

How to Reverse Type 2 Diabetes.

Yes, it is Possible!

Before you begin on your quest to score this important Health Goal, I suggest you take a timeout and assess the current state of play of your Team and Players.

Every Manager will face different obstacles and barriers they need to overcome and have to deal with different game situations. The dietary tactics outlined in this Playbook, may not necessarily be the best for your team.

For example, some of you may already be on diabetic medications which lower the blood sugars and a change in diet could potentially cause your blood sugars to drop too low and cause a dangerous hypoglycaemic coma.

Others may be on tablets to lower their blood pressure and losing weight is likely to reduce their blood pressure and potentially cause dizziness.

It is therefore important you seek medical advice before embarking on this journey.

If however, you are diet controlled or just on Metformin which does not lower your blood sugar to any great degree then prepare to:

Kick-Off

In simple terms type 2 diabetes is the result of too much sugar going into the body over many years. Eventually the fat cells fill up with the white stuff until they can't take anymore and it starts overflowing into the blood stream, causing damage to the organs of the body (kidneys, eyes, heart, brain etc) - a bad situation.

If you have read my first football tragedy, you will know I liken this to the tragic events at Hillsborough, when overcrowding in the stadium caused the deaths of 96 fans by crushing and suffocation, and other fans were forced to spill out onto the pitch.

The solution Football found was to prevent overcrowding, by carefully controlling how many fans enter the ground and ensuring their exit is as easy as possible.

The solution for type 2 diabetes then is obvious:

If we have too much sugar in the body, then we need to get rid of it.

There are really only two steps needed to get rid of this excess sugar.

1. **Don't put any more sugar (carbs) in. (Controlled Entrance)**

And

2. **Burn it off. (Exit)**

That's it.

That's all you need to do!

Step 1 – Don't put sugar in.

The first step is to eliminate most of the sugar and refined carbs/starches from your diet.

i.e. Reduce the Carbs!

Remember - any Carbs in the diet are broken down in the body to form sugar (glucose).

Also, the body is very clever - if you eat too much protein - this can be converted to sugar too.

Therefore, the best strategy to adopt, at least in the initial stages, is to eat very little or no refined carbs, a moderate amount of protein and focus on eating lots of vegetables and natural healthy fats which your body can use as an alternative energy source.

Dietary fat and cholesterol have had a bad press over the years, thought to be the cause of heart disease and obesity. The evidence is now pointing towards highly processed carbs and trans fats in processed foods as the main culprits, so don't be afraid to increase the natural fats in your diet. (See: Football Tragedy 2)

Natural fats, found in avocado, nuts and olive oil are known to have healthy beneficial effects on both heart disease and diabetes.

If you stick to eating whole, natural, unprocessed foods you are on the right track.

A Low Carb Diet Can Help With Diabetes.

How?

Ans: By putting less sugar in your body.

A low-carb diet restricts carbohydrates, such as those found in sugary foods, pasta, cereals and bread. It is higher in, protein, fat and healthy vegetables.

A Low Carb Diet Meal Plan.

What foods you should eat depends on a few things, including how healthy you are, how much you exercise and how much weight/fat you have to lose.

These are general guidelines, everyone has different metabolisms and different needs.

The Key is to find out what works for you.

The Basics.

Eat: Meat, fish, eggs, vegetables, low sugar fruit, nuts, seeds, high-fat dairy, healthy oils (e.g. Olive oil, coconut oil).

Don't Eat: Sugar, wheat, trans fats, low-fat products and highly processed foods.

Foods to Avoid.

- Sugar: Soft drinks, fruit juices, sweets/candy, ice cream and many others.
- Gluten Grains: Wheat, barley and rye. Includes breads and pastas.
- Trans Fats: "Hydrogenated" or "partially hydrogenated" oils.
- High Omega-6 and Vegetable Oils: e.g. sunflower, corn and canola oils.
- Artificial Sweeteners: Aspartame, Saccharin, consider Stevia instead.
- "Diet" and "Low-Fat" Products: Many dairy products, cereals, crackers, etc.
- Highly Processed Foods - don't eat it.

Read ingredient lists, to see how many carbs are in the food.

Low Carb Food List - Foods to Eat.

You should base your diet on real, unprocessed, low carb foods.

- Meat: Beef, lamb, pork, chicken and others.
- Fish: Salmon, trout, haddock and many others. Wild-caught fish is best.
- Eggs: Omega-3 enriched or free range eggs are best.
- Vegetables: Spinach, broccoli, cauliflower, kale, cabbage etc.
- Fruits: Apples, oranges, blueberries, strawberries.
- Nuts and Seeds: Almonds, walnuts, sunflower seeds, etc.
- High-Fat Dairy: Cheese, butter, double cream, yogurt.
- Fats and Oils: Coconut oil, butter, olive oil and cod liver oil.

If you're healthy, active and don't need to lose weight then you can eat more carbs, though I suspect you won't be diabetic either.

If you are overweight especially around the belly, then reducing carbs is the first thing you should try.

Occasionally Eat.

- Root Veg: Sweet potatoes, parsnips.
- Non-gluten grains: Rice, oats, quinoa and many others.
- Legumes: Lentils, black beans, peas, peanuts.
- Dark Chocolate: with 80% cocoa or higher.

Dark chocolate is high in antioxidants and may provide health benefits if you eat it in moderation.

Drink.

- Coffee
- Tea - black, green, herbal.
- Water, inc sparkling water.

Herb's & Spices.

Bilberry

Action: Increases intracellular antioxidants improving circulation and protective against retinal damage.

Dose: 80-160mg 3 times a day

Bitter Melon

Action: Lowers Blood Sugar

Dose: 57g daily

Cinnamon

Action: Lowers Blood Sugar

Fenugreek

Action: Slows down the digestion and absorption of carbs

Ginger

Action: Increases uptake of glucose into muscle cells

Turmeric (Curcumin)

Action: Reduces Blood Sugar. Reduces Insulin Resistance.

Vinegar

Action: Reduces Fasting Blood Sugar

Dose: 1-3 teaspoons at night or before meals (avoid balsamic vinegar - too much sugar)

NB Rinse mouth after to protect enamel of teeth.

A Sample Low-Carb Menu For One Week.

This is a sample menu for one week on a low carb diet plan.

It provides less than 50 grams of total carbs per day, you should start to get more of your energy from fat and then your body will shift to burning more belly fat.

Monday

- **Breakfast:** Full fat yogurt with blueberries and a handful of almonds.
- **Lunch:** Omelette with various vegetables, fried in butter or coconut oil.
- **Dinner:** Chicken served with vegetables and salsa sauce.

Tuesday

- **Breakfast:** Bacon and eggs.
- **Lunch:** Tuna salad with olive oil balsamic vinegar dressing
- **Dinner:** Salmon with butter and vegetables.

Wednesday

- **Breakfast:** Full fat yoghurt
- **Lunch:** Prawn salad with some olive oil.
- **Dinner:** Grilled chicken with vegetables sautéed in butter.

Thursday

- **Breakfast:** Omelette with various vegetables, fried in butter or coconut oil.
- **Lunch:** Avocado with nuts.
- **Dinner:** Steak and veg

Friday

- **Breakfast:** Bacon and Eggs.
- **Lunch:** Chicken salad with some olive oil.
- **Dinner:** Pork chops with vegetables.

Saturday

- **Breakfast:** Omelette with various veggies.
- **Lunch:** Full fat yoghurt and a handful of walnuts.
- **Dinner:** Meatballs with vegetables.

Sunday

- **Breakfast:** Full fat yoghurt or cottage cheese.
- **Lunch:** Boiled eggs
- **Dinner:** Roast Dinner with veg no potatoes..

As you can see, this diet involves eating plenty of vegetables and little fruit to start with, to avoid too much fructose (the sugar in fruit).

Some Healthy, Low-Carb Snacks.

There is no health reason to eat more than 3 meals per day or snack, but if you get hungry between meals then here are some healthy, low-carb snacks that can fill you up:

- Full-fat Yogurt
- A Hard-Boiled Egg
- Raw Carrots
- A Handful of Nuts
- Some Cheese and Meat (not processed).

A Simple Low-Carb Shopping List.

Try to choose the least processed option that still fits into your price range.

- Meat (Beef, lamb, pork, chicken, bacon)
- Fish (Oily fish like sardines, salmon and mackerel is best)
- Eggs
- Butter
- Coconut Oil
- Lard
- Olive Oil
- Cheese inc cottage cheese.
- Double Cream
- Sour Cream
- Yogurt (full-fat, unsweetened)
- Blueberries
- Nuts
- Olives
- Fresh vegetables: greens, peppers, onions, etc.
- Frozen vegetables: broccoli, carrots, various mixes.

Try to clear out all the high carb foods from the house to reduce temptation - ice cream, biscuits, cakes, chocolate bars, cereal bars, fizzy drinks, juices, breads, breakfast cereals (inc weetabix, bran flakes) you should get enough fibre from the veg and nuts.

Step 2 – Burn it off.

The usual advice given has been to Eat Less and Move More - or put another way -

Diet and Exercise.

There is however a third way, which in my opinion is the easiest and fastest way to get your body to burn fat for energy and ditch the belly fat and reverse diabetes.

And that is:

Therapeutic or Intermittent Fasting.

Therapeutic or Intermittent Fasting helps type 2 Diabetes.

How?

Ans: By burning off the stored fat/sugar, with the added bonus of reducing insulin production and resistance - a key factor in the development of type 2 Diabetes.

Your body needs energy all day long, when you are fasting (e.g. when sleeping) it is forced to use the energy stored in your fat cells. As soon as you start eating again insulin is increased and the food gets used for energy instead and any leftovers gets stored as fat.

Remember:

Fasting = Burning - Low Insulin and Sugar. GOOD for Diabetes.

Eating = Storing - High Insulin and Sugar. BAD for Diabetes.

By extending the fasting period you can burn off the stored sugar/fat.

This is simply the reverse of what caused the Diabetes (type 2) in the first place!

The easiest way to extend the fast and prolong the burning period is to delay breakfast.

NB. If you are taking prescription medications, you should seek medical advice first.

Please take a look at my blog for my experience of and views on Intermittent Fasting.

The bottom line is this:

When you don't eat, you are burning not storing and sugars will come down, along with levels of insulin. GOOD.

When you don't eat, you will lose weight, esp the belly fat weight. GOOD.

1 At the start don't have any fruit or anything white! (Rice, potatoes, pasta or bread, no bread whatsoever, even gluten free bread!

2. Add lots of good fat and subtract carbs from your diet to become a fat burner rather than a sugar burner for energy.

Fat does not increase your insulin levels and that is what this whole process is about.

It enables you to lower Insulin levels - your storage hormone - So you can then burn the fat stored in your belly, liver and pancreas.

3. Try Fasting to accelerate the process.

Top Tips!

Utilise resources online:

www.diabetes.co.uk - can sign up to their low carb plan for free.

www.dietdoctor.com - good resource for low carb and intermittent fasting.

www.delish.com - loads of low carb recipes.

Dr Jason Fung YouTube video on therapeutic fasting (36mins) good introductory video on reversing diabetes.

Try low carb alternatives e.g. Cauliflower Rice, Courgetti (courgette spaghetti) etc

Drink more fluids - water, herbal teas, green tea.

Remember to replace the carbs with healthy fats - e.g. Try adding butter and coconut oil to coffee. (whisking is required).

Don't be too hard on yourself - no such thing as the perfect diet - besides nobody is perfect!

Other dietary tactics can be used e.g. Dr Michael Greger vegetarian diet or Prof Taylor very low cal diet.

Remember to take a holistic approach and not just focus on diet alone - there are other factors like; sleep, stress and exercise which need to be addressed.

Remember your diabetes took years to develop and may take a while to reverse, and you've got to be in the right gear first!

Play Well, get your teams in shape and Take Care!

Dr Rob.