

# Letter from China

Colin Austin 10 May 2017 © Creative commons this document may be reproduced but the source should be acknowledged. Information may be used for private use but commercial use requires a license.

## Preface

I am writing from China - I came to a rural area to search for better ways for making fermented foods which would lead to improved gut biology which is a key part in the battle against diabetes and similar illnesses.

I am writing this on the fly as I visit various regions and make new finding so it may not be the most logical newsletter, more of a rolling account which I will sort out later (maybe). At the moment, I am in Shenzhen after visiting Shanghai and next week I am off to Hunan - a more rural area - where I may find further revelations - who knows - but this is the story to date.

## My first big mistake

I was looking for starters (which determine the type of bacteria) which can generate the needed biology.



I found - in this part of China anyway - that fermented vegetables were extremely common - most farms were producing their own - but they were not using starters but large amounts of salt so it was more like pickling than fermenting. It tasted horrible so I could see no way that Western people would eat such bitter tasting food. Not much use to me so the trip looked as though it could be a failure.

But the Chinese have been eating this food for centuries - many times I have ridiculed what the Chinese do and later learned that they were right and I was wrong. I was well into the trip - back in my base is Shenzhen - after I had written this newsletter that I got the message.



Chinese food is all about contrasting flavours. They never have just one dish but typically four or five (many more at a feast). I got the message when I read an article about strawberries which most people think are very sweet and full of sugar. Scientific analysis shows that the sugar content is quite low but they also contain a bitter substance and the contrast between the bitter and sweet fools our brains into thinking that they are very sweet - when they are not.

In older times China did not have sugar - only honey which was rare and expensive - but they had discovered that mixing a small amount of their bitter fermented vegetables in with other food made the combination taste sweet.

This struck me as a very important finding which I need to investigate further.

I understand very well what people should eat to be healthy - that is not the problem. The difficulty is to get people to eat and continue to eat a healthy diet. Anyone who has lived in China will appreciate that the Chinese are masters of making food taste good. Maybe this finding of the bitter fermented vegetables could be one of those significant accidental discoveries.

But back to the story as it unfolded.

### **Old but fit and healthy - how come?**



I saw something else which really grabbed my attention and which is a topic for this newsletter. There were so many seriously old people - in their eighties and nineties who were really fit and healthy - going to the traditional Chinese exercise and dance sessions in the morning and working in farms during the day.

Next year I will start to get old - I have been saying that for the last fifteen years - but as I age I am becoming more reconciled to life being finite - dyeing does not worry me but while I am alive I really want to be fit and healthy so I can enjoy life.

How do the Chinese do it? How can people be so old yet so healthy - that's the topic for this newsletter.

### **It's just a fun story with serious bits**

If you have read any of my previous newsletters you will realise I have a bit of a 'thing' about the misuse of statistics which occurs in popular and many scientific papers. What I am going to talk about would be classified in scientific literature as 'observational' so I am not even going to try and write this as a technical paper but more of a chatty and hopefully fun story about what I saw and how I try and understand what I see.

Writing this as a story means I can also have a bit of fun in writing- I hope you can tell the difference between my jokes and when I am serious - and there is some really serious stuff here.

## Shanghai city and state



I flew into Shanghai for a simple reason - I needed to renew my Chinese residence permit which I have to do every three years. Szechuan - which is the centre of spices in China may have been a better place and I may go there later - but Shanghai it is for now.

We tend to think of China as one homogeneous country - in reality it is a collection of very different states - a bit like Europe - bound together into one country.

Shanghai is a seriously big city with a population bigger than the entire Australian continent. (But we have got more sheep if that is any conciliation). The city area it is about the same size as Melbourne but there is also Shanghai State which is much bigger and like many Chinese cities provides a ring around the city where much of the food for the city is produced.

That's where we went.

## Farmers of forty centuries



For some four thousand years, Chinese farmers have been totally sustainable with virtually 100% recycling. There is a really good book - 'farmers of forty centuries' available as a free download on the web. (ask Mr. Google he is a clever clog and knows everything).

However modern farming techniques are being introduced into China, small farms are collapsing with corporations taking up land for less sustainable and less healthy systems like feed lots which just dump their waste into the mighty Yangtze River to be flushed out to sea.

China has gone through a major transformation with most of the young people moving to the city for better jobs leaving the older people behind. They will often make a living by converting their houses into guest houses.



It was a revealing trip. China is group orientated so typically several farmers or family members will group together to build a largish house which is divided up into units. We stayed in a farmer's house run by an old couple with their farther who was 81. His granddaughter is herself a grandmother which says something about the healthy life style.



We had meals in the farmhouse which were totally from local produce mostly from vegetables grown on the farm by these older people and fish caught in the local rivers.

These meals were probably not much different to what people had been eating for many hundreds of years. Nutritionist rave about the Mediterranean diet but it would seem that this traditional Chinese food would be just as healthy and with similar health and extended life benefits.

## Yellow rice wine



I was familiar with the traditional Chinese white rice wine, which honestly, I find a bit like drinking nail polish remover. you can only drink it if you pour it straight down your throat without touching the sides - or else your lips and mouths will totally disappear.

But our local farmer was producing his own yellow rice wine which was totally different - much more mellow and very pleasant to drink. We poured it directly from the five-gallon keg in which it was produced. It tasted really nice and was not strong at all. Apparently, farmers all over China brew this harmless drink.



The only issues I could see is that it must contain an enzyme that makes you clumsy - we had hardly dented the level in the keg when this clumsy enzyme hit home and I spilled my glass of wine all down my front.

Clearly, I need to do a research project to see if all regions in China produce yellow rice wine which contains this clumsy enzyme.

## Fit and healthy in old age



I have been to China many times and always been surprised by how fit and healthy the older people are. Living with these older people made me aware of just how healthy and fit they are - joining in the group dancing and exercises early in the morning then working in their gardens during the day.

When you look at their life history they really have had a pretty rough time. They would have been born in the thirties when the old empire system had collapsed and the country was struggling to work out how to govern itself - a pretty rough time. But it got worse with the Japanese invasions followed by the civil war.

The early Mao era was even worse with the great famine, the great leap forward and the cultural revolution. During the horrible period it is estimated that some 60 million people died - more than all casualties in the second world war.



## Xiulan's bent finger



I know how terrible this period was. My wife Xiulan was taken from her home and family in her early teens - put in a train for four days to Xinxiang - Chinese Mongolia. She never talks about this directly - I have to piece the bits together like a detective. Once we went to a reunion party and I noticed that most of the people had a bent finger like Xiulan.

I asked her why and all I got was 'we slept two in a bed'. Eventually I worked it out. The nights in this desert region are incredibly cold so the finger on the outside got frostbite.



Finally salvation came with Den Xia Ping - who put pragmatism first - leading to the greatest modernisation any country has ever seen.

How can it be that these older people have suffered to much in their life time yet still seem so healthy and fit?

A nit-picking pseudo statistician may argue that the weak ones had all been killed - I think that is ignoring the evidence in front of my eyes - there are a lot of old and fit Chinese.

## Trip not a failure

The purpose of the trip was to find the best starter mix but I did not find anything better than the mixes I was using in Australia - as yet but this is only the first leg.

I have a bit of a thing about our modern approach to medicine - just going to the doctor to get some pills to nominally cure the problem but which really only resolve the symptoms - not the basic cause.

This is particularly true with diabetes where there has been a recent explosion in numbers.



Diabetes is largely the result of our change in diet so insulin - the hormone which should control blood sugar - is no longer effective as it is blocked by fat in the muscles. Instead of attacking the route cause the medical profession offers pills which essentially increase the insulin production by the body putting an extra load on the pancreas which eventually fails. It is a one way street hence diabetes is classified as chronic - for life.

My aim has been to find out how to grow foods which will reverse diabetes. But better food does not only apply to diabetes but to many deceases so I was anxious to try and understand how these older Chinese - with such a terrible early life - were so fit.

## Looking for a holiday with a difference

I may not have found the answer to my immediate question but it is really an experience to spend time in a different culture - like traditional Chinese farming - and one which will unfortunately soon disappear. These old time farmers may live a long life but not for ever so when they go that lifestyle had gone for ever.



I appreciate that many people like to come to China and do the Hong Kong, Shanghai, Beijing and great wall and Xian and the terracotta warriors tour but if you have done that and are looking for something a bit different then visiting these rural Chinese areas may be your thing.

Just a tip, unless you speak fluent Chinese then hire a local guide who can pick you up from the airport and travel with you and sort out the local situations. I married into a Chinese family so have never investigated if there are commercial firms offering this type of service but if this is of interest just drop me an email and I may be able to help.

Once you marry into a Chinese family you learn that there is an almost infinite supply of 'cousins' who can supply virtually any service. China is producing large number of graduates who speak English but find it difficult to get a job straight away. They would be happy to act as private tour guides.



A few tips on travel in China. Expect total contradictions. On the farm we stayed, the meals were cooked on a traditional wood stove yet I just said wifi and was immediately given the password.

Most regions of China have their own dialect and even if you speak mandarin the locals may not understand you.

Chinese characters may seem totally confusing to a foreigner but here are the essential ones you may need.

The Chinese character for WIFI is WIFI pronounce wifi.



The Chinese character for toilet is as shown, if you cannot see this sign then you just need one word Qing (pronounced ching - the noise you make when you tap a glass) which means please.

The process to finding a toilet is to put your hands on your groin, knees together and do a little dance just moving from one foot to the other and say 'Qing WC'. Guaranteed that someone will direct you.

## The natural Chinese diet

I just cannot get away from certain facts. Deceases like diabetes, heart attacks, strokes etc. have just exploded over the last few decades. It is true they have always occurred, records go back to the Greeks two thousand years ago but it was rare. Nowadays obesity which is an indicator is common place.



The major change has been in diet which has gone from the food we enjoyed at the farm to highly processed - loaded with sugars and fats and minimal fibre. This food certainly taste good but this is because it has been engineered to create cravings - it is essentially addictive like other drugs. How has this happened and what can we do about it?

My main objective is pretty modest - how can I help people who read my web be healthier and more fit by a better diet. Gut biology does many things for us - digests our food to provide out bodies with the nutrients, vitamins and minerals we need. But is also acts as a second brain which controls our desire for certain types of food.

I am not saying that fixing your gut biology will solve diet induced deceases like diabetes but if you don't get the right gut biology then it almost impossible to resist the cravings which lead to a poor diet.



That's what I am doing in China - looking for fermented food which will improve gut biology and as yet I have not hit the jackpot. But China is a big place and in my research into yellow rice wine I may well hit the jackpot.

What is so painfully obvious is that the Chinese eat an incredible range of foods typically bought fresh in a local market and eaten the same day.

There are so many foods - many I have never seen before - that it would be almost impossible to find the one magic ingredient - if there is one. Maybe it is simply the variety that leads to health.

For example - mushrooms. When I come to China and wander around the local market there are just do many different varieties. Does one of these varieties contain some magic ingredient or is it simply that the natural Chinese diet (not the westernised version) has so much variety.

All I can say is that their diet has much more mushrooms, fish and a wider range of fruit and vegetables than our

western diet.

## What has gone wrong

I wish I could prove to you there is a magic solution to a long and healthy life - but I cannot. All I can say is that the Chinese eating a traditional diet don't just seem to live longer but are incredibly fit in their old age.

We might not know why it works but you just need eyes on your head to see that is does.



So here is another question - why is it that when we know diet - as in the traditional Chinese diet - lead to a long and healthy life - does humanity as a whole seem to have thrown it all away and eats foods which are leading to a slow destruction of our bodies with a shorter and certainly less healthy life?

I admit that the country style food I have been looking at (and pigging out on) may be labour intensive to produce and modern agriculture may be more cost efficient. But surely it is crazy to ignore the benefits.

Why do we do it?

I am still waiting for my resident's visa so have time on my hands which I spend in the local parks. These are an essential part of Chinese life and make the high-rise housing viable.

First thing in the morning the park is full of people exercising, dancing and tie chi. They move out and the mums with their kids take over for the rest of the morning. After lunch seems to be oldies times - often just chatting. Then evening time is for music and dancing.

Not a bad place to contemplate the world.

### Contemplating the world (with a food bias)



I wonder what a couple of space travellers - Ning and Nang - roaming around the universe would make of our world.

Ning may say 'this place is distinctly weird - look at all these factories turning out food in plastic boxes and tins of fizzy soda - which is slowly killing of the population - do you think they are some other space race disguised as humans which

have a devious plan to take over the earth'.

Nang may reply 'No they are definitely a species of humans who are trying to kill off all the other humans. We can help them out - our blood clotting rays would kill of the entire population in two minutes'.

Ning 'No they want to do it slowly'.

Nang 'what about our erectile dysfunction spray - that will stop them breeding'



Ning 'no these humans are sex crazy - they do it all the time whether they need to breed or not - they are worse than the stibbar back home on htrae' - why don't we load up their water supply with our new wonder drug ragus (sugar) - it will make them all so fat they will die young'.

Nang ' you have got it - lets glide back in a hundred years and see if they are all dead yet'.

I told you this story was going to get a bit silly but there is truth in this. Food processing is the world's biggest industry and is clear to a space wanders that they are slowly killing of the population.

billions of people around the world health is being compromised by a poor diet.

You just have to ask why?



As I sit in the park in Shanghai looking up to the forest of high rise buildings, watching the oldies exercise I think to myself that this 'do it yourself style' Wicking Beds will never make a major contribution to healthy food in China or any other densely populated region - there really is a lot of people in Shanghai - believe me.

I need to think very carefully about how I promote the benefits of my gut biology technology. I do not want to restrict use but neither do I want people to miss out by using corrupted technology.

### How did we get it so wrong?

Sitting on my park bench in my favourite local park I can at least contemplate how society has just got it all so wrong on food and what we need to do to make it right again.

I am an engineer - I make things. Give me a few specialists like a horticulturist, botanist with a knowledge of food and medicinal plants, a soil biologist and an entomologist to control the bugs and I could produce food in bulk of the same quality as I have just been enjoying on my trial beds.

Then why - not just in China but around the world - have we settled for crappy food which is sabotaging our health. Tell me I would really like to know. Here is a few ideas which come to mind.

### China - where it is all happening

I know two things about China, If you think you understand China it is because you have no idea what it going on and even if you did by some fluke understand China **right now** they will change it in six months leaving you just as confused as before.

There is no country which has changed more in the last few decades than China so while I am here let's have a little peep into how China works.

### Leap frogging

Years ago when I started Moldflow where I developed computer aided engineering software I observed a phenomenon I called leap frogging.



I found it a pretty hard grind (at first) to promote to technically sophisticated countries like Germany who were very confident of their practical expertise - they knew they were world leaders and could see little need to adopt computer aided engineering - particularly from a small Australian company.

However, in less sophisticated countries (at that time) particularly in Asia but also in Brazil and India they did not

have a tradition of practical experience and saw the computer as a way they could rapidly train up a skilled work force which could overtake or leapfrog the already advance companies.

This was particularly fortunate for me as it kept the company solvent until it picked up commercial inertia and has allowed me to live the interesting if somewhat peculiar life style I now enjoy.



This is just so evident in China. My first trip into China proper was from Hong Kong into the tiny fishing village of Shenzhen which had just been opened up by Den Xiaoping as an open city.

Since then China has changed from being a very poor country to become what economist say is the second largest economy. I actually wonder if this is an underestimate. Economist judge an economy by its current size but wherever I look in China there is a massive investment in productive assets - the factories, the road and rail system and the education system. We should measure value by the benefits - not what it costs.

### Education costs and benefits

When I first went to China I was very concerned about their health system thinking it may be a bit third world. I have been hospitalised in China couple of times now and have totally changed my mind. China has a major education system producing an adequate supply of doctors.

The system is very different to ours. You just trot along to the local hospital - which is general only a few minutes' walk or drive away - where you are interviewed by a reception doctor. He will give you a chit and your health report book saying what tests you need - blood test, MRI, CAT Scan etc.



You go to each floor for the various tests - there is no appointment system you just wait in a queue - but then in my experience you only have to wait a short time. You then go to general doctor who decides what specialist you need and again you just go to the appropriate floor and see the specialist who will decide what action to take.

There is a bit of time lost in waiting but the whole process is finished in a morning. Compare this with our health system where we may have to wait months to see an appropriate specialist.

Nowhere does the benefit of being able to see a specialist the same morning appear in the economic analysis but if you have pancreatitis (as I had) then the benefits are truly significant.



You can measure the economic cost of an education system but there is no accounting for the productive value of all the highly-trained graduates leaving University.

The productive capacity - rather than the cost - is not factored into the current size of the economy. The US spends vast amounts of money on its defence industry

which appears in the GDP figures - but there is not much of a market for obsolete aircraft carriers.

Ok you could use them for estuary fishing trips and the jet engines could be converted to the world's most spectacular barbeque.

## Temporary benefits

The US also earns large amount of money from products currently designed in America but made in lower cost countries like China.

But this technological lead is only temporary. A few years ago I bought an early design smart phone in China and it was really pretty crappy and soon failed. I went back to buying from big brand Western names but I recently bought the latest Chinese phone. It had improved beyond leaps and bounds.

It still uses a US operating system but I wonder how long that will last - the Chinese certainly have the technical capability to write an operating system for any computer or smart phone if they wanted - but I doubt if they will.

They may well leap frog. It is obvious that smart phones and the classic desk top both have limitations and it is easy to project that a new type of device will be developed which will combine the benefits of both systems.

This could well be developed - with its own operating system in China.

## Sneak preview into the future

I started computer programming in the days of punched cards. No terminals - no mice - no interactive debugging - just cards in printouts out. The basic technology of solving engineering problems has changed little however the human - machine interface has changed beyond recognition.

May be because of my grandfather status in programming - or just to humiliate me - I was given a sneak preview on what is to come. I am still in shock.



Just two little blocks like a kid's toy showing the Tencent fluffy penguin - nothing else - no plugs, sockets or anything. You put these on the table in front of you, or just hold them or put in your bag - whatever suits but there is absolutely nothing to see. What the big deal I think?

Then the fun starts - they give me a hat which looks just like any other woolly hat - it has got a very nice silk lining but nothing exceptional.

That silk lining contains a world of super sophisticated microelectronics which link into my brain cells.



As soon as I put it on the world changes - before me I see a full 3D holograms. Good but nothing really new. But as I think the hologram changes - it is just like doing a google search in my head and seeing the results right before me. Elephants, cars, boats, street maps - there it is.

I think of my wife Xiulan and there she is in front of me. Now I get my next surprise - I reach out and can actually touch her, her forehead is hard, her hair feels just like her real hair and her cheeks are soft and her lips feel moist.

Now I make a mistake and think of a baby. There she is in front of me with her mummy changing her nappy. The smell is awful and when I put my hand out it feel just like what you would expect in a baby's nappy. I quickly pull my hand away - there is nothing - it was just all in my mind.

I think if an apple and take a bite - taste with crunch. All five senses sight, touch, sound, taste and smell - this is a real breakthrough.

The company think they will make a fortune using this for real time pornography. I tell them they are stupid - there will be so many cardiac arrests that Governments will ban it.

They are working with department of human machine interface at Minneapolis University. They have warned them that this is so advanced that people will react badly to it so they need to introduce some reality elements into the system. They show me a couple of these reality elements.



The first is aimed at Windows 10 users. The system has been programmed to randomly loose internet connections. You run a diagnostic which presents a whole range of setting options which you play with for a while with no affect. Then you reboot (by taking the hat off) and the system automatically reboots - but it still takes the normal three minutes - after which it works perfectly until the next drop out.

I congratulate them on their reality.

Next they show me a realtiy element they have developed specifically for Australia. You get an email telling you Telstra - Optus or whatever Telco you use - is ready for inspection - it knows.



When you look, you find that you are being overcharged for some service you never requested. So, you dial the number given. Easy - you just look at the number and it dials automatically. You get a voice message that your call will be answered in 15, 10, 5, 1 minute and then you get to talk to a person but before you can explain the problem you have to give your telephone number and date of birth.

The very friendly person says this is no problem but you need to speak to billing and they will transfer you. You go through the 15,10,5,1 minute process but before you can explain the issue you have to provide your telephone number and date of birth.



No problem she says but you need to talk to the adjustment department. Again the same process giving the telephone number and date of birth to find out that this is a third party charge so you need to talk to that department.

Again the same process and you are left wondering why you are the only person on the globe that is not changing their telephone number and date of birth every few minutes and are left feeling you are really a very dull person.

Next month - and in fact every month - this process is repeated.

Again I congratulate them on their reality elements and am so impressed that I ask to meet the engineer in charge. I am so surprised that this is not - like everyone else - a school kid dodging English lessons but an older man that I have to be rushed to hospital for emergency shock treatment.

Thank heavens for an efficient medical system.

### **Staggering very - shocking and surprising (Cambridge dictionary)**



Getting back to my China trip. I am writing this from Pudong which is interesting in itself. Shanghai is an old city with many slum areas. The Shanghai government decided it wanted to clean up these slums and they needed to relocate thousands of people.



So they took Pudong, which was basically wet boggy marshes, put in drainage canals and build thousands of high rise apartment blocks with all the associated infra structure, roads, high speed railways, shops and supermarkets etc. They have basically created a new city out of mud. (I like to look at soils wherever I go and here it is just mud).

I am writing this on the seventeenth floor of an apartment block sitting on mud - as an engineer I am hoping they got their sums right - it's a long way down.



The scale is simply amazing - not just the engineering but the social management of moving so many people.

We drove out of Pudong on new freeways through intersections which are just multiple roundabouts created into the sky - then crossed into the tunnel which runs under the Yangtze - this is at least eight kilometres long - and then onto a massive suspension bridge.



The engineering is just staggering. As an engineer this turns me on but what really gets to me the wind farm at the end of the bridge - turbines out to the horizon. China is also installing massive solar farms all aimed at changing the power source. I even see notice boards to educate the public about the changes to the power supply from coal to renewable.



The problem with renewables is the need for storage which has still to be properly resolved yet the Government is still pushing ahead with this massive renewable project before large scale storage is available - that is a leap of confidence that storage will come - technical speculation. They have every right to be confident as the battery technology and manufacturing facilities come on line.

The amount of money in changing from coal to renewable will be simply massive. What is the real reason - are they so convinced about climate change? May be - I don't know. I have no hidden microphone into Xi Jinping office so I have to guess what and how they think - maybe I am right maybe wrong.

But what is clear they are betting that renewables will soon be cheaper than conventional power. By investing in technology now, they will establish a technical lead which will give them major export opportunities later.

But there us another issue.

## Pollution

I am sitting on the seventeen floor in Shanghai looking out of the window. Believe me - China has a pollution problem.

I am sure the Government knows their Chinese history in which dynasty after dynasty collapsed. People on mass have power - I see this on the roads where crowds of people will just walk in front of the cars - the drivers have no option - they just stop and let the pedestrians through. I just take my life in my hands and stick to the middle of the crowd.



Pollution is a serious issue - it is not good to have 1,400,000,000 angry people. The Government know they have to fix it. I am sure they believe that climate change is real but the driving force for this massive investment in wind turbines, solar panels and battery research is to solve the pollution problem.

The picture opposite of a public notice board is educating the population on the need for renewable energy.

So, can we sit back and relax now China is making a major contribution to combating global warming - even if for the internal reason of solving pollution? Read on.

## Shared bikes and electric cars



At one time, we would look to the US as the source of new technology and trends - now we need to look to China. Nowhere is this better illustrated than in bike and car sharing.

A few years ago, the local city councils decided to introduce bike sharing to help resolve the transport problems of a massive and dense population. It was popular but not revolutionary.

Now private companies have picked this up on a grand scale. You open up an app on your mobile which shows you where there are bikes nearby. You select one (if needed - using your mobile to navigate) take a picture of the QR attached to the bike, this records your starting position and

time and opens a temporary account.

When you have finished the journey you just log out which automatically debits your account. Mobile phones have pretty much replaced cash here.

It's dirt cheap - may be 20cents for a trip.

What makes it work is the huge number of bikes - they are just everywhere so you never have to worry about a bike being available.



Car borrowing is now just starting. They have the cutest little electric cars which work pretty much on the same principle as the bikes. I have never mastered Chinese characters but I sort of worked out from the label on the side of the car that the rate was around \$3 per hour so a twenty-minute ride to the shops would cost little more than a dollar.

They have not as yet reached the plague proportions of mosquitoes in Darwin that the bikes have achieved but even so every time I have been to the local shopping centre there has been one available.



This cute little electric car costs about \$3,000 in China. I could charge it up from my solar panels for free. Great toy for an adolescent oldie.

The government ensures that new apartment blocks have facilities for charging electric cars even though it will be a while before there is an abundance of electric cars.

What's all this to do with the way that the processed food companies are slowly poisoning us? It is a way the system works.



## Comparing how the system works in China and the US

The Chinese people trust the Governments with the massive public spending.

I heard some figure for approval ratings in the US - how well is the government satisfying the needs of the population. At the time of John F Kennedy, the approval rating was 85% it has now dropped to 14%. It is pretty obvious that there have been similar crashes in government approval in other countries from Australia, the UK, and other European countries.

I don't have real figures and Chinese people don't talk about politics in the way we do but from what I can see they are more than happy with the way the Government has brought the country from what can only be described as sub-basket case to the most productive country in the world (i.e. ability to produce useful products and service).

With that track record the people are prepared to trust their Governments with massive investments like renewable energy.

## Implications for us - how the system affects our food

Keynes once made a comment that politicians are often influenced by the scribblings of some obscure and obsolete academic.



In the case of America, it is the Chicago school of economics who have a fanatic faith in the free market to take the right decisions. Australia and many other western countries follow the US lead.

China's success has challenged this obsessive neo liberal following of the free market. The food industry has proved it is highly dangerous.



Of course free markets and globalisations are good in theory, but that is all it is - just a theory - but applying that theory to practice is a different story.

There is probably no country which is more 'free market' than China where you can get almost anything from street vendors or large conglomerates.

What we can learn from the China US comparison is that these concepts should not be taken to extremes like some religious sect.

The history of China has been one of escarpments. A new emperor would achieve power and typically provide effective government with the country climbing to the top of an escarpment. It only takes a couple of steps along the dynasty for the following emperors to take more interest in his concubine's breasts than running the country.



The dynasty would eventually collapse to be replaced by the next dynasty but throughout all these ups and downs the country would be run by an effective system of highly trained civil servants - the mandarins - selected by a highly competitive system to get the best of the best.

Right now, the modern mandarins - who think on a time scale of decades - have decided to back renewable energy. The economic rationalist of the west - who think on a time scale of the next news bulletin - say that renewables are too expensive and there is no effective storage as yet.

## The mandarins gamble on renewable energy

Take the case of renewable energy.



The mandarins gamble - or considered judgment depending on which side you are on - is that once the high capital costs of changing to renewable are paid off that energy renewable will be significantly cheaper and that an effective storage system will be developed.

If the mandarins are right then China will have cheaper power than the rest of the world and will have acquired a lead in renewable technology which they can export to the rest of the world.

Australia will have Adani - the world biggest coal mine.

China will have renewable energy technology expertise - we will have a big hole.





Just in case you have not picked up my bias let me tell you that back home in Australia I have a solar powered system with battery backup - I am saving money right now and don't have to worry about power cuts. Looking at what is happening with electric cars in China I am working out how to get an electric car as a town run about for shopping. There are some really neat baby cars here which would be a dream to park and with my solar power I could run for next to nothing.

If I were to follow the strict economic doctrine I would never have installed my solar system. For now, I can earn a higher rate of interest simply by leaving the money in the bank. I am not going to try and justify my un-economic decision - but at the next power cut just pop round to my place and I will boil a kettle and you can watch your favourite program on TV and try and convince me I have wasted my money on secure electricity.

## Politics US and China

All this debate about politics is just a preamble to working out what has gone wrong with our food supply. How it is that the largest industry in the world seems intent on slowly poisoning the world's population?

To understand this we have to look at the extreme theories of the free market thinking and globalisation.



There is no doubt that globalisation increases total wealth as predicted by the theorists but the wealth does not flow uniformly to the population but increases the wealth of multinational corporations and the top of that pyramid while wealth for many actually declines as jobs are transferred to lower cost countries.



Western democracies simply haven't worked out the solution to this problem a situation made worse by the immense power and wealth of these organisation to influence (or control) governments.



We have seen how governments have gradually learned to have some control over the tobacco industry which has used deception and confusion to avoid government control. The health hazards of smoking have been so well proven and the solution is so simple - stop smoking - that Governments have made progress in reigning in the immoral activities of the tobacco companies.

## Who is running the show

The Chinese system may still carry the label communist - this is a pity as the China is nothing like what we would associate with communism as in old style Russia and North Korea. The modern Chinese governments is just as committed to the market and free trade as the US (probably more so under Donald Trump).

The Chinese people are committed to free trade - just go down to the local market and haggle over the price of a pair of shoes - China is a trading country - probably more so than the US where monopoly and neo-monopoly power typically dominate trade.



At this moment, the Chinese Government have convinced over a billion of its people that it is working for the benefit of the people and has a high satisfaction record.

How have the Chinese achieved control? By controlling the finance industry.

The core of the reason why our food system is slowly killing us is the giant corporations that control the food, finance and many of our vital industries have so much power and control over our political system. They behave in a way which I would have to classify as immoral and corrupt.

China has its' problems with corruption too - the difference is that in China this corruption is illegal while in the US the corruption in the large multi-nationals is perfectly legal.

I still can't get over how the banks in the US bought the whole world to the edge of economic collapse by their greed but the leaders still received multi-million dollar bonuses - and the system still not has been fixed.

Off track? - I think not.

You may think that all this rambling on about free markets and how technology develops a bit off track from my key aim of developing food technology which makes us healthy.

I don't think so. There is no point in my developing technology if there is a failed system which prevents people from accessing the technology.

## What can I do?

I may get all steamed up about these chronic failures of the system but I have to accept that there is not much that I can do directly to change the system.

But what I can do is what I have been doing for many years is to keep on experimenting with ways of growing food which makes us healthy. I feel comfortable with this particularly the work I am currently doing on gut bacteria.

It is not that improving gut bacteria is going to solve all health problems - but I know that it is incredibly hard to follow a diet if your gut bacteria is telling your body to eat this or that appetising looking food. It is basically just too hard for most people. But if you focus on getting your gut bacteria into a healthy state then this craving will stop and you will automatically be able improve your health.



What I have recently learned in China about juxtaposition of flavours - sweet and sour - giving an enhanced sense of sweetness will make it even easier to minimise sugar consumption. It is of course fooling our sense system but who cares if it works.

But developing the technology is one thing. Let us say I am lucky and actually find some way of naturally fermenting vegetables which will encourage the needed broad spectrum of gut biology. What do I do next?

Promoting it and getting it widely accepted is another issue.



The normal process for protecting new technology is to go through the patent process which provides a monopoly which can be exploited for commercial benefit.

This gives me some problems - I don't want to stop people using my technology - I want them to use and benefit from it.

This project is not about making money (although that would be nice) it is about providing a way that people around the globe can enjoy a better life through improved health. I don't want to be like the multi-nationals and get a monopoly on the technology for excessive profits.

Neither do I want the multi-nationals to use their power to take the technology and use their marketing power to obtain a de-facto monopoly.

This is important for my current project on gut biology where I want people to benefit without having to go through the whole process of growing biologically active vegetables and the following fermentation processes to amplify the biology.



I see commercial growers selling through the local farmer's market as being one possibility of distributing produce.

In many ways, I have been lucky enough to develop the Moldiflow technology - the right product at the right time - which was commercially successful.

This has enabled me to spend time and money on wicking beds, food to make us healthy and gut biology without worrying about any financial return. While I am enjoying good health at the end of my life it will not go on for ever so I have to work out how other people can take over from where I leave off as I change my state from being a wicking bed developer to provide organic fuel for my last wicking bed.

I need to consider how other people can take over the reins and earn a fair return for their efforts and also to combat the resistance from the established food monolith which would prefer to carry on with their profitable business of selling toxic food.



My thinking is to set up a form of global club. People and companies can join the club for a nominal membership fee and in return they will receive the technical know-how and support on the growing systems I am developing to provide food which will improve gut biology.

This information will be provided on a confidential basis.

Members of the 'club' will be encouraged to seek out new members (for which they will receive an immediate financial payment). All members will be able to generate revenue by the sale of inoculants to grow further biologically active plants or mother stock for the next stage fermentation plus of course the main product of both fresh and fermented produce to improve gut biology.

### **Back to my rambles**

I have now moved back to Shenzhen which is my base in China and have found more fermentation products but again not exactly what I am looking for. Next week I set off again to Hunan - away from the big cities - to see if I can learn more about fermentation (and of course by study into the clumsy enzyme in yellow rice wine).

I would appreciate any comments you may have on this rather rambling document but particular how to promote and obtain equitable benefit for all involved in this the plant and fermentation technology to improve gut biology.