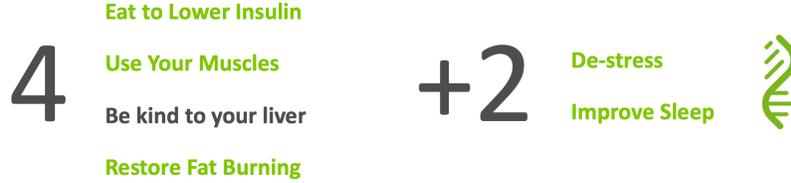




# Diabetes Reversal Strategy



## Be Kind to Your Liver

**Diabetes is a disease of energy overload.** Energy we get from food, when eaten in excess, is stored as fat. Our ability to store fat in a healthy manner - mainly under the skin - is limited. When our healthy fat storage depots get full, fat begins to be stored elsewhere - most notably in our abdomen as visceral fat. As we begin to store fat in the abdomen, we also start to have fat accumulate in liver, muscle and pancreas cells, and this fat affects the action of insulin in those cells resulting in insulin resistance.



Compounding this, any carbohydrate that we eat in excess of what our muscles and liver can store as glycogen, gets converted to fat. The liver exports this as triglyceride, but some of this fat also backs up in the liver.

When we are not eating, our livers are responsible for maintaining blood glucose by either breaking down glycogen (stored glucose) or creating glucose from protein, lactate or glycerol (gluconeogenesis). Both of these processes are regulated by the pancreas through the release of glucagon to increase the production of glucose or insulin to slow it down. When fat builds up in the liver, the liver becomes less sensitive to insulin and the pancreas has to increase insulin levels.

### Fat in the liver is the biggest driver of insulin resistance and high insulin levels.

When insulin levels are high, we lose our ability to burn fat, resulting in a situation where we can store fat but not lose it. Further fat storage increases fat build up in the liver, worsening the insulin resistance - resulting in a metabolic vicious cycle.

Anything that increases fat in the liver, will throw fuel on the fire.  
 There are three major culprits that we need to be concerned about:

1. **Alcohol** - in energy overload will directly increase liver fat.
2. **Fructose** - the other half of sugar (sucrose is 50% glucose and 50% fructose). Fructose in high concentrations gets turned into fat in the liver.
3. **Poor gut health** - leakage of bacteria from the gut into the bloodstream, directly causes inflammation and fat build up in the liver.

**As we seek to reverse insulin resistance, we need to be sure that we are not compounding the effect of energy overload by directly adding fat to the liver, begin by decreasing or eliminating alcohol and fructose. Then be sure to maintain gut health by eating whole foods with adequate fibre. Finally address any gut symptoms with a thorough nutrition assessment.**

101 BEHAVIOURS

Stop Sugar  
 Decrease Alcohol

NEXT STEPS

Improve Gut Health

## Take Control of Your Health

For more information  
about our 1:1 support

