which is a group of growers who believe in the importance of re-generative farming - both for the health of the population and the sustainability of the planet - and work together to advance the technology.

## The Pick and eat schedule

At this moment the instruction for building a Gbiota bed are up on the web just waiting for any grower to join the Gbiota club, accepting the terms and conditions which are essentially acknowledging intellectual property under the creative commons systems.

Also there is an agreement that all Gbiota produce is traded through the pickandeat.shop web site. We take a 10% commission or retail which is much better than the 85% supermarkets typically take. Non Gbiota produce can also be traded on the pickandeat.shop web.

Payment is directly to the growers account which can either be a standard bank account needing entry of BSB and Ac details or PayPal. Other systems such as Strike or mobile phone systems may be introduced later if there is a need.

The contract is directly between the grower and the consumer. Apart from our commission we are not part of the legal process although obviously we are here to help.

There are three ways the produce can go from the grower to the buyer.

The buyer can agree to pick up directly from the grower at his farm.

More likely is the use of a food hub. In the software the consumer can buy from multiple farms in one order. Each grower it then responsible for transporting the produce from his farm to the food hub where the multiple orders are boxed so the buyer just picks up from the food hub.

Thirdly delivery can be directly from either the farm or the food hub to the buyers home.

While we are going through the trial phase we are organising food hubs in both Brisbane and Bundaberg and can provide personal assistance in getting the process running.

However our aim is saving legs being chopped off. Now we just don't care whether they are white, yellow, brown, or purple legs although we may have to ask Elton Musk for delivery to the purple legged martians.

This means that away from our home base of Queensland Australia the setting up of food hubs has to be carried out by local people (with our internet support). The money will go directly to the grower who may well decide to contact a suitable site for a food hub. This is most likely to be an existing stall holder in a farmers market or a health food store. It could also be a diabetes support group, may doctors and diabetes coaches run groups who may decide to take the initiative in setting up a food hub themselves.

As the software is currently being configured payment will go directly to the grower who needs to organise a commission from his revenue for payment for the food hub and transport if that the way he wants to go. This could obviously be changed at a later date if needed but for the time being we are adopting the simplest system possible.

The software is scheduled to be fully operational as a functioning site in May but we are ready to receive registrations from growers right now.

This also give growers time to set up their Gbiota beds before trading opens.

If you are a grower we welcome you to join the club and share the technology right now.

Contact me at [colinaustin@bigpond.com](mailto:colinaustin@bigpond.com)