

GLP-1 - MAKING THE MOST OF YOUR MEDICATION

For people living with Type 2 Diabetes



COASTAL
PRIMARY CARE
NETWORK

Introduction to GLP-1 medication

GLP-1 agonists are medicines used to treat type 2 diabetes. They mimic (copy) the action of a hormone (chemical substance) called GLP-1. Your stomach naturally releases this hormone when you eat food.

How do GLP-1 medications work?

They work by :-

- slowing down the digestion of food
- reducing your appetite
- helping your body make more insulin
- stopping the liver making glucose when it is not needed

When combined with a healthy diet and lifestyle, GLP-1 medication can help reduce body weight and lower blood sugar levels.



How long can I take GLP-1 medication ?



It is likely that your medication will be continued after six months provided you are seeing benefits to your blood sugar control and a reduction in your body weight.

Your targets at six months are:-

- 11 mmol/mol reduction in your HbA1c (average blood sugar)
- at least a 3% reduction in body weight

Use effective contraception

It is important to use effective contraception whilst taking a GLP-1 as these medications should not be used in pregnancy; Please see the [Faculty Sexual and Reproductive Healthcare GLP-1 agonists and contraception Patient information leaflet.](#)

Hormone Replacement Therapy

If you are taking oral progestogen as part of your HRT, then you need to be aware that tirzepatide (Mounjaro) may have an impact on the effectiveness of your HRT. This means your HRT might not protect your endometrium (womb lining) enough. Please contact the surgery to book an HRT review if you use oral HRT.

If you do not take your HRT orally (for example, you use a patch, a gel or a Mirena coil instead of a tablet) then you do not need to worry.





When you are unwell

You should not take this medication during periods of illness e.g. an upset stomach, diarrhoea, vomiting.

Restart it once you are eating and drinking normally again.

Reduce portion sizes

Side effects are made worse by eating more food than you need.

If your stomach has not had time to empty and you eat more food, you will feel unwell.

The medication can give you an opportunity to learn to recognise feelings of fullness again. Begin to reduce your portions and relearn what the right portion size is for you now. This will help to manage your blood glucose and help you to lose weight

Top tips:

- Reduce your portion sizes
- Stop eating at the first signs of fullness
- Buy less food when you go shopping
- Cook less food for yourself
- Use a smaller plate
- If eating out, share a main meal or choose smaller meals such as starters
- If being cooked for, tell them you only need a small portion.



PORTION
CONTROL

What are the possible side effects of GLP-1's?

The most common possible side effects of these medicines include:

Feeling sick	Stomach ache
Loss of appetite	Bloating
Constipation or diarrhoea	Low blood sugar (if taking Gliclazide or insulin *)
Skin reactions at injection site	Heartburn

If side effects do not improve after a couple of weeks, contact your practice nurse. Rarely, these medications can cause inflammation of the pancreas (pancreatitis). If you experience severe abdominal (central tummy) pain, seek immediate medical help from your GP or NHS 111.

*if you take gliclazide or insulin you are at risk of low blood glucose (hypos) and these medications may need to be reduced. Your diabetes team may recommend you check your blood sugars more regularly, particularly when you first start the medication.

Reducing potential side effects of GLP1's

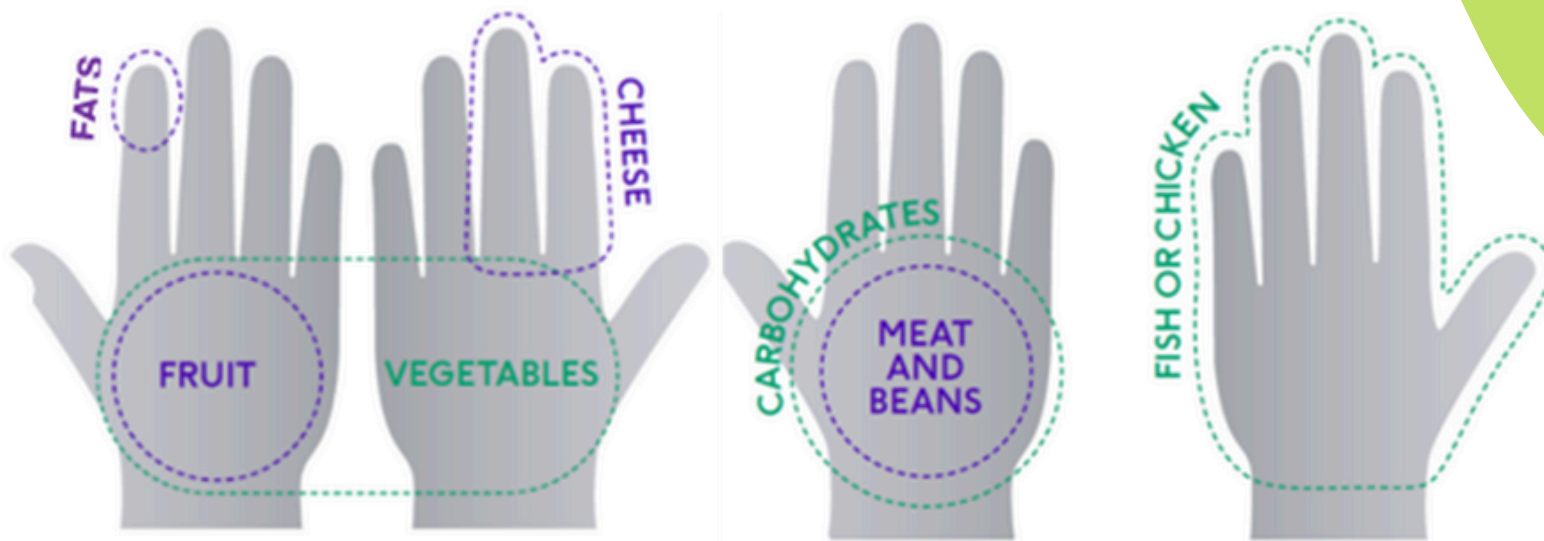
Following the dietary and lifestyle advice in this booklet will help you get the best results from your medication, reduce possible side effects and improve your overall health.

Another tip is to give your medication before you go to bed and allow it to come up to room temperature before giving your dose.



Handy portion guide

Your hands can be useful in estimating appropriate portions. When planning meals, use the handy portion sizes as a guide.



Reduce your fat intake

Reducing the amount of fried or fatty foods will help prevent unwanted side effects, as well as supporting you in losing weight and keeping you healthy. Fats have the most calories of all the food groups. All fats, even heart healthy types, are high in calories.



- Avoid takeaway food as much as possible
- Eat less high fat snacks such as biscuits, crisps, cake, chocolate, puddings and pastries
- Grill, steam, bake, air-fry or microwave foods instead of frying
- If you use oil in cooking, use a spoon to measure it. Keep to 1 teaspoon per person
- Cut the visible fat off meats and remove the skin from chicken/turkey

Learn to eat to your appetite

When we eat, there is a delay between us having eaten enough and our brain getting the message. This can take at least 20 minutes.

During these 20 minutes or more, you may think you are still hungry and continue eating. By the time your brain knows you are full, you may have eaten more than you need. This may increase the side-effects of nausea and discomfort and make it harder to lose weight.

Tips for tuning into your body's feeling of hunger and fullness

Slow down your eating to give your brain time to catch up with your stomach by;

- Using a knife and fork where possible. Cut food into smaller pieces and put your knife and fork down between mouthfuls.
- Sit down to eat; eating on the move makes it harder to concentrate on slow eating.
- Avoid distraction and multi-tasking - focus on eating rather than watching TV, reading or using your phone.
- Focus on tasting and savouring every mouthful of food.
- Allow yourself a break midway through the meal, put your cutlery down and engage in conversation if eating with others.
- Avoid second helpings - you should feel comfortably satisfied at the end of a meal, but it is normal to feel you could still eat more. It is important to get used to this feeling and not to go back for seconds. You can always eat again in a few hours if you are still hungry later.

Get snacking under control

Get snacking under control; try to only eat when you are truly hungry. We often snack in response to cravings or out of habit, rather than physical hunger.



Ask yourself:

“Am I really physically hungry?”

Physical hunger doesn't tend to go away when you are distracted. You may have an empty feeling or a rumbling stomach. Does the timing of your hunger make sense? If it has been 4 hours since you last ate, it is more likely to be true hunger than if it is just after a meal.

“Could this be a craving?”

Cravings may feel like physical hunger but there are some clues to help you decide. Cravings can be at any time, even straight after a meal. They are often triggered by emotions, boredom or by simply seeing, smelling or hearing about food. Cravings tend to be for specific foods we enjoy which are often high in sugar, salt and fat.

“Could this be a habit?”

Habits are not hunger or cravings. Habits tend to happen repeatedly and are triggered by time or routine. For example, eating supper every night even though you are not hungry; buying a chocolate bar each time you go to a petrol station; or having pudding after your main meal even though you are full.

Tips to beat cravings:

- Once you have recognised your cravings you can start to try and resist them. Most cravings last for 5-10 minutes and will go away especially if you distract yourself by keeping busy.
- Avoid temptation. Try to keep tempting food out of the house. Ask family members to support you in this if necessary. It is part of your treatment.
- Try having a sugar-free drink instead of eating.
- If you do decide to have a craved food, try to have the smallest portion that will satisfy your craving. Take your time and savour the taste, try to make it last as long as you can.
- Recognise what triggers cravings and try to address this. For example, if it is boredom, find activities to keep you busy, such as walking, crafts, reading, puzzles or self-care. If it is low mood or anxiety, consider seeking counselling.

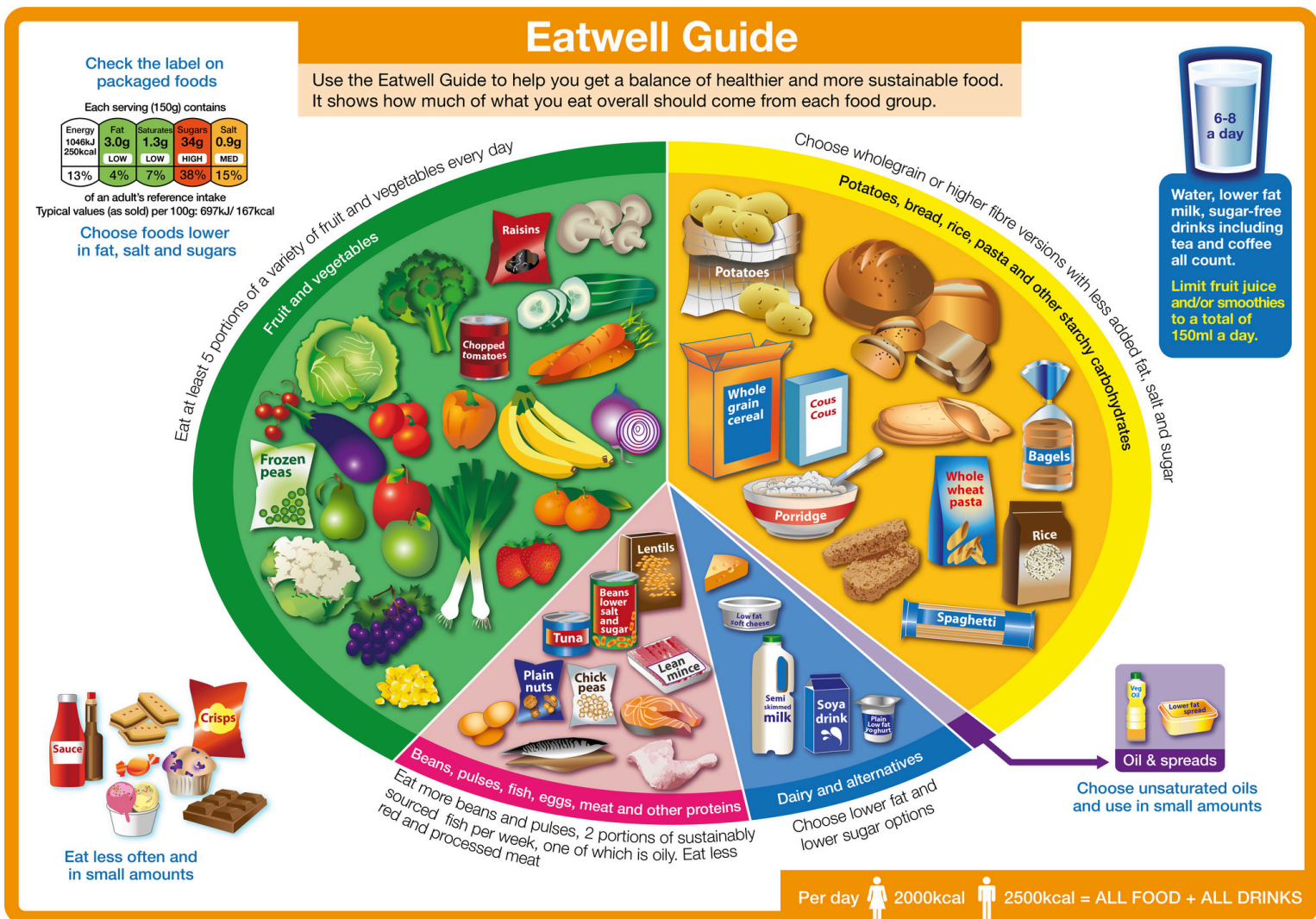


Tips to changing habits:

- We have had habits for a long time. Some people can change these straight away and for others this can take more time, effort and support. Ask for help if you need it.
- Try to change the routine that leads to the habit. For example, pay for your petrol at the pump, stay out of the kitchen at bedtime.
- Reduce the portion size of foods you eat out of habit. For example, if you usually have two biscuits at bedtime, have one instead.



EATING A HEALTHY DIET



Source: Public Health England in association with the Welsh Government, Food Standards Scotland and the Food Standards Agency in Northern Ireland

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The Eatwell guide is the UK government's dietary recommendations. It divides food items into five main food groups according to the nutrients they provide. The Eatwell guide also gives guidance on how much of each food group should contribute to our diet. Following this guidance helps you to get the right amount of nutrients for good health and to achieve a healthier weight.

The Eatwell Guide encourages more whole foods and minimally processed foods.



Fats

Use amounts of fat and choose unsaturated fats such as rapeseed, sunflower and olive oils.



Saturated fats from butter, lard, ghee, processed meats, pies, cakes and pastries raise cholesterol and increase the risk of heart disease and stroke.

Dairy

Milk and dairy products are good sources of calcium, protein and provide a wide range of vitamins and minerals. A lack of calcium could lead to weakening and softening of the bones (osteomalacia or osteoporosis).

Choose lower fat and sugar options such as semi or skimmed milk, natural or reduced fat Greek yogurt and reduced fat or cottage cheese.



Protein

Is essential for growth and repair. Eating a portion of protein at each meal helps protect against any loss of muscle associated with weight loss.

Choose lean protein (e.g. chicken, turkey, eggs, beans, fish, low fat dairy, beans and lentils). Eat less red and processed meats. Aim to have two portions of oily fish (salmon, sardines, pilchards, mackerel and trout) per week.



Carbohydrates

Carbohydrates are broken down into glucose which is used by our body's cells for energy.

Starchy carbohydrates include bread, rice, pasta, breakfast cereals, potatoes, yam, plantain, couscous and chapattis. Choose wholegrain varieties as they contain more fibre, vitamins and minerals. The fibre will keep you feeling fuller for longer.

Spreading carbohydrate throughout the day and reducing your portion sizes of carbohydrate can help control blood glucose and hunger levels.



Fruit & Vegetables

Aim to eat at least 5 portions a day and try to eat a rainbow to obtain a wide range of vitamins, minerals and fibre.

A diet rich in fruit and vegetables can help reduce the risk of heart disease, strokes and some cancers.

Fruits contain fructose which is a natural fruit sugar so you should have one portion of fruit at a time and spread your fruit portions over the day. A portion of fresh fruit and veg is 80g - roughly what fits into the palm of an adult hand. A portion of dried fruit is roughly about 30 grams.

Fruit juices and smoothies are high in sugars and should be avoided or limited to 150 ml per day.





Foods higher in sugar, fat and carbohydrates

These are foods such as chocolate, crisps, biscuits, cakes and are high in carbohydrates, fat and sugar. These foods should be consumed less frequently and in small amounts.

Fluid

Include at least 6-8 glasses or 1500-2000mls a day. Water, no added sugar squashes, herbal tea, tea and coffee all count. Alcohol does not count and should be limited to less than 14 units a week.



		SATURATED FAT	FAT	SUGAR	SALT
HEALTHIER CHOICE	LOW	3g or less	1.5g or less	5g or less	0.3g or less
OK MOST OF THE TIME	MEDIUM	3.1g to 17.5g	1.6g to 5g	5.1g to 22.5g	0.31g to 1.5g
JUST OCCASIONALLY	HIGH	More than 17.5g	More than 5g	More than 22.5g	More than 1.5g

ALL MEASURES AS 100G/ML

Food labels

Aim for more green and amber labelled foods. Red labels indicate the food might belong in the high fat/sugar/salt food group.

Nutritional Supplements

Providing you choosing balanced meals, you should be able to get all the nutrition you need from your food. However, if your appetite is reduced over a long period of time, consider taking a complete multivitamin and mineral.

Vitamin D works with calcium to keep your bones strong. It also assists your immune system, supports nerve function, and helps maintain muscle strength. As most our Vitamin D is obtained through sunshine exposure, it is advised that all adults take a daily vitamin D supplement during the autumn and winter.

People at high risk of not getting enough vitamin D should take a daily supplement throughout the year.





Being physically active

You can maximise the benefits of this medication by including more movement in your daily routine. Work within your own capabilities and gradually build up to 150 minutes of moderate activity each week, such as walking, swimming, dancing, cycling, gardening or housework.

After the age of 40, the natural aging process leads to 5-10% muscle loss (strength) every decade. Weight loss can accelerate loss in muscle mass, so it is important to eat enough protein in combination with regular strength exercise to protect your muscles.

You should aim to do some strength (resistance) exercise at least twice a week. Examples of muscle-strengthening activities include, yoga, Pilates, tai chi, lifting weights, working with resistance bands, push-ups and sit-ups, heavy gardening, such as digging and shovelling and wheeling a wheelchair. If you are new to exercise or suffering from co-existing health issues, seek advice from your healthcare team.



Keeping a track of your progress

It can help to keep a food diary when you first start to make changes. A food diary could be on paper, an app on your phone or taking photos.

You could add notes about your blood glucose if you check yours at home or record you HbA1c (average blood glucose) levels over time. You can also add information about your physical activity levels.

It is helpful to review your diary and see where you have made changes that have helped to reduce your blood glucose levels or weight, or where you might want to make further changes.



USEFUL WEBSITES AND PHONE APPS

Food logging and calorie counting app; there are a number of these available through your phone app store, including 'MyfitnessPal' or 'Nutracheck'

Carbs and Cals App

[Carbs & Cals | Diabetes, Dieting & Calorie Counting App](#)

Carbs and Cals book

[Carbs & Cals Books | Carb & Calorie Counter Book](#)

Food and Mood diary

[1766_Food and Mood diary_A4 landscape_HC_V6.pdf](#)

Diabetes UK recipe database

[Recipe finder - Enjoy Food | Diabetes UK](#)

Physical Activity

[Get active - Better Health - NHS](#)

[Diabetes for exercise | Type 1 and type 2 | Diabetes UK](#)

www.healthycornwall.org.uk

Emotional and psychological support

<https://www.cornwallft.nhs.uk/talking-therapies>

<https://www.nhs.uk/every-mind-matters/mental-wellbeing-tips/self-help-cbt-techniques/>

www.mind.org.uk/information-support/types-of-mental-health-problems/mental-health-problems-introduction/self-care/