How you might get your Type 2 Diabetes into remission

Join thousands of others who are becoming part of a quiet revolution



What is Remission of Diabetes?

Although it's not possible to cure your diabetes, thousands of people in the UK are now achieving remission from their type 2 diabetes.

Diabetes remission in people with Type 2 diabetes means that your blood sugar levels* are healthy without needing to take any diabetes medication. This can have a dramatic effect impact not just on your diabetes but on your wider health and wellbeing.

**Remission* is defined as when your HbA1c is less than 48mmol/mol on 2 occasions, at least 6 months apart, when you are not taking any diabetes medicines.

Many people with Type 2 Diabetes have increased weight around their stomach. This affects organs such as the pancreas and liver, and stops them from working properly, leading to diabetes.

By reducing this weight, it allows these organs to work more effectively again.

Not everyone can get their diabetes into remission.

But even by losing 5% of your body weight, you can:

- reduce your risk of diabetes complications
- reduce the number of medicines you take
- reduce your risk of arthritis (especially knees, hips and back)
- achieve better mental well-being, sleep and energy levels

Some people call this "reversing" Type 2 diabetes or even a "cure", but we prefer the term remission because your diabetes can come back, particularly if your weight increases again. You will need to continue having yearly follow ups at least.





How can I try and get my diabetes into remission?

You may be able to get your diabetes into remission, like many others have, through significant weight loss (this is normally 10-15kg of weight or 10-15% of your body weight).

- 1. A very low calorie diet or VLCD (800 calories/day). The best research evidence on how to achieve remission is based on the DiRECT study which was published in 2017. In that study, nearly half the people who went on an 800 calorie Very Low Calorie Diet achieved remission. Importantly, over three quarters were successful in stopping their diabetes medication. Nearly 9 out of 10 people who lost more than 15kg were in remission at one year. The VLCD course normally lasts for 24 weeks: 12 weeks replacing all your meals with soups, shakes and snacks from a specially formulated diet plan, and then 12 weeks gradually reintroducing food. This approach is challenging and is not for everyone, but offers the highest chance of achieving sufficient weight loss over a short period.
- 2. Many other studies have shown that **Low Carbohydrate** and **Mediterranean style** diets are very effective in helping people achieve improvements in blood glucose and body weight whilst reducing need for medication, although there have been no formal remission trials like with VLCD. The key is to reduce the amount of starchy carbohydrates and sugary food you eat.
- 3. Intermittent fasting is the other approach that has been demonstrated to be effective in supporting weight, blood glucose and medication reduction. This includes: 5:2 diet (eating normally for 5 days a week then eating only 500-600 calories on the other two days) and Time Restricted Eating where you have a long period in the day when you don't eat. With time restricted eating, most people choose a 16:8 cycle, which involves not eating for 16 hours in the day. Sometimes this is also referred to as an 8-hour eating 'window'. You eat all your meals within an 8-hour time period and fast for the remaining 16 hours. Generally, this is done daily or almost daily. There is some evidence that suggests that the best period for eating is earlier in the day.

Whichever you choose, you'll need to make some longer term lifestyle changes.



Understanding carbohydrates

Carbohydrates are one of the body's main sources of energy and consist of two main types:

Sugars, found in sweets, cakes, pastries, fruit juices and energy drinks.

Starches, (which are long chains of sugar joined together), found in foods such as cereals, rice, potatoes, bread, pasta, yam, plantain, dumplings and noodles. When starch is digested it's broken down into sugar.

Diabetes means your metabolism can no longer deal with sugar, which becomes almost a poison to your body.

You can manage your diabetes rather than let it manage you, by reducing your sugar intake (and this includes starchy carbs).

Studies have shown that lowering carbohydrate intake from starchy and sugary foods can reduce the need for insulin and diabetes medications and promote weight loss.



Eventually all of these are break down into glucose





Carbohydrate content in common foods

Sweet and starchy carbohydrates all increase your blood sugar level.

See the photos - one meal can be the equivalent of over **18** teaspoons of sugar (each drop of blood with a sugar cube in is equivalent to a teaspoon of sugar in the pictures to the right).



Bread, rice, potatoes and pasta have significant amounts of carbs in them and this adds up to large amounts of sugar entering your blood stream during the day.

All this sugar is then mostly stored as fat and causes weight gain.

If I count up my teaspoons of sugar, what is this telling me? What action can I take?







Reducing carb content

You can reduce your carb intake through:

- 1) reducing carb portion size
- 2) making health swaps
- 3) a combination of both

Reducing carb content will generally mean you will be eating more:

- Vegetables that grow above the ground: eat as much as you can.
- **Protein:** non-processed meat, chicken, eggs, fish (particularly oily fish like salmon and mackerel).
- **Healthy fats:** olive oil, nuts, seeds, avocados Avoid margarine, corn oil, vegetable oil.
- **Dairy:** Use full-fat options like Greek yoghurt, real butter, cream, sour cream and cheeses. Avoid flavoured, sugary and low-fat products.

Eating lots of vegetables with protein and healthy fats leaves you feeling properly full in a way that lasts.





Meal ideas

Meal	Eat more	Eat less	
Breakfast	Eggs, full fat yoghurt, avocados, fish, berries	Toast, bread, cereals, bananas	
Lunch	Salads, fish, chicken, cheese, beans, nuts, seeds, olive oil	Bread, rice, pasta	
Dinner	Cauliflower rice, green vegetables, beans, meats, chicken, fish	Rice, bread, pasta, potatoes, yam, plantain	
Snacks	Try and avoid snacking but if you need something then nuts and seeds are good	Crisps, crackers	





Very low calorie diet: Total diet replacement options

Product	Cost (per week)	Benefits	
Cambridge Weight 1:1 diet plan (800kcals)	£50	Choose your personal local diet Consultant, work out your Plan, order the Products you need. Meet your diet consultant weekly. The 1:1 Diet gives you a fantastic menu to choose from, based on 3 meals per day (soups /shakes/meals). www.one2onediet.com	THE 1:1 DIET by Canabradge Weight Plant
Counterweight-Plus (PRO800) (850kcals)	£40	The Counterweight-Plus Programme is a low- calorie diet of Counterweight PRO800 soups and shakes available online. Online nutritional education and behaviour- change support are offered. www.counterweight.org	<section-header><section-header><section-header> COUNTER WEIGHT PRO800 Shakes babbabbbbbbbbbbbbbbbbbbbbbbbbbbbbbbbb</section-header></section-header></section-header>
Optifast – Nestle (800kcals)	£60	The OPTIFAST [®] weight-management program is a meal replacement low-calorie complete diet between 600-800kcal based soups and shakes, comprehensive patient education and support online. www.optifast.com	
Meal replacement products (800kcals) Liquid diet = 600kcals Vegetable allowance = 200kcals Total = 800kcals	£20	LighterLife / Slimfast / Holland and Barrett (not nutritionally complete) No support provided Self-monitored Some food involved – not total diet replacement	SALTED CARAMEL BAR



There are 2 body states:

- The **fed** state when insulin is high and the body is in storage mode (glucose→glycogen→fat)
- The fasting state when insulin is low and the body is in burning mode (1st glycogen then fat). Fats
 →ketones which are an alternative and efficient energy source for all body cells

Time restricted eating makes the body burn fat in the absence of glucose

Spending time in the fasted state is actually a form of exercise – "a metabolic workout". Extending time in the fasted state improves the ability to burn fat efficiently and quickly.

It takes **12 hours** after the last meal to reach the fasted state, so ideal regimes include 16:8 (skip breakfast where you only eat during an 8 hour "window") and 20:4 (only eat during a 4 hour window – more challenging!)

Avoid snacking as this disrupts the effect.





Avoid snacking



Action

What does this all mean for me?

What action will I take?

Some questions to consider:

- How important is losing weight and coming off diabetes medication for me?
- How would it feel to reduce medication and lose weight?
- What weight could I aim for (about 15% loss provides a really high chance of remission)?
- What things are getting in the way?
- What help do I need?



What can I do now?

KnowDiabetes: www.knowdiabetes.org.uk

• Info and links to all available sources for patients in North West London

Carbs & Cals Books:

- World Foods: Available from Amazon for £10.63 (www.amzn.to/2X3rlUb)
- Carb & Calorie Counter: Available for £12.99 (<u>www.amzn.to/2WtGrpj</u>)
- Very Low Calorie Recipes & Meal Plans: £8.91 (<u>www.amzn.to/2VMRSDU</u>) (How to do the Very Low Calorie Diet with real food)

Low carb programme: Healthy living website and App for Type 2 Diabetes

• <u>www.lowcarbprogram.com</u> £14.99/month or £69.99/year

Diet Doctor: (meal planners / videos / ask the experts) www.dietdoctor.com

• Free for 1st month then equivalent to £7/month (though many recipes are available for free)

The Clever Guts Blood Sugar Diet www.thebloodsugardiet.com

• Includes a range of options including very low (800) calorie, 5:2 and Mediterranean low carb

Structured Education Programme

Refer through your GP to DESMOND or X-PERT



