



# Diabetes Reversal Strategy

## Diabetes is a disease of sustained energy overload

Energy we get from food. Energy we store as fat.

Our body's ability to store fat in healthy ways gets overwhelmed and we begin to store fat in places it does not belong.

Unhealthy abdominal or belly fat grows and throughout the body fat enters cells and disrupts their function.

This ectopic fat especially affects our muscle and liver cells reducing their ability to respond properly to insulin, our energy storage and building hormone.

To compensate, our pancreas releases more insulin.

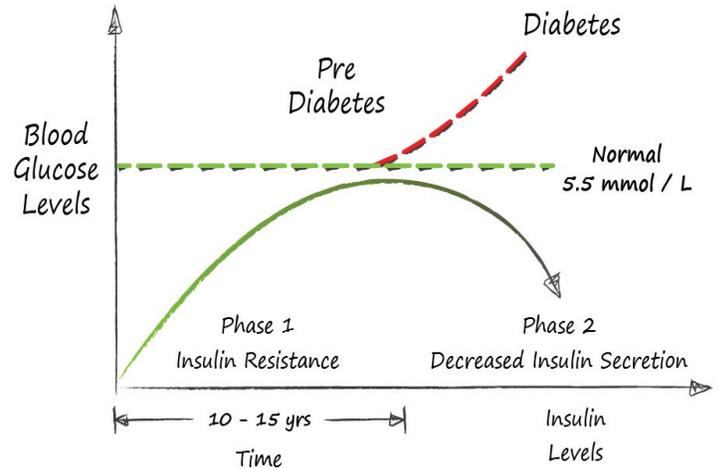
More insulin leads to more energy storage and high levels of insulin directly inhibit fat burning, only making the problem worse.

This process of insulin resistance sets up a vicious cycle where energy once stored cannot be used, and the energy overload is perpetuated through hunger and increased appetite.

Eventually, even the pancreas is affected by ectopic fat, decreasing its ability to synthesize insulin.

High insulin levels plateau and then begin to fall, and we lose our ability to maintain normal blood glucose.

When glucose levels are mildly abnormal (pre-diabetic), over half of the beta cells that produce insulin are dysfunctional. By the time diabetes is diagnosed over 80% no longer work properly.



This metabolic vicious cycle of energy overload leading to insulin resistance and eventually abnormal blood sugars on average takes 10 to 15 years to unfold.

Traditionally diabetes has been thought to be a chronic progressive disease that can be managed, slowed perhaps, but not reversed.

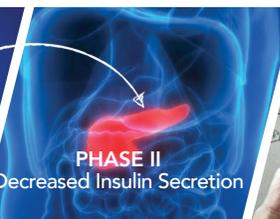
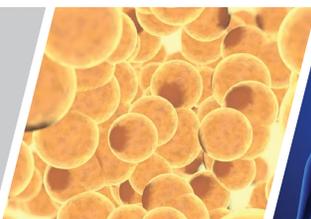
An emerging body of evidence suggests otherwise.

The cycle can be broken by reversing the energy overload, getting fat out of the liver and out of the pancreas.

Understanding insulin resistance allows you to align your behaviours to maximize your ability to sustainably reverse diabetes or prevent it in the first place.

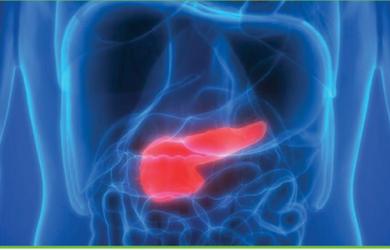
The 4+2 Diabetes Reversal Strategy leverages insights from the work of Dr. Roy Taylor and others who have demonstrated that the cycle can be broken.

The application of these principles can break the metabolic vicious cycle of insulin resistance.



# 4 STEPS TO REVERSE INSULIN RESISTANCE

1



## Eat to Lower Insulin

The simplest way to take the load off the pancreas is to decrease the fast carbs that trigger insulin. Choosing slow carbs with lots of fibre will lower insulin release and is the first step to breaking the metabolic vicious cycle of insulin resistance.

**Eat Real Food | Focus on Fibre | Think Sugar Equivalents**

## Use Your Muscles

Increased exercise helps to reverse insulin resistance, the process underlying Type II Diabetes, by improving the uptake of glucose and improving fat burning—even in the absence of weight loss. By using your muscles you will restore a vital energy buffer—the “glucose sink”.

**150 Minutes of Exercise | Portfolio of Exercise | Move Every Hour**



2

3



## Be Kind to the Liver

Fat in the liver is the biggest driver of insulin resistance and high insulin levels. As you seek to reverse insulin resistance, you need to be sure that you are not compounding the effect of energy overload by directly adding fat to the liver. Start by decreasing or eliminating alcohol and fructose. Then be sure to maintain gut health by eating whole foods with adequate fibre.

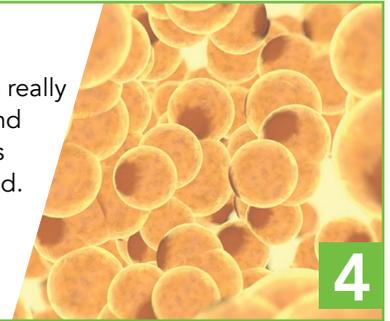
**Stop Sugar | Improve Gut Health | Decrease Alcohol**

## Restore Fat Burning

The first three steps of the 4+2 Diabetes Reversal Strategy set the stage for fat burning. To really reverse insulin resistance and Type II Diabetes, you have to get rid of the fat in your liver and pancreas—and to do this, you need to lose weight. Our preferred method for weight loss is time restricted eating: limiting the number of hours we eat and extending the fasting period.

**12 Hours Fasting\* | Extend to 14 or 16 Hours | Aerobic Exercise in Fasted State**

\* If you are on medications seek medical guidance first.



4

# +2



## Decrease Stress

Stress can worsen insulin resistance and impede the reversal of diabetes if you are unable to recover. High levels of cortisol, the stress hormone, counteract many of insulin's actions while also increasing appetite. Improving stress tolerance helps by decreasing our stress reactions and improving your recovery from stress.

**Nighttime Relaxation | Meditation | Hobbies**

## Improve Sleep

Lack of sleep increases cortisol and appetite. Getting enough sleep is key to reversing insulin resistance and Type II Diabetes—start by setting yourself up for a good night's sleep, give yourself an 8 hour sleep window and develop a sleep ritual to improve your sleep. If there are any signs or symptoms of obstructive sleep apnea—get a sleep assessment and investigate.

**8 Hour Sleep Window | Investigate Warning Signs | Sleep Ritual**



Learn More About Our 4+2 Diabetes Reversal Program