

# Reversing diabetes the Yangtou way

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## Yangtou - the Mission

After a routine blood test you may be diagnosed with type 2 diabetes and be told that the disease is not curable, will steadily get worse needing stronger and stronger medication ending in insulin injections, if you don't take your medications you may go blind and have your limbs amputated and will probably suffer an early death from a heart attack.

Diabetes is no longer a minority disease - it is the major health epidemic of our times - the statistics are dramatic enough but the real scare is the number of pre-diabetics who will end up in the statistics of full diabetes. Adding up all the diagnosed, likely undiagnosed and pre-diabetics show that almost half the global population are sufferers.

This is serious stuff - but to tell half the world's population that there is no remedy goes beyond serious - and what makes it worse is that it is just not true.

How can this be?

This is the mission of Yangtou village - to answer that question and reverse diabetes for our guests.

It is in two parts, the first deals with the theory and ideas the second with the practical solutions.

## *Part 1 reversing diabetes - the theory*

### Disrupters

The word disrupter is now fashionable and is used to describe a new technology coming in from outside and disrupting an existing technology.

A conventional infectious disease is typically caused by some virus or bacteria which infects the body - you kill the infection - often by an antibiotic - and you are cured and in many cases have developed an immunity against that disease.

You are not just cured but protected.

Diabetes and the other chronic diseases are totally different - they are not caused by a single source but are the results of many factors working together to push you over the hill and become diabetic.

Science works on specialisation and is not so good at bridging multiple technologies - which is exactly what we have with diabetes so here we have to look at a whole range of technologies from conventional medicine, psychology, sociology, engineering,

computer science, food production, ecology, anthropology and more and see how they can all work together to reverse diabetes.

It is wrong to even talk about curing diabetes in the way cure is used in infectious diseases. Diabetes is a non-infectious disease so it is wrong to talk about a cure in the way that measles or mumps can be cured, but it is absolutely possible that sufferers can reverse their illness and enjoy a healthy life.

If you have diabetes you probably have a genetic proneness to diabetes. Even though diabetes can be reversed so you are no longer diabetic - pending some spectacular medical breakthrough which changes your genes - you will remain prone to diabetes.

## **Diabetes can be reversed**

It is true that there is no known pill which will reverse diabetes. But there are enough dedicated doctors around the world who have proved beyond doubt that - with the right treatment - diabetes can be reversed. (See *choice* on [www.waterright.com.au](http://www.waterright.com.au)).

Diabetes is the result of a combination of many factors - poor diet, lack of exercise, stress and genetics. Genetics cannot be changed but changing diet, exercise and stress can lead to reversal in the vast majority of cases.

But with modifications to the three critical components of diabetes diet, exercise and stress you can enjoy a healthy life - have normal blood sugar levels and be free from blindness, amputations, heart attacks and the other horrors of diabetes for the rest of your life.

But you will always have to be careful not to slide down the slippery slope back into diabetes.

## **Aims of Yangtou village**

The aim of the Yangtou village is to help you reverse diabetes by finding the diet, exercise and relaxation regime most suited to your needs - people - and their guts - are all different so at the current state of the art there is no universal solution.

Our aim is to help you find the solution which is the best fit for your body and needs.

The aim here is to help both guests understand the processes we use.

(N.b. diabetes as used here means type 2 diabetes.)

## **Changing Paradigms**

Let me start with two quotes from 'The Diabetes Code - prevent and reverse Type 2 diabetes' by Jason Fung's which was released in 2018 and is a most penetrative analysis of diabetes management.

*In just a generation, diabetes has gone from a rarity to epidemic, a catastrophic turn that presents urgent questions: Why are so many suffering, and so suddenly? And how have our health authorities failed to offer an explanation or treatments for so devastating a scourge, despite spending billions? They have, instead essentially given up on finding a cure for type 2 diabetes a chronic, progressive disease that promises a*

*life of slow, painful decline and early death. - Nina Teicholz*

*Most health professionals consider type 2 diabetes to be a chronic and progressive disease. This promotes the idea that type 2 diabetes is a one-way street, a life sentence with no possibility of parole: the disease continuously gets worse until you eventually require insulin injections.*

*But this is actually a great big lie. - Jason Fung.*

The Diabetes Code explains the paradigm shift in the thinking of managing diabetes - Jason - as a qualified medical doctor who has a successful track record of reversing diabetes in thousands of his patients - gives a clear and simple explanation of the technology. I thoroughly recommend reading his book.

But he is not alone in creating this paradigm shift so I will give a brief summary of the latest thinking together with my interpretation and experiments.

Diabetic sufferers are being told that diabetes is not reversible when in most cases it can be reversed with the right treatment - this is a major paradigm shift.

I am very focused on Jason's work as it is written in a very accessible way but I would suggest you also look at ; -  
'The Change Your Biology Diet by Louis J. Aronne.

There are many excellent technical articles on reversing diabetes which support Jason's work and go into the technical details of the bio-chemistry which are readily searched. Searching *Low carbs down under* will lead you straight into this highly charged debate.

On my web there is an bibliography of sources on the diabetes paradigm  
<http://www.waterright.com.au/choice.pdf>

## **General v tailored solutions**

Why should there be so much controversy between competent and dedicated scientist? May be they are just trying to find a general solution which works for everyone and people are so different there is no general solution.

My wife and I eat similar food, I tend to put on visceral fat and but am not diabetic while my wife is generally slim but is diabetic.

The Yangtou approach is to try and find a specific solution for each client - one of the few redeeming features of diabetes is that using continuous blood sugar monitoring it is possible to measure the effects of any diet straight away and tune the best diet with virtually no chance of any diet leading to runaway blood sugar levels.

## **The battle of scale**

This is not a one man battle there is a whole team trying to change the way we treat diabetes. What makes this paradigm shift so different is the scale - some 10% of the world's population has been formally diagnosed with diabetes but if you consider non-diagnosed, pre-diabetic and simply insulin resistant you are looking at close to half the world's population - the scale is simply staggering.

What currently happens to the vast majority of people who are actually diagnosed as diabetic - which typically follows after a routine blood test? They are told that diabetes is a progressive - non reversible disease it will steadily get worse and they are likely to go blind, have a limb amputated and will probably die young from a heart attack.

The medical profession is not without empathy and so the patient will be prescribed drugs, probably metformin which actually is a comparatively good drug with not many side effects and may adequately control their blood sugar levels for a decade or more.

This is like travelling down a gentle slope with a slow progression of the illness until at some point the slope increases and they need stronger medication like sulfonylureas which are really nasty creatures and just delay for a bit longer the arrival at the final cliff.

Why do empathetic doctors do this? Partly it is the difficulty of going against the conventional paradigm but it is also - simply a question of time - there are so many newly diagnosed diabetics there is just not enough time to treat them so there is little option other than a six minute consultation and writing out a script for the pills and maybe a few words about eating better and exercising more.

Money also plays its part - there are some very large and powerful organisations (food and drug companies) earning large amounts of money from the current situation.

Paradigms are never totally wrong and replaced by a new paradigm which is totally right. So let us be fair and admit that the drugs in common use - like metformin - are infinitely better than any other alternative available to date. We need to recognise that the conventional paradigm has given people a decade or more of extra quality life.

The current state is not a wrong - it is simply that much better alternatives are now available.

## The Diabetes Code

Let me just give the essence of the Diabetes Code - this is a closely argued book, as are the many other books on reversing diabetes - but I am more interested in how to use this information in practise to reverse diabetes than a debate on biochemistry.

With a slight modification to the wording Jason actually agrees with the conventional wisdom - *that diabetes is a chronic and progressive disease which is not reversible* - by adding - *by drugs* - at the end. *Diabetes is caused by diet and can be cured by diet.*

I need to add a footnote here that genetics and epigenetics play a role in diabetes - there are some people who are so disposed to diabetes that there is no known cure - but history shows that this only applies to a fraction of a percent of the population and all the evidence shows that for the majority of people diabetes can be reversed.

Jason argues there are really two phases in the development of diabetes - in the first stage there is a slow increase in blood sugar levels and insulin resistance. This early state is often missed as the pancreas can compensate by producing extra insulin so blood sugar is technically under control - but at some point the pancreas is unable to produce enough insulin and diabetes becomes serious and obvious.

At this point the patient is likely to be prescribed drugs which either makes the insulin

work better or worse drugs which increase the supply of insulin which actually make insulin resistance worse.

## Storing energy

The body seems to have remarkable ability to convert energy - from carbs to sugar, from sugar to fat and back again so we can simply talk about fuel.

Diabetes is really about balancing the input and output of fuel and we have evolved mechanisms to manage this balance both in the short and long term.

In the short term we eat food and if - right now - we do not need the fuel we turn it into fat and transport it off to the liver. Later when we need a bit of fuel we take the fat convert it back to glucose - transport it back to the blood stream to be used by our muscles or organs.

Our liver works like a fuel tank in a car providing a temporary fuel store.

For the longer term we have evolved a mechanism for the longer term storage of fuel by storing any excess fat throughout our body.

If our input and consumption are balanced this just keeps on working fine. Our bodies have a highly sophisticated system of balancing our inputs and consumption. Below is a list of all the hormones we use to balance our input and consumption. I show these not because I want anyone to read it - let along remember it - but just to show how sophisticated this system is.

## Decrease food intake

Leptin  
α-elanocyte-stimulating hormone  
Corticotropin-releasing hormone  
Growth hormone-releasing hormone  
Cholecystokinin  
Somatostatin  
Glucagon-like peptide 1  
Urocortin  
Neurodynin  
Serotonin  
Dopamine  
AgRP/APP-1/GBP28  
C75/Cerulenin

## Increase Food Intake

Ghrelin  
Neuropeptide Y  
AGRP  
MCH  
Orexin/Hypocretin  
Galanin  
Norepinephrine  
Perilipin

## The control system

If anything upsets this control system we may have an ongoing surplus of food - we eat too much. Insulin allows sugar to enter the cells and at first we store the food in the temporary store - our liver - then all the fat cells around our bodies. The pancreas is still working fine so we keep on making more insulin which allows fat to enter our organs including the pancreas - which make the insulin.

Much conventional literature talks about the pancreas being 'burned out'. Burning out is a phrase better applied to mechanical devices like car clutches rather than the parts of the body which do not burn out. Generally they are simply clogged and can be coaxed back into working again.

At first we may put on weight but we are still healthy but at some point the pancreas gets clogged up with fat and stops making insulin. This is when the real problem starts as our blood sugar rises and we are on the road to all those horrible things like blindness, amputations and heart attacks.

We can take pills to slow the process but there is no pill to reverse it.

## The two stages of reversing diabetes

The first stage is to restore insulin sensitivity.

It is easy to reverse the diabetes in the short term - simply stop eating, the body will burn up all the excess energy and we are back to normal. Fine in theory but not so easy in practise.

There are some clinics which specialise in water fasting - eating nothing and just drinking water. Within two or three weeks the body is cleaned up of all that excess fat and diabetes has been reversed.

The body tends to shut down to preserve what energy is left so becomes inactive and this really needs medical supervision to avoid harm. [Dr. Goldhamer](#) at the True North Health Clinic specialises in this method.

There is no doubt it works but in practise not many people want to go to such extreme lengths.

A more moderate approach is severe calorie restriction - this was scientifically researched by Professor Roy Taylor with a very high success rate. Because some food is being consumed people have energy and can participate in a reasonable life style. Restricting the food to just the right level is a delicate process which requires experienced supervision.

You only have to Google fasting to see there are numerous clinics around the world offering fasting style facilities.

Indications of lower insulin resistance may be seen within a few days but It takes longer - may be around eight weeks for the process to really work.

The third option is intermittent fasting which is typically a cycle of between sixteen to thirty hours of fasting between eating.

This is much more gentle, particularly the sixteen hour daily fast and is easy to stick to, but may takes two or three months to reverse diabetes.

It seems impractical to just restrict food intake to balance energy needs so typical calorie restricted diets don't really work, some form of fasting is needed and it is not difficult to choose a form of fasting which suits a particular individual to reverse diabetes - that is the easy bit.

It does not really matter how you do it - you simply need to have make sure the fuel intake is less than the fuel used so you burn up all the excess fuel. In the short term this should restore a functioning blood sugar system - but this is only temporary - we now have to look at making this work for the rest of your life.

## **Stage two - the difficult bit**

If someone is diabetic this is probably due to a combination of being genetically disposed to diabetes together with being addicted to an eating pattern - typically too much sugar and high glycaemic fast acting carbohydrates.

We now face the much more difficult job of working out a combination of diet, exercise and freedom from stress which will compensate for any genetic characteristics to prevent the reoccurrence of diabetes.

People and their guts are intrinsically different so it is not possible to recommend an off the shelf diet but undoubtedly a diet low in sugars and fast acting high glycaemic carbohydrates is required. In the relatively short first phase we simply needed to keep the fuel input levels down and we did not have to worry about ensuring there was enough fuel and protein to maintain the body. Now this is the priority.

Fortunately there are many diets to choose from but we have to find a diet you will be happy to keep to on an ongoing basis.

It really pays to understand why our bodies work the way they do. Anyone who studies diets cannot be impressed by the skills of the biochemist who aided by modern instrumentation can tell us what is happening inside our bodies. But we really need to understand why our bodies work the way they do - and for that we need to turn to a different science - that of evolution.

## **What evolution can teach us**

Most of us have a good idea of how evolution works - survival of the fittest or in our case survival of the fattest.

This is commonly thought of in terms of the creatures or plants ability to survive in competition with all the other living things. It is very wrong of me to ascribe some intelligence to evolution - it is a cold hard test of what will survive. Evolution works by sorting out those creatures or plants with the ability to breed - to have kids which in turn will have more kids. It is not a question of whether one fox will eat a rabbit - it is a question of whether enough rabbits escape the foxes to breed.

Many creatures do not provide any protection for their young - a frog will produce thousands of spawns and it is just a question of luck of how many survive. I assume that to a frog spawning is not much different to going to the toilet.

A salmon will undertake a life taking journey up a river to spawn but having taking a life threatening journey will typically give up and die and leave the spawn to look after themselves.

Warm blooded creatures will take good care of their young until they are able to look after themselves.

But humans are in a different class - we have intelligence which is much more than making a spear for hunting or protection - it has given us the capability of passing on information and forming complex social systems.

In most animals the parent have to live long enough to protect their young - if they don't the species disappears - that is the way evolution works. Empathy and altruism are human characteristics which make environmental scientist puzzle but are a crucial part of our survival strategies.

In our complex society there will always be someone who will look after an abandoned kid - it is the way we are wired. In practices this means we have not experienced evolutionary pressure to develop a specific defence mechanism against diabetes. In our evolutionary days if a few people died from diabetes in later life after breeding it would have no evolutionary significance. Some other member of the family or tribe would look after the kids and the species would continue without a hiccup.

We have not evolved any specific mechanisms to protect us from diabetes in later life.

But we do have some protection against diabetes from our complex inbuilt control system which in the natural state would prevent us from continuous gorging on sugars and high glycaemic carbs (even if they did exist in our evolutionary days).

## **Why do we eat too much?**

We have this fantastic control system which for thousands of years has regulated how much food we eat so we neither starve nor overeat without even thinking about it. Our ancestors didn't run around with electronic scales weighing every gram of food they were about to eat - they just ate when they felt hungry and stopped when they felt full - and it all worked perfectly without a moment's thought.

But somehow in modern times our control system seems to have broken down, we spend vast amounts of intellectual energy trying to eat just the right amount of food yet many people end up with diabetes- what's gone wrong?

The answer to that question is the real cause underlying the diabetes epidemic so that is what we need to correct - not some symptom like high blood sugar which is a result of diabetes rather than the cause.

There are two reasons and we have to look at both - let's start with our gut brain.

## **Our gut brain**

We have two brains - our guts and our cranium or head brain linked together by an Ethernet cable called the Vagus nerve. They both work together in deciding what and how much we eat.

Gut biology has received an enormous push since we found we could classify all the



species in the gut by DNA testing - so naturally this subject has been dominated by micro-biologist who spend their energies classifying the various species and sub species of bacteria, fungi and other weirdos in the gut and looking for correlations with health issues like obesity and diabetes.

Certainly not the area for computer scientist - which is a pity because that is exactly what is wrong with our guts - they are going through a logic process to decide what and how much we should be eating and they are coming up with the wrong answer - so we get fat and diabetic.

Now it is not all our guts fault - the head brain is playing naughty as well but that will come later.

We know how computer work and basically it all boils down to one line of code. The *if then else line* which is coded into each logic unit or cell.

If hungry *then* go to eat cell *else* go to drink cell.

The eat cell is just the start of a string of cells which decides what you want to eat while the drink cells leads to a string of cells which decides what you want to drink and so on.

This may seem primitive but when you have trillions of cells it makes a super computer look like an abacus.

What makes it even more difficult to decipher is that there are thousands of different types of cells - at least in a regular computer the cells are the same.

At this moment we have very limited understanding of how this control system really works, the biochemist have been able to identify a spectrum of hormones which control hunger and satiety, it seems they work in combination so if we overeat it is not simply that we have become leptin intolerant - leptin being one hormone which should tell us we are full and should stop eating.

Most of this array of hormones is produced in the gut and we have yet to fathom out how the cells in our guts communicate to decide which hormones to produce to say stop eating.

We may not know the details of how the gut brain works but we do know that it has worked well for thousands of years without any help from us. But the situation has changed - modern agriculture now uses a whole range of toxic chemicals which are designed to kill bugs - which is precisely what is in our guts - lots of bugs.

Our control system may not even be sending the correct signals to our brain to say stop eating when we are full.

We know that the guts of moderns city dwellers have a limited range of species compared to people living a traditional hunter gather life style so we can be pretty sure our guts are compromised.

We also have the vagus nerve which communicates directly between our guts and brain which again we don't really understand - but our head brain seems to be even more compromised.

## **Our head brain**

What we know to our cost is that faced with modern foods - particularly those blended from sugars and fats which are not found in nature (like ice cream and cheese cake) that our brain will override our natural signal system and we will keep on eating to our detriment.

We know that these sugary foods are addictive producing dopamine, opioids and beta-endorphins which make us feel good and just want more and more..

It seems more than likely that this combination of foods we have never experienced in nature coupled with chemical damage to our gut biome are basic causes of the current diabetes epidemic.

A useful video on food addiction is Doug Lisle the pleasure trap  
<https://www.youtube.com/watch?v=jX2btaDOBK8>

## **Our pragmatic ancestors**

The fact is we really don't fully understand these complex processes but it is verging on the certain that these are at the root cause of the chronic disease diabetic epidemic. However we live in an age where no decision can be taken until everything is proven and double checked and all debate removed.

There are many highly qualified and experienced doctors and researchers who have proved that diabetes - in the majority of case - can be reversed. This message has as yet not got out to the vast majority of overworked practising doctors who see diabetic patients virtually every day. Should we just sit back and wait?

Not so our pragmatic ancestors. If our hairy ancestor saw a tiger charging straight towards him with a gleeful grin on his face he would not enter into a debate whether there was sufficient evidence to prove that he was about to be eaten. No he would shout to his mates and they would all pick up their spears and form a little coral and the tigers grin would disappear and he would sulk away.

This human pragmatism is why humans have houses with maybe a picture of a tiger on the wall and tigers don't have houses with pictures of humans on the wall.

So at the village we take a pragmatic view that the most likely root cause of the diabetic epidemic is a combination of the damage to our gut biome and addictive foods and set about delivering solutions.

Without doubt this is far more effective in trying to develop some magic pill which will offset the damaged to our guts from toxic chemicals and addictive food - which is simply not living in the real world.

## ***Part 2 reversing diabetes - the practise***

### **Before you come to the village**

We assume that you are already on some form of diabetic medication to control your

blood sugar levels. In the village we will be aiming to reverse your diabetes and lower your blood sugar level. The combination of your existing pills and the more healthy diet and exercise could result in your blood sugar dropping too low - hypoglycaemia.

This is particularly true if you are taking pills which increase insulin production such as sulfonylureas. Our aim is exactly the opposite - to increase insulin sensitivity so you need less insulin.

Metformin pills are far safer and are less likely to lead to hypoglycaemia.

However the pills you take are between yourself and your doctor and this is an area where the village does not intrude. We therefore suggest that you discuss this with your doctor before you come and decide if you can suspend taking the pills for the duration of your stay.

You may also like to start the first phase by trying intermittent fasting simply having an eating window for eight to ten hours a day with fasting for the remainder.

Our bodies do not like shocks to the system (shocks can stimulate cortisol which makes diabetes much worse) so we recommend a gentle introduction.

## **Welcome to the village**

When you reach the village you will be fitted with a continuous blood sugar monitor that you can read at any time. You are advised to bring your pills with you and be ready to take them should you experience abnormally low blood sugar levels.

We also recommend that if possible you bring your partner or close friend with you to provide immediate support throughout your stay. If you come alone we suggest you pair up with a buddy to provide the support and help monitor your progress. We organise a welcome event where you can mix with other guests and can choose a buddy.

## **Focus on education**

It may take some six months to reverse diabetes and most people cannot afford the time to stay that long in the village so we focus on giving our clients the knowledge and training so they can manage their own reversal after they leave.

If you have diabetes then the odds are that you are genetically disposed to diabetes. This means that although diabetes can be reversed in a matter of weeks that you will need to manage your lifestyle (diet, exercise and stress) for the rest of your life. It is therefore essential that we find a solution which you are comfortable with and can manage yourself. We do not tell you what you must do but work with you to find a way that will work for you.

You will be assigned a career or coach who will be available to help you throughout your stay at the village. The career's job is not to tell you what you must do but to work with you to find a routine that you are comfortable with and can stick to long after you leave the village.

## First stage reversal

That said the first job is to get your diabetes under control by a period of eating less than you burn so you reduce your fat levels throughout your body and particularly your pancreas.

We therefore recommend a period of three days of reduced food intake. You can go for a full fast if you wish however it is important to maintain the body repairing foods such as proteins, minerals and vitamins. We therefore suggest that you eat a largely vegetarian diet with some broth during this early phase.

It is important to have plenty to drink throughout your stay and green tea helps reduce blood sugars so tea making facilities are available day and night and you should drink as much as you like.

## Intermittent fasting

We strongly recommend you adopt a system of intermittent fasting. It is common to adopt a 2:5 system with 2 days of extreme fasting and 5 days of normal eating but we prefer a regular daily system such as having an eating window of eight hours and a fasting period of sixteen hours the 8:16 system. This is the routine we adopt in the village but when you get back home you may prefer a 10:14 system which is easy to adhere to and may be perfectly adequate for maintain you blood sugars.

If your blood sugars go up you can easily go back to a more rigorous fasting such as the 8:16 or even skip one or more meals. There is no need to make life miserable and it is fine to go out for a social meal and have a really good time then compensate by restricting your diet for a few days afterwards.

The villagers prepare the food for you and serve this buffet style. They aim to prepare a range of foods so you can select what foods you like and can adopt as your routine diet.

We do not regulate the amount of food you take but we do like you to record how much food you take, the easiest way is simply to serve the food you want from the buffet then when you return to your table take a photo for your records.

You can then check this against the continuous blood sugar monitoring to see what foods you can manage without blood sugar spikes. If you see sugar spikes you need to take less or different foods at the next meal.

While the spikes give important information you should also look at how quickly your blood sugar levels drop after a spike - a rapid drop to a low base level indicates that your insulin is working and you are not so insulin sensitive.

If the level only drop slowly and the base level is high this indicates that your insulin sensitivity is not good and you need to get rid of a bit more fat from you pancreas.

This is not a problem - it is simply a routine of making continuous corrections - a process we hope you learn in your stay in the village and will continue to use long after you leave.

This way you can learn what foods suit you best. Your partner or buddy and coach can inspect the graphs with you to help you decide what it right for you.

While you choose your own diet there are some foods we recommend and others should be avoided.

Sugars and fast acting high glycaemic foods (typically the processed foods) are definitely off the list and are simply not available in the village. (Sorry about that but these are the cause of your diabetes). This may not sound so inviting but the good news is that dark chocolate is on the list of good foods.

Sugar is probably the major cause of diabetes but is also highly addictive - just like a drug. However the addiction disappears after a few weeks away from sugar.

Rice is a carbohydrate but we offer minimally processed rice which we suggest you eat in only limited amounts.

Vegetables are definitely on the list and we aim to grow a wide variety that are both healthy and tasty - it does not matter how healthy they are if you don't eat them.

### **The ketone diet**

The ketone diet focusing on fats and almost no carbs is becoming very popular. We recognise this and will work with you if you want to adopt a ketone diet. We also accept that to reverse diabetes you need to have a period when you eat less than you burn which means a certain level of hunger and going into ketosis.

On that basis we accept that a ketone diet may be a useful approach in the first stage of reversing diabetes when the aim is to burn off excess fat which is clogging the pancreas so if that is the way you want to go we will work with you.

As it appears to be a difficult diet to stick to we do have some concerns that this is a good approach for stage 2 when we are essentially trying to stop the sugar and fat levels creep up again.

We also note that for thousands of years and over all parts of the globe some people have eaten a wide variety of diets ranging from high fat (e.g. the Eskimos) to high carb (Kitavans) without our current diabetic epidemic. Even today there are millions of people eating a diet that virtually all dieticians would describe as totally awful but they still do not get diabetes.

The only explanation that currently fits the facts is those lucky people have a control system is able to cope with these bad diets which indicates we should not get to hung up about any particular diet but should look at how our control system manages these diets.

We still have a lot to learn about our control system but we do know that it is intimately tied up with our gut biology which is under attack from toxic chemicals, particularly those used in modern agriculture.

### **Train your body like you would a pet**

Your body is not simply a lump of meat - it has an intelligence developed over thousands of years to protect you. It stores fat for you to provide fuel when food is not available and is most reluctant to give up this food source if there it feels threatened.

So we think that the necessary changes to your diet should be done slowly so your body does not feel threatened. Every day you need to go through the stage of feeling some hunger - which means that your body is switching from eating carbs to eating fat. But this not should be too severe and it seems beneficial to feel fully satisfied at least once a day - preferably after breakfast or lunch.

If your body feels threatened it may go into panic mode and start producing cortisol - the stress hormone - which will send you blood sugar sky high. You will see this on you continuous blood sugar monitor and it tells you that you are being too extreme too quick.

## **Restoring your gut biome**

We have developed a system of growing plants - called the Gbiota bed - free of chemicals in a biologically active soil which encourages beneficial organisms. This system also ensures you get the trace minerals which are essential for human health.

## **Activities**

There is more to diabetes than simply diet. Continuous monitoring of blood sugar levels have shown the benefits of both exercise in reducing blood sugar and how stress can raise blood sugar.

A problem with diabetes is that high blood sugar leads to insulin which in turn leads to the storage of fat which in turn leads to blocking of the pancreas which leads to even higher blood sugar levels - it is a viscous circle so all ways of reducing insulin and blood sugar levels must be pursued.

We plan our day around the 8:16 intermittent fasting cycle. The last meal is generally between 4 to 5 pm with no food after that. In the evening we organise music, exercise and dancing which uses up some energy but as guests have eaten they do not feel hungry.

In the morning breakfast is not until 9 by which time people if they were just sitting around would feel hungry. Feeling some hunger is unfortunately part of reversing diabetes.

We therefore organise activities such as walking in the mountain tracks followed by organised music, exercise and dancing. Our bodies will always burn of the immediately available carbs before it starts to burn the less accessible fats which need to be burned up to restore the pancreas.

This morning exercise - when guest have already burned of the readily available carbs is an important part of reversing diabetes.

It is simple - if for some time you don't swap from burning carbs to burning fat you won't reverse your diabetes. The hunger period only last for a short while as your body changes from carbs eating to fat eating when the switch is made you stop feeling hungry.

The organised music and dancing takes guests minds of any potential hunger they may feel if they were just sitting around waiting for breakfast and is a critical part of reversing diabetes. Having a partner or buddy and being part of a group going through the same process really helps.

After a few days your body gets used to the routine and you won't even notice the hunger period.

### **Monitoring progress**

It is important to measure your weight and waste measurement daily. If these are not going down then you just have to be a bit more aggressive with the diet and exercise.

Your coach will work on you to tune up your diet so you can do it yourself when you leave. We are not aiming to be task masters but to teach you how to change your lifestyle so you carry on after you leave.

### **Gardening**

The village aims to grow most of the food itself using Gbiota beds and organic growing principles. We invite our guest to join us in the garden - it is a valuable source of exercise but also we want you to learn how to grow some food when you leave.

The Wicking Bed system enables people living in high rise apartments to grow some of their food themselves. Obviously it is not practical to grow all your own food unless you have access to a reasonable land area but you can certainly grow herbs and spices but also sprouts and baby greens. These mature in a few days or weeks and typically contain higher levels of nutrients and minerals than mature plants.

It is a sad fact that modern factory farm food is low in essential trace minerals, hopefully you will learn how to get these minerals into your diet from your stay in the village.

### **Wild food treks**

Many of the older villagers have a wide knowledge of the wild plants that grow on the nearby mountains. These plants often have highly beneficial medicinal properties but are also growing in soil that is still pristine and has not been damaged by extensive farming.

You are invited to join these older villages on their treks - it is healthy, good exercise and preserving a knowledge that unfortunately is slowly being lost.

### **Cooking and food preparation**

Diets are useless and less you can stick to them. We try hard to make a low carb diet as tasty and satisfying as possible and would like you to join in the food preparation so you can learn to cook healthy food continue to enjoy tasty food after you leave the village.

### **Stress and relaxation**

It has been known for a long time that stress leads to the release of cortisol which immediately raises blood sugar levels. What has surprised me is just how powerful this is - often leading to far higher sugar spikes than diet.

A short period of stress leading to higher blood sugar levels may not - in itself - be so bad but it can start that exponential process of more insulin leading to yet more insulin - which is the feature of diabetes.

Some people have difficulty relating to relaxation techniques but we aim to offer meditation, yoga and tai chi which - particularly when done as part of a group - can be particularly soothing which apart from the psychological benefits can drop blood sugar levels.

Again this varies from person to person but continuous blood sugar monitoring can show whether you are one of the people who can benefit.

### **Saying goodbye**

We know that a short stay at our village will not be long enough to fully reverse your diabetes but we hope that by the time you leave you have the skills to continue with the process of reversing your diabetes and equally important maintain your health so you do not slip back into diabetes.

We are here to help and you can always come back - contact us for a chat - or even order some of our toxin free food.