Functional Nexus Cardiometabolic and Weight Management Support Recommendations

What is Cardiometabolic Health?

Cardiometabolic health is essential for longevity and both physical and mental well-being. It is the name given to the way that we assess the body's fitness and risk of developing cardio-metabolic diseases such as diabetes, cancer, heart disease, stroke and dementia. This is an aspect of health we consider in all of our patients when we assess how best to devise a Functional medicine treatment plan.

While some aspects of cardiometabolic health are visible (weight gain and central obesity), other problems are invisible and have to be tested for when we are assessing metabolic health in the clinic. The features of inflammation in the body which we look for make up what is known as the **Metabolic Syndrome.**

Features of the metabolic syndrome:

High blood pressure: One of the invisible aspects of cardiovascular health, this can be caused by weight gain, stress, inflammation and sleep apnoea. While it's important to treat Blood pressure symptomatically, understanding the root cause of this condition means we can often improve it through diet and lifestyle changes.

High blood sugars and Insulin: Over a long period of time, excessive intake of sugar and carbohydrate can lead to the over-production of insulin (the hormone which helps us store sugar in the cells). However, over time, the body becomes less responsive the effects of insulin, leading to higher levels of sugar in the blood-stream and initially this leads to unstable 'spiky' blood sugars. If left unchecked, this can transition to permanently high blood sugars (seen in Type II diabetes). Blood sugar monitoring and control can be achieved effectively through dietary changes as well as nutritional and sometimes medication support. We even see reversal of Type II diabetes as an achievable goal for most people.

Weight gain with central obesity: Excess caloric intake can lead to energy being stored as fat (whether the calories come from fat or carbohydrates), unless there is sufficient exercise being done to build muscle (lean weight gain doesn't contribute to the metabolic syndrome). Often the fat is stored around the organs in the abdomen, leading to increasing waist circumference (known as central obesity).

Fatty Liver Disease: In some people, fat from excess calories starts to be stored within the liver itself. This can lead to reduced function and damage to the liver.

What are the Root Causes of the Metabolic Syndrome?

Our Obesogenic Food environment: A steady increase in the availability of high calorie, low nutrient, convenient, highly-processed foods is undoubtably the cause of the soaring rates of obesity seen across the western world. We see education and empowering people to make better food choices as key to successfully tackling all the features of the metabolic syndrome.

High cortisol Levels: Stress due to life circumstances or childhood trauma, lack of effective rest, sleep apnoea and inflammation due to autoimmunity or food sensitivity can all lead to a rise in cortisol levels. This in turn can interfere with insulin and blood-sugar signalling pathways leading to carbohydrate cravings, increased sugar intake and sometimes binge-eating. Understanding the triggers for excessive eating means we can effectively help by tackling the root causes.

Sedentary Lifestyles: Unfortunately working in offices and sitting for long periods is part of modern life and learning how to move and stimulate our metabolism back into effective fat-burning helps improve long term health and maintain healthy weight.

Hormonal Imbalances: Thyroid problems, adrenal dysfunction and menopause can all have huge impacts on cardiometabolic health. Identifying and treating these is key to success when it comes to management of the metabolic syndrome.

How can we help?

Fortunately, with the correct tools and support, improvements in cardiometabolic health is available to everyone. We offer comprehensive testing, a full assessment of diet and lifestyle contributors and work with you to develop a bespoke package of care incorporating a holistic approach to optimising weight, blood pressure, blood sugars and cortisol levels.

Treatment Options:

In this patient guide, we detail the options we can offer to patients to help patients manage all aspects of the Cardiometabolic Syndrome from Diabetes and Hypertension through to weight management and reversal of fatty Liver Disease:

Dietary Options for Blood Sugar Management and Weight loss

Over-consumption of carbohydrates, sugar and processed foods is causing a spiralling health crisis across western society. Cheap and readily available convenience foods are all high in sugar, low in essential nutrients and often create addictive behaviours in response to rapidly cycling high and low blood sugars. Go into any high street supermarket and check out the lunch time offerings: Sandwiches, pasta bowls, crisps, fruit, chocolate and fizzy drinks. These foods all have the potential to destabilise our blood sugars and mood and impact our long term well-being.

The consequences of un-checked high blood sugars are well documented: Diabetes, heart disease, cancer, dementia and strokes are just a few. One of the foundation stones of the Functional Medicine approach is to educate and help patients understand the relationship between food and blood sugar and how to manage and stabilise blood sugars through informed food choices.

What's the difference between carbohydrates and sugar?

Sugar is the end product from the digestion of carbohydrates (which includes long chains of sugars called starches). These are small molecules which are easily absorbed and can raise blood sugar levels quickly.

However, when looking at food labels it's important to take note of all the carbohydrates in a food – not just the labelled 'sugar' content. Carbohydrates not already broken down into sugars can be in the form of either:

Digestible starches: These will end up as sugar in our bloodstream eventually and need to be counted towards our total sugar intake.

Or

Fibre: This is made up of non- digestible molecules and will not raise blood sugar levels and slows down the absorption of sugars from the gut into the bloodstream. While our bodies are unable to break down and absorb fibre, it remains an important carbohydrate to include in the diet as it keeps the friendly gut bacteria (our microbiome), fed and happy.

When trying to reduce sugar intake, we need to understand how it gets into our diet and which foods contain it. For example:

- A standard Mars Bar contains 36g of carbohydrates, of which 31g is sugars and 0.85g is fibre. This means the total net carbs absorbed from this snack will be **around 35g**.
- 2 slices of wholemeal bread contains around 30g of carbs, of which 3.2g is sugar and 5.4g is fibre. So the total sugar absorbed from the bread will be **around 25g.**
- An apple contains around 25g carbohydrate, of which 4g is fibre and the net carbs which we can digest to sugars will be **21g.**

Why does carbohydrate type matter?

The difference between sugar and starches is that sugar hits our bloodstream quickly and starches are digested and absorbed more slowly – meaning blood sugars rise more slowly with an apple than with a mars bar.

When we are looking to control high blood sugar, we need to think about 2 concepts:

Glycaemic Index (GI): This is how quickly the carbohydrate in a food is absorbed into the blood stream and raises blood sugars after eating. Pure glucose, has a GI index of 100 as it instantly raises blood sugar. Celery has a very low GI index of 15 as the majority of the carbs in it are in the form of indigestible fibre. If we look at our examples again:

- A Mars bar has a **GI of 62**
- Wholemeal bread has a surprisingly higher **GI of 65**
- An apple has a the lowest **GI of around 36**

We then add up the net carbs and take into consideration the rate of delivery of the sugar to the body to formulate the Glycaemic load:

Glycaemic Load (GL): This is a calculation of the potential of a food to raise blood sugar which takes into account the portion size and carb content as well as the GI index.

- Mars bar has a **GL of 22.3**
- 2 slices of wholemeal bread has a **GL of 19.5**
- An apple has a **GL of around 9**

Thos means that the bread and the mars bar have fairly similar potential to raise blood sugar – whereas the apple will have low impact on blood sugars.

How can we use this information to help stabilise our blood sugar?

For someone with diabetes, we are looking for ways to reduce the total carbohydrate intake and the Glycaemic load. This will help to reduce insulin requirements and can help with weight loss. Ultimately this can help us to improve diabetic control or even reverse diabetes altogether.

For someone who doesn't want to lose weight but needs to eat frequently due to unstable blood sugars, we want to concentrate on choosing foods which will release sugars slowly into the bloodstream (with a low glycaemic index), but may not want to reduce the total glycaemic load.

Continuous Glucose Monitoring:

In practice, one of the best ways to learn about how blood sugars are affected by foods is to wear a continuous Glucose monitor (CGM), which will show a real-time trace of your blood glucose readings on your smartphone. There are several examples available for non-diabetics:

- Lingo Monitor: https://www.hellolingo.com/uk/lingo-experience

  And for diabetics:
- Dexcom monitor: https://www.dexcom.com/en-GB
- Freestyle Libre: https://www.freestyle.abbott/uk-en/home.html

Speak with our Nutritional therapist about whether a CGM tracker would be a useful addition to your treatment plan.

Reducing the rate of carbohydrate digestion and absorption:

There are lots of tips and tricks that we can derive from our understanding of how carbohydrates affect us.

Lowering the GI index of a meal can be simple. Just increase the intake of fibre, fat and protein with your carbohydrates.

For example:

- Add nut butter to an apple or a handful of nuts with your berries on porridge oats
- Opt for beans, avocado or sardines on toast rather than jam or just butter
- Adding lemon juice or acid to a meal will slow down the release of carbohydrates
- Sprinkle cinnamon on porridge, baked fruit and yoghurt to improve blood sugar stability

Choose lower carbohydrate accompaniments with your meal:

- Eat bolognaise with avocado, courgette noodles or a big helping of green beans and cabbage instead of pasta
- Add cauliflower 'rice' to curries and stir-frys instead of rice, naan bread or noodles
- Replace potato with celeriac for low GI chips and stews

Swap out traditional high carb breakfasts for healthier and nutrient dense options. Our favourites include:

- Eggs with ginger stir-fried greens

If you are struggling with diabetes control, blood sugar management or have a family history of diabetes and want to get control of your carb intake, our expert team can help you optimise your diet, lifestyle and feel back in control.

Fasting / Intermittent Fasting:

Restricting the time-frame in which you eat to between 8-10 hours, or introducing specific periods of fasting into your week, can have many health benefits. Prolonging the fasting state (coupled with a low carb or keto diet), can help to reduce inflammation and encourage cell repair and appropriate 'clearing out' of damaged cells (this is known as Autophagy). This is often advised to patients with increased cancer risk.

Discuss which form of fasting would be most appropriate for you at your treatment planning review appointment. You might also find the following article helpful: https://www.carbmanager.com/article/yoherxeaaceazayu/how-to-choose-an-intermittent-fasting-schedule

Our Other Dietary Resources for Weight loss and Blood sugar control

Low Carb Modified Mediterranean Diet Plan: This diet consists of whole, unprocessed foods and can help to favourably change many aspects of cardiovascular health and blood sugar control:

https://drsarahdavies.online/document/the-modified-mediterranean-diet-plan/

Balancing Blood Sugar: The following handout has some ideas on how to lower carbohydrate intake in a practical way, focusing on high intake of low carb vegetables and how to replace bread and high carb snacks with tasty, low sugar alternatives:
https://drsarahdavies.online/document/1658/

Ketogenic Diet Plan: This low carbohydrate / high healthy fat plan is ideal for patients with low energy levels or who need intensive healing. Progress can be monitored with a blood or breath meter for ketones:

https://drsarahdavies.online/document/paleo-keto-diet-plan/

Gluten Free and Low Carb Bread Guide: Advice on the best available pre-made low carb breads as well as many recipes for low carb and ketogenic diets:
https://drsarahdavies.online/document/gluten-free-and-low-carb-bread-guide/

Links to our Blog posts and Recipes

Fuelling Your Body and Your Gut, How To Navigate Carbohydrates:

https://functional-nexus.co.uk/fuelling-your-body-and-your-gut-how-to-navigating-carbohydrates/

A Functional Medicine Guide to Choosing the Best Fuel – Rethinking Fats:

https://functional-nexus.co.uk/a-functional-medicine-guide-to-choosing-the-best-fuel-rethinking-fats/

The Power of Protein, Our Functional Medicine Approach to Nourishing Your Body:

https://functional-nexus.co.uk/the-power-of-protein-our-functional-medicine-approach-to-nourishing-your-body/

Easing into Winter with 5 AIP Slow Cooker Recipes:

https://functional-nexus.co.uk/easing-into-winter-with-5-aip-slow-cooker-recipes/

Deliciously Simple Paleo – Nourishing Your Body with One-Pot Wonders

https://functional-nexus.co.uk/deliciously-simple-paleo/

Cooking for Wellness: Functional Medicine-Approved Recipes for a Healthier You

https://functional-nexus.co.uk/cooking-for-wellness/

Exercise for Weight Loss

Evidence suggests that we should be advising a combination of weights / resistance training and HIIT for weight loss (especially around menopause). However, cardiovascular workouts are also needed for cardiac fitness.

Our Resources include

Foundations of Health for Movement: https://drsarahdavies.online/document/foundations-of-health-for-movement/

This includes some online training programmes:

Caroline Girvan:

Great for home weight training, Calisthenics and body-weight exercises. Good for improving muscle strength and fitness.

Caroline presents a mixture of HIIT, resistance training and plyometrics. The Programmes are free with extensive YouTube Video workout support.

https://www.carolinegirvan.com

Sydney Cummings

Sydney is a motivational trainer and coach and has countless of free resistance training sessions on her YouTube channel. Whether you want a quick 5 minutes or a full 40-50 minute home workout, this might be one for you:

https://www.youtube.com/c/SydneyCummings/playlists

Pahla B

For gentler weight baring sessions, you can follow Pahla B who offers free sessions on her YouTube channel. Phala specialises in offering exercise advice to the over-50's and her workouts are aimed at women who want to lose weight and feel motivated:

https://pahlabfitness.com

Supplemental Strategies for Blood Sugar Management

Chromium Picolinate

Chromium is an essential mineral has a beneficial role in the regulation of insulin and its effects on carbohydrate, protein and lipid metabolism. It has been found to lower some of the risk factors for cardiovascular disease, particularly in overweight individuals. Chromium picolinate, has been shown to reduce insulin resistance and to help reduce the risk of cardiovascular disease and type 2 diabetes.

Dose: 200mcg 2-3 times a day

For Example: Pure Encapsulations Chromium Picolinate 200mcg

NB: Please avoid all supplements containing Alpha Lipoic Acid due to its ability to cause toxin re-distribution.

Selenium:

Selenium helps to improve blood sugar control also cholesterol profiles in patients with cardiometabolic syndrome and diabetes. Selenium helps to improve thyroid hormone metabolism and also aids glutathione production (essential for lowering inflammation levels).

Dose 50-150 mcg/day (but titrate to blood levels, some need 200mcg plus)

For Example: BioCare Selenium 100mcg

Or eat Brazil nuts. 2 per day provides approximately 100mcg selenium.

MyoInositol:

Myo-Inositol acts to improve insulin sensitivity and can help to improve blood pressure control, lower cholesterol and aid in weight loss. It has added benefits for post-menopausal women and those with PCOS.

Dose: 4g daily added to water or juice

For Example: Lamberts Myo Inositol powder 200g

Berberine:

Berberine significantly lowers fasting glucose levels and has efficacy similar to the drug Metformin for management of blood sugars through improvements in insulin sensitivity. It has also been shown to improve cholesterol levels and helps to reduce BMI, waist circumference and visceral fat levels.

Dose: 500mg once to three times a day as needed

For Example: Metagenics Berberine 250

Igennus Berberine Phytosome with Chromium (550mg / 200mcg)

Novel agents which may be helpful

For Completeness, I have included information on some promising new agents which have been recently proposed as 'natural alternatives' for GLP-1 medications.

As the Functional Nexus Clinic has no personal experience with these agents yet, we are only able to share the published data from the product manufacturers, but we look forward to hearing more about whether they can deliver the results that initial data seems to promise. If you have personal experience of either of these products (good or bad), we would be interested to hear from you.

Calcocurb:

You can read about and order this herbal appetite suppressant here: https://www.numan.com/supplements/calocurb

Its key ingredient, Amarasate Extract, is derived from New Zealand-grown hops, and has been shown to reduce appetite in several studies – often with side effects similar to those seen with injectable GLP-1 medications. [1,2]

Calocurb dosing

Calocurb dosing starts at one capsule a day, one hour before a meal. It then increases gradually over five days to two capsules twice a day before meals.

- Days 1-2 Take one capsule one hour before a meal
- Days 3-4 Take one capsule twice a day, one hour before a meal
- Days 5+ Take two capsules twice a day, one hour before a meal

Elcella:

Elcella combines flaxseed (linseed) oil, coconut oil, and MCT oil in a specialised capsule for delivery to the lower gut. The blend of fatty acids is designed to stimulate L-cells in the colon which then stimulated natural release of satiety hormones such GLP-1 and PYY. These send signals to reduce cravings and calm 'food noise.'

You can read more about this novel supplement here: https://elcella.com

They have links to the scientific studies they base their research on here: https://elcella.com/pages/how-it-works

Elcella Dosing

The recommended dose is 4 capsules, twice a day (8 total), taken with your two biggest meals (usually lunch and dinner). Some people prefer to start with fewer capsules - especially if they're more focused on gentle gut health benefits rather than weight management.

References:

1 Walker E, Lo K, Gopal P. Gastrointestinal delivery of bitter hop extract reduces appetite and food cravings in healthy adult women undergoing acute fasting. Obes Pillars. 2024 Jun 20;11:100117. doi: 10.1016/j.obpill.2024.100117. PMID: 39071168; PMCID: PMC11279280.

2 Walker EG, Lo KR, Pahl MC, Shin HS, Lang C, Wohlers MW, Poppitt SD, Sutton KH, Ingram JR. An extract of hops (Humulus lupulus L.) modulates gut peptide hormone secretion and reduces energy intake in healthy-weight men: a randomized, crossover clinical trial. Am J Clin Nutr. 2022 Mar 4;115(3):925-940. doi: 10.1093/ajcn/nqab418. PMID: 35102364.

Glucagon-Like Peptide-1 Receptor Agonists

For years, GLP-1 receptor agonists (GLP-1 RAs) have been making waves, primarily for their remarkable efficacy in managing type 2 diabetes and, more recently, for significant weight loss.

From a Functional Medicine perspective, GLP-1s represent far more than a pharmaceutical solution for symptoms; they offer a powerful tool to address the root causes of metabolic dysfunction, inflammation, and chronic disease.

Traditional medicine often views GLP-1s simply as glucose-lowering and appetite-suppressing agents. However, in Functional Medicine, we ask: Why are these mechanisms beneficial, and what deeper physiological imbalances are they addressing?

What are GLP-1 RA's?

GLP-1, or Glucagon-Like Peptide-1, is a naturally occurring incretin hormone produced in the gut in response to food intake. Its primary roles include stimulating insulin secretion, suppressing glucagon release, slowing gastric emptying, and promoting satiety.

However, other benefits have also been shown including:

Improving Gut-Brain Axis Harmony: GLP-1 acts as a crucial communicator between the gut and the brain, influencing hunger signals, mood, and even cognitive function. Dysregulation of this axis is central to many chronic conditions.

Mitochondrial Health: Emerging research suggests GLP-1s may play a role in mitochondrial function and energy metabolism, key pillars of cellular health that are often compromised in chronic disease.

Inflammation and Oxidative Stress Reduction: Beyond their metabolic effects, GLP-1s exhibit anti-inflammatory and anti-oxidative properties, directly addressing underlying drivers of chronic illness.

Microbiome Modulation: While indirect, improved metabolic health through GLP-1 use can positively influence the gut microbiome, a critical component of overall health in functional medicine.

Therefore, when we consider GLP-1s, we're not just looking at a drug; we're looking at leveraging a natural physiological pathway that has profound implications for a multitude of interconnected bodily systems.

From Symptom Management to Root Cause Resolution – How We Utilise GLP-1s in Practice

Comprehensive Assessment: Before considering GLP-1s, our doctors and advanced practitioners conduct a thorough functional medicine assessment. This includes detailed medical history, lifestyle factors (diet, stress, sleep, movement), and comprehensive laboratory testing (looking beyond standard markers to include inflammatory markers, advanced lipid panels, nutrient deficiencies, and gut microbiome analysis). We aim to understand why a patient is experiencing metabolic dysregulation, rather than simply diagnosing a condition.

Addressing the Foundations First: GLP-1s are never a standalone solution. They are introduced within a foundational framework that prioritises:

- **Personalised Nutrition** – Implementing a nutrient-dense, anti-inflammatory dietary plan tailored to the individual's unique needs and sensitivities, often guided by detailed food diaries to identify triggers and patterns.
- **Optimised Lifestyle** – Addressing sleep hygiene, stress management techniques, and incorporating appropriate movement.
- **Gut Health Restoration** – Utilising targeted interventions to rebalance the microbiome, heal the gut lining, and optimise digestion.8
- **Targeted Supplementation** – Addressing identified nutrient deficiencies and supporting specific physiological pathways.

Strategic Use of GLP-1s for Specific Root Causes

Insulin Resistance & Metabolic Dysfunction: While GLP-1s are effective in this context, we utilise them to break the cycle of insulin resistance, thereby allowing other dietary and lifestyle interventions to become more effective.

Chronic Inflammation: Their anti-inflammatory properties are invaluable in conditions where inflammation is a key driver.

HPA Axis Dysregulation: By improving metabolic stability and reducing inflammatory burden, GLP-1s can indirectly support HPA axis function.

Food Cravings and Dysregulated Appetite: GLP-1s can help re-establish healthy satiety signals, allowing patients to make more conscious and less emotionally driven food choices.

Micro-dosing in Functional Medicine – A Nuanced Approach

One key differentiator in our Functional Medicine approach is the consideration of micro-dosing GLP-1s. While conventional medicine typically escalates doses to achieve maximum effect, we often begin with lower doses, carefully titrating based on individual response and tolerance.

Mimicking Physiological Rhythms: Our aim is to gently nudge the body back into balance, rather than overpower it. Lower doses can mimic more physiological levels of GLP-1, providing subtle support without overwhelming the system.

Minimising Side Effects: Micro-dosing often leads to fewer and less severe side effects, enhancing patient adherence and comfort.

Synergy with Lifestyle Interventions: Lower doses allow for a greater emphasis on the foundational lifestyle changes. The GLP-1 becomes a supportive tool that amplifies the benefits of diet, exercise, and stress reduction, rather than replacing them.

Personalised Titration: We work closely with our patients, adjusting the dose based on their subjective experience, symptom improvement, and follow-up lab results. This allows for a truly individualised approach.

Protocols of Usage in Functional Medicine

Initial Assessment & Foundation: Building As outlined above, this is non-negotiable

Low-Dose Initiation: We typically start with the lowest effective dose, carefully monitoring for response and side effects.

Gradual Titration Dosing: Dose increases are slow and deliberate, often over several weeks or months, in contrast to the more rapid escalation seen in conventional settings

Integration with Nutritional Strategy: Patients are concurrently following a personalised eating plan, utilising detailed food diaries to track intake, symptoms, and responses. This helps identify optimal food choices and reinforces healthy eating habits.

Emphasis on Gut Health: Simultaneous strategies to optimise gut health (probiotics, prebiotics, gut-healing nutrients) are often employed to enhance the overall metabolic benefits.15

Regular Monitoring: Beyond standard blood tests, we track inflammatory markers, continuous glucose monitoring data (where appropriate), and patient-reported outcomes to assess progress and adjust the protocol.

Exit Strategy: The ultimate goal is to support the body in regaining its own metabolic resilience. For some, this may mean a temporary course of GLP-1s followed by a maintenance phase with lifestyle alone. For others, particularly those with significant underlying conditions, long-term low-dose support may be appropriate.

Advanced Practitioner Support Between Doctor Appointments

Personalised Coaching & Education: Our practitioners work closely with patients to implement dietary changes, optimise sleep, integrate stress-reduction techniques, and understand the nuances of their GLP-1 protocol.

Food Diary Analysis & Feedback: Patients maintain detailed food diaries, which are regularly reviewed by our practitioners. This allows for real-time adjustments to diet, identification of problematic foods, and celebration of successes. It's a powerful tool for behavioural change and understanding the individual's unique response to food.

Symptom Tracking & Adjustment: Practitioners diligently track patient symptoms, side effects, and progress, relaying crucial information back to the prescribing doctor to inform dosage adjustments or protocol modifications.

Emotional & Behavioural Support: The journey to optimal health can be challenging. Our practitioners provide empathetic support, addressing emotional eating patterns, stress-related triggers, and helping patients navigate lifestyle shifts.

Bridging the Knowledge Gap: We ensure patients fully understand their health journey, empowering them to make informed decisions and actively participate in their healing process.

The functional medicine use of GLP-1s is not about quick fixes; it's about intelligent, targeted support that empowers the body to heal from the inside out.

Choosing a GLP-1 RA

There are three main options for weight loss in non-diabetic patients:

- **Wegovy** (injectable Semaglutide):
- **Mounjaro** (injectable Tirzepatide): This is a dual GLP-1/GIP (gastric inhibitory polypeptide)
- **Rybelsus** (oral semaglutide): Once daily tablet (on an empty stomach sitting upright for 30 minutes)

Contra-indications to GLP-1's

- History of active Diabetic Ketoacidosis
- Significant gastroparesis or Inflammatory Bowel Disease
- Severe Renal Impairment (GFR <15mL/min)
- Severe Liver disease
- Pregnancy, breastfeeding or planning pregnancy.
- Personal or family history significant for multiple endocrine neoplasia 2A (MEN 2A), multiple endocrine neoplasia 2B (MEN 2B), or medullary thyroid cancer.
- History of Pancreatitis

Common side effects can include:

- nausea
- constipation
- diarrhoea.
- Risk of low blood sugar (if taken with insulin or sulphonylurea)

Other risks:

- Worsening of diabetic retinopathy
- Increased risk of suicidal thoughts (no clear relationship demonstrated but small risk not ruled out – report on Yellow card scheme if reported)
- Pancreatitis
- Possible malabsorption of Oral Contraceptive pill with Tirzepatide (Mounjaro). It's recommended to use a backup method of contraception, for four weeks after starting tirzepatide and for four weeks after any dose increase.

Medication Monitoring:

- Typically every 4 weeks for a dose adjustment (although need to order the week before running out).
- With rapid/steady weight loss, there will also be a need to review thyroid and BP medication doses.
- Anyone taking a GLP-1, should pay attention to any sudden changes in their mood, behaviours, thoughts and feelings and contact their healthcare team straight away if they are concerned about changes in mental health (especially any new or worsening symptoms).

Pancreatitis Risk Discussed Further:

While earlier reports suggested a potential association between GLP-1 RAs and increased pancreatic risks, large-scale, modern studies have shown that the risk of pancreatitis in patients with type 2 diabetes and obesity taking GLP-1 RAs is low and, over long-term follow-up (up to 5 years), not significantly increased.

Research indicates that the risk of acute pancreatitis in patients with obesity using GLP-1 receptor agonists (GLP-1 RAs) is generally comparable to the risk in obese patients not using these medications.

Key Findings on Pancreatitis Risk and GLP-1 RAs

- **Low Relative Risk:** Studies have shown that the incidence of pancreatitis in users and non-users of GLP-1 RAs in an obese population is very low and similar (0.1% vs 0.1% - 0.2%).
- **Long-Term Studies:** Research comparing GLP-1 RA users to non-users, often with matched, large, real-world data, has shown that the risk of pancreatitis over 1, 3, and 5 years is not higher among users.
- **Obesity as a Baseline Risk:** Obesity is independently recognized as a major risk factor for pancreatitis (due to gallstones, type 2 diabetes, and hypertriglyceridemia), and some studies have shown that GLP-1 RAs do not elevate this already present risk.
- **Potential Protective Effect:** Some studies have suggested that GLP-1 RA use may improve outcomes in obese patients who do experience acute pancreatitis, indicating a "benign" or even protective influence on the disease trajectory, rather than a harmful one.

Factors Influencing Risk

Although the overall risk is low, certain factors have been associated with a higher risk of developing pancreatitis while on a GLP-1 RA, including:

- A history of pancreatitis.
- A history of gallstone disease.
- Tobacco use.
- Advanced chronic kidney disease (CKD).

In summary, for the vast majority of patients, the cardiovascular and metabolic benefits of using GLP-1 RAs for obesity and type 2 diabetes outweigh the minimal risk of pancreatitis (which is already an increased risk factor due to obesity itself).

References:

Ayoub M, Chela H, Amin N, Hunter R, Anwar J, Tahan V, Daglilar E. Pancreatitis Risk Associated with GLP-1 Receptor Agonists, Considered as a Single Class, in a Comorbidity-Free Subgroup of Type 2 Diabetes Patients in the United States: A Propensity Score-Matched Analysis. J Clin Med. 2025 Feb 1;14(3):944. doi: 10.3390/jcm14030944. PMID: 39941615; PMCID: PMC11818918.

Postlethwaite R, Amin AM, Alsawas R, Almandoz JP, Sawas T. Predictors of acute pancreatitis in patients treated with GLP-1 receptor agonists for weight management. Pancreatology. 2025 Aug;25(5):609-613. doi: 10.1016/j.pan.2025.06.018. Epub 2025 Jun 26. PMID: 40695708.

Nieto LM, Martinez J, Narvaez SI, Ko D, Kim DH, Vega KJ, Chawla S. Glucagon-Like Peptide-1 Receptor Agonists Use Does Not Increase the Risk for Acute Pancreatitis and Is Associated With Lower Complications in Patients With Type 2 Diabetes Who Develop Acute Pancreatitis: A Multicenter Analysis. Am J Gastroenterol. 2026 Feb 1;121(2):424-431. doi: 10.14309/ajg.0000000000003525. Epub 2025 May 13. PMID: 40358430.

Choosing between GLP-1 options:

Both Mounjaro and Wegovy are effective at reducing hunger and food cravings, but Mounjaro's dual-action mechanism is generally considered more potent. However, this comes with a higher cost.

Mounjaro (Tirzepatide): Acts on both GLP-1 (reducing appetite), and GIP receptors (slowing gastric emptying and increasing the feeling of fullness). Studies suggest weight loss often exceeding 20% over 72 weeks in clinical trials. Starter doses are around £129–£149, with maintenance doses reaching £279–£299+ per month with normal usage (as of early 2026).

Wegovy (Semaglutide): Acts on GLP-1 receptors only. Trials show weight loss of around 15% over 68 weeks. Starter doses can be found from £85-£99, with maintenance doses around £169–£189/month (as of early 2026).

Our doctors and our Advanced Practitioner Nicola (Clinical Pharmacist, Nutritional Therapist and trained GLP-1 advisor), can help you decide which version to try first and how to adjust the dosing. Once the desired weight loss is achieved, the dose is titrated back down and a minimum required maintenance dose can be offered if needed. **Please keep pens in the fridge once they arrive from the pharmacy.**

Mounjaro:

Usual Dose: Initially 2.5 mg once weekly for 4 weeks, then increased to 5 mg once weekly for at least 4 weeks, then increased if necessary up to 15 mg once weekly, dose to be increased in steps of 2.5 mg at intervals of at least 4 weeks.

In practice, we may start lower and proceed more slowly to help avoid side effects and to use minimal dosing required for the best results. This means we may use a higher dose pen to deliver smaller doses (outside of the product license), if we feel this is the best way for us to proceed for you. You can work out how to get different doses from your Mounjaro pen here:

Microdosing Calculator: https://getdosewise.com Each full pen contains 60 clicks for 1 full dose.

Microdosing examples with a 10mg pen:

- 2.5mg (15 clicks)
- 5mg (30 clicks)
- 7.5mg (45 clicks)

Mounjaro Quick start Guide and Video: https://mounjaro.lilly.com/how-to-use-mounjaro

Wegovy:

Usual Dose: 0.25 mg once weekly for at least 4 weeks, then increased if tolerated to 0.5 mg once weekly for at least 4 weeks, then increased if tolerated to 1 mg once weekly for at least 4 weeks, then increased if tolerated to 1.7 mg once weekly for at least 4 weeks, then maintenance 2.4 mg once weekly.

Microdosing Calculator: https://wegovyclicks.replit.app 0.25mg and 0.5mg pens contain 37 clicks, 1mg, 1.75mg and 2.4mg pens contain 75 clicks.

Microdosing examples with a 1mg pen:

- 0.25mg (19 clicks)
- 0.5mg (37 clicks)
- 1mg (75 clicks)

Wegovy Quick start Guide and Video: https://www.wegovy.com/obesity/starting-wegovy/starting-wegovy-pen.html