# REVERSE TYPE 2 DIABETES

AND REDUCE OR ELIMINATE YOUR MEDICATIONS

## THROUGH APPLYING POWERFUL TOOLS AND MANAGING YOUR MIND

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#### AFUTUREBYDESIGN HEALTH & WEIGHT LOSS COACHING

# ls Type 2 Diabetes Reversible?

#### In a word: Yes.

So why is it that the American Diabetes Association and your doctor might have told you that Type 2 Diabetes is a "chronic reversible disease?" That it is incurable and something you will have to live with for the rest of your life?

This is explained by considering that most of the research around treatment for Type 2 Diabetes focuses on medications and even surgeries to combat the disease process.

#### But I have a simple, logical approach: Type 2 Diabetes is caused by lifestyle. So guess what the solution is? It's lifestyle.

But what about genetics? Yes, certainly some are genetically predisposed to developing Type 2 Diabetes. And some of us are more predisposed to developing an alcohol use disorder, but what if we never drink alcohol? What I am getting at here is that food choices and eating patterns are what are flipping the switches on those genes that ultimately produce high blood sugars, and this is entirely modifiable or within a person's control. So wounldn't it be super valuable to know what it is that is flipping those switches? Wouldn't *that* seem to be most critical to understand, rather than which medication to take?

### I believe it is more important to find and address the CAUSE rather than try to cover it up by treating the SYMPTOMS.

## What is Possible

## My mission is to inspire hope in you and show you how you can take back control of this situation.

Imagine we are in the hull of a sinking boat. Water is leaking into the boat and filling the bottom of the boat. It's only a matter of time before we are underwater and nothing can save us. Maybe someone has found a way to bail water out of an opening to buy us some time, but we aren't keeping up with the rate water is flooding the boat. Now imagine there is actually a door that we can escape through, but no one is aware of it. Wouldn't it be ideal to just climb out of the hold through that door?

What I am showing you is the DOOR OUT. The door is the escape, the solution to your problem. Taking medicine is like bailing water. It can help temporarily but is not a longterm strategy.

#### There are actually a number of diseases that may be reversed along with Type 2 Diabetes through similar strategies:

Obesity

- High Blood Pressure
- || High Triglycerides
- **Polycystic Ovarian Syndrome (PCOS)**
- □ Gastroesophageal Reflux Disease (GERD)
- □ Non-alcoholic Fatty Liver Disease (NAFLD)
- 🛛 Gout

# The Truth About the Cause

Chances are that you have been told any number of explanations for why you developed Type 2 Diabetes that are false or only part of the truth.

You may have been told it's because you are obese, or that it runs in your family, or because your pancreas quit on you. I want you to understand the cause of your disease because it will give you the basis from which to form a plan. In this section I will take you through many of the wrong teachings that are sabotaging your ability to develop effective strategies to return your body to normal blood glucose regulation.

#### I. Obesity does NOT cause Type 2 Diabetes!

First, I need to establish that calories are irrelevant. Stop counting them. Never again will it be necessary to count calories.

The calories in-calories out explanation for a human being's body weight has been so ingrained, so widely accepted, it has become part of our belief system along with gravity and human rights. Well, I have news for you. It is useless.



Despite the fact that the "EAT LESS, MOVE MORE" wisdom has failed to produce durable results for most anyone hasn't seemed to inspire much skepticism from the authorities who determine our national dietary guidelines, which repeatedly ignore the science that shows the failure rate of conventional advice to eat fewer calories to achieve a normal body weight is **99.4%**.

#### So if calories aren't the key to weight loss, what is?

Would it surprise you to learn that obesity and Type 2 Diabetes are both caused by the same thing? Some people believe that obesity causes Type 2 Diabetes. Even some doctors might subscribe to this idea. Well, it's wrong.

### Both diabetes and obesity are caused by too much insulin, or hyperinsulinemia. This is the presence of elevated levels of insulin in your body.

Because both diabetes and obesity share similar origins, the term **Diabesity** has been coined.

# II. Diabesity is a hormonal disease. And the main player is INSULIN.



Insulin is a hormone produced by the pancreas that signals the body to: 1. Take up glucose, or blood sugar, to burn for fuel AND 2. Stop burning fat and start storing it.

## So what is causing insulin to be released?

Eating foods that raise your blood sugar, which are usually carbohydrates. The more concentrated the food is, the quicker and the higher the blood sugar will rise. **Examples of concentrated carbs are sugar and flour.** And the higher the blood sugar rises, the more insulin will be required to keep it in the normal range.

# Why current dietary advice is making the problem worse, not better.

Now, think about how the average American eats. We are told to eat breakfast because "it's the most important meal of the day!" We are told to eat every 2-3 hours to "Keep our metabolism going!" We're grabbing muffins, bagels, oatmeal and cereal for breakfast. Drinking sweetened coffees and beverages all day long. We have been informed that whole grains are healthy and that corn is a vegetable. We've been implored to eat more fruit! And the LOW FAT dogma, which is a byproduct of the cut-your-calories crusade, has been likely **the most damaging advice for population health in all of history** because it has lead to swapping fat for sugar in a thousand sneaky ways.

### Now add to that our culture around food.

Food for every occasion. We show love with food. New neighbor in the hood? Bring them food. Someone's leaving your department at work? Let's have a potluck! It's a hot day. We all scream for ice cream! It's a cold day. Hot chocolate with marshmallows will warm us up!

Graduations, birthdays, holidays, Wednesdays.

So here we are, eating and drinking in a pattern that is constantly asking our pancreas to produce insulin to keep up. And then it can't.





# The defining feature of prediabetes and diabetes is insulin resistance.

Insulin's main job is to take glucose out of the blood stream and push it into your cells (muscle, brain, etc) to burn as energy OR to turn it into fat and push it into fat cells. It also drives storage of glucose in your liver and muscle cells as **GLYCOGEN**, a long chain of glucose. This is a readily available energy source that can quickly be broken down and released into your blood stream when needed.

When you *over*-consume carbohydrates, your liver is working *over*time to process them for energy now as well as store as much as it can for later. It's making glucose for now, glycogen for tonight when you are sleeping, and fat for later when there is a famine, right?

#### Insulin is driving all of these processes.

What happens when you over-consume is that you literally RUN OUT of storage space. Liver cells are jam packed. The liver is also packaging up glucose into fat molecules (triglycerides) and storing these. Storing them in places it should not be stored, such as within the liver itself as well as other organs, like the pancreas. I like to use the example of an **overflowing bathtub** to explain what is happening in the liver, the **first** place in the body that becomes insulin resistant.



When it is full of storage (glycogen and fat) and receiving lots of carbohydrates to process, it is like a full bathtub. The drain becomes what you are burning for energy. The faucet is what you are consuming in your diet.

With Type 2 Diabetes, the drain is not able to keep up with the faucet that is on FULL BLAST, and the bathtub (your liver) is FULL.

Wouldn't it make sense to turn OFF the faucet and let the bathtub drain?

## Insulin resistance is kind of like blowing up a full balloon.

If a balloon (your liver) is at max capacity, it gets harder to blow more air in. The balloon is **resistant** to more air.



The body's response to this problem is to make MORE insulin from your pancreas.

More insulin SHOVES more glucose into the already-full liver cells.

# Meanwhile, your pancreas is working overtime to keep up with the demand.

When your pancreas is tasked to keep insulin levels high to control blood sugars, your body adapts to this abnormal state also by becoming resistant to insulin. This is **aside** from what is happening in the overfull liver.

I like to use the example of alcohol tolerance to explain what is happening in the rest of your body. When a person drinks alcohol often, their body gets used to it, and it will require more and more alcohol to produce the same effect over time.

When insulin is always high, your body gets used to it and will adapt by becoming resistant. To compensate, your pancreas has to make more to overcome the resistance, which actually drives more resistance.

See how this becomes a vicious cycle? More insulin drives more resistance which drives more insulin. All the while, your storing fat by the way. No bueno.

## **The Tipping Point**

The process of developing Type 2 Diabetes for adults typically takes about **10 years**.

The mechanisms I have taught so far have been developing for quite awhile before sugars become uncontrolled and diabetes is discovered.

#### So what flipped the switch?

There are a few ideas, but it is still unclear. The explanation that makes the most sense to me is the accumulation of fat in the pancreas, or **fatty pancreas**.

We know that the pancreas in Type 2 diabetics becomes fatty, and that this interferes with the function of the pancreas. We also see reversibility of impaired function of the pancreas with dietary interventions that reverse insulin resistance.

This is good news. When you empty out the fat stores in the liver AND the pancreas, often, normal blood regulation is RESTORED.

### **BREAK THE CYCLE**

The key to reversing diabetes is the same as losing weight. You have to allow your insulin levels to fall low enough and for long enough to allow your body to become sensitive to insulin again. And, when insulin levels are LOW, you unlock the door to all that stored energy (fat and glycogen) so that you can burn it for fuel.

#### And guess what drives that?

#### Is it your medication? NO!

It's your eating pattern and food choices.

Which is **awesome news** because these are completely in your control. Only you can decide when and what and how much you are going to eat.



#### III. What if I know what to eat, but I just keep eating the wrong food because I can't stop?

This is where I've got your back my friend.

Behavior change is the hardest part for most people, whether they're trying to quit smoking or trying to stop yelling at their kids. It all comes down to managing your mind. Many of us know what we should do, and even want to do, but we just can't get ourselves to do it consistently. the solution to this is uncovering how the thoughts in your brain are driving the actions you are taking or not taking.

When you gain awareness of how your brain is getting you the result in your life that you do not like, you have the opportunity to change that.

# This is where life coaching literally becomes your lifeline.

Your coach will guide you to a place where you can create the result in your life that you are dreaming of.



## Let's Apply This 1. WHAT ARE YOUR GOALS FOR YOUR HEALTH?

2. WRITE DOWN EATING HABITS THAT YOU HAVE THAT ARE DRIVING INSULIN RELEASE AND/OR RESISTANCE?

### Let's Apply This 3. DO YOU BELIEVE THAT YOUR DISEASE IS REVERSIBLE? WHY OR WHY NOT?

#### 4. HOW WOULD YOUR FUTURE BE DIFFERENT IF YOU DID REVERSE YOUR DISEASE?