



Prediabetes Education Session



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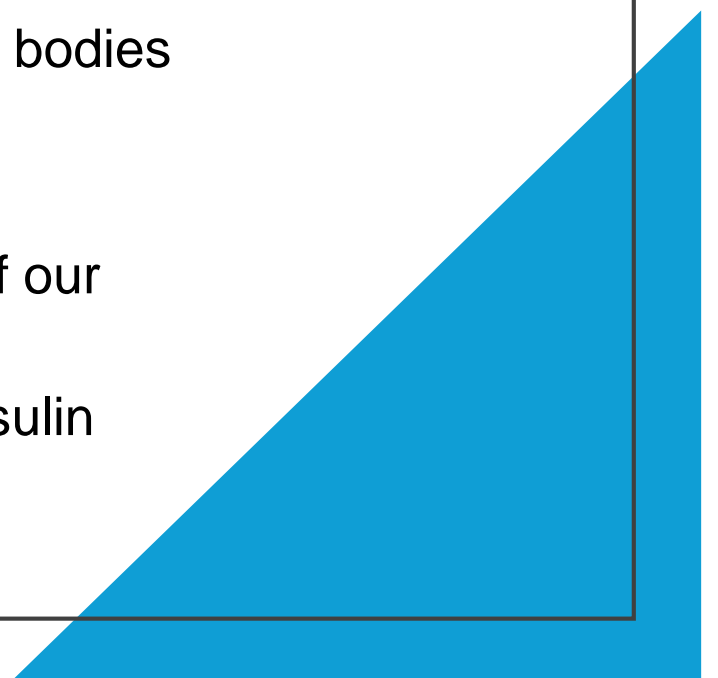
Next steps and helpful resources

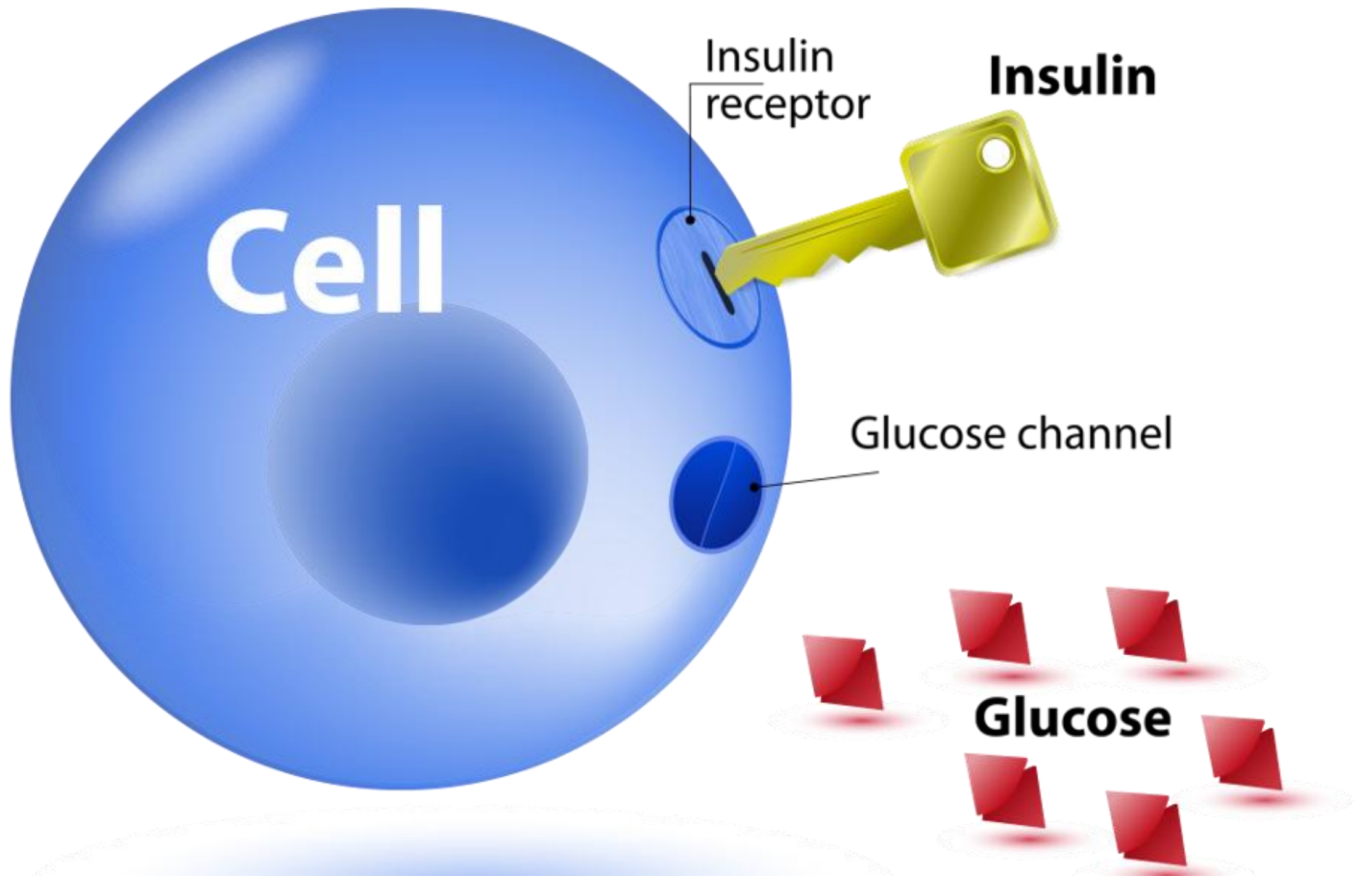
Aim of the Session

Increase your knowledge of how to prevent or delay the onset of Type 2 Diabetes.



What is Prediabetes?

- Pre-diabetes is a condition where the blood glucose (sugar) level is higher than normal but not high enough for a diagnosis of diabetes.
 - Any food/drink that contains carbohydrate is broken down in our bodies to glucose.
 - The glucose is then used by our cells for energy.
 - Insulin is produced by the pancreas to help glucose get inside of our cells.
 - In prediabetes, the glucose struggles to get inside of the cell (insulin resistance) and therefore glucose levels increase in the blood.
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Monitoring Prediabetes

An **HbA1c** test shows the amount of glucose that is attached to the red blood cells within the body. Red blood cells are renewed every 2 – 3 months so this test gives us an indication of blood glucose control over these 3 months.

- Healthy range = HbA1c <42mmol/mol
 - Prediabetic range = HbA1c 42-47.9mmol/mol
 - Type 2 Diabetes = HbA1c >48mmol/mol
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Prediabetes Risk Factors

Risk Factors we can change

- High blood pressure
- High cholesterol
- Central Obesity
- Being less active
- Diet

Risk factors we cannot change

- Ethnicity
- Family history of diabetes
- Gestational diabetes
- Getting older
- PCOS
- Use of steroids

Carbohydrates



STARCHY
CARBOHYDRATES



NATURAL SUGARS



REFINED SUGARS

Dietary Recommendations

- 1- Eat regularly
- 2- Include starchy carbohydrates at each meal
- 3- Eat less refined sugar
- 4- Opt for lower fat choices to reduce overall fat intake
- 5- Eat 5 portions of fruit and vegetables per day (80g/portion)
- 6- Include oily fish in diet
- 7- Reduce salt intake
- 8- Limit alcohol (<14 units per week)
- 9- Increase fibre intake



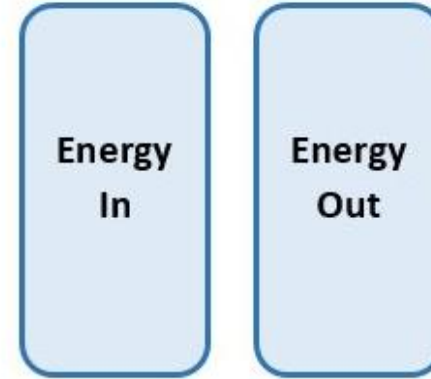


Weight Management and Prediabetes

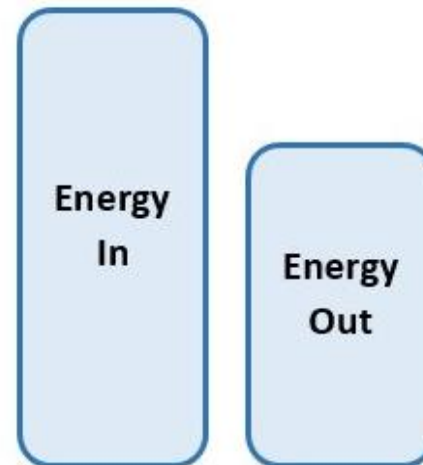
- **How can weight loss help to reduce your risk of developing type 2 diabetes?**
 - Extra weight around your waist (central obesity) means that fat can build up around your organs
 - The accumulation of this fat is associated to insulin resistance, which makes the insulin you produce work less effectively
 - Losing weight can help to make the insulin you produce work better
 - As a result, weight loss is often associated with an improvement to blood glucose levels.
- Making small changes to our food choices and activity levels can lead to slow steady weight loss and can help reduce your risk of developing type 2 diabetes.

Each nutrient provides us with different amounts of energy (calories) as follows-

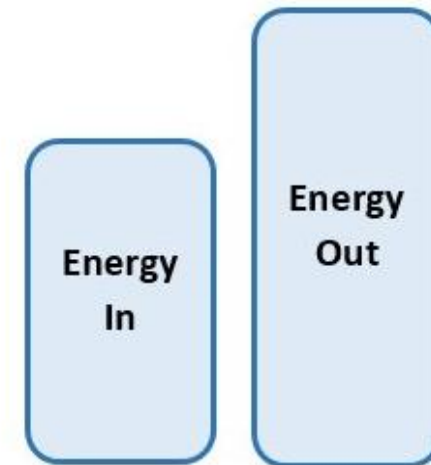
- Carbohydrate- 4kcal
- Protein- 4kcal
- Fat- 9kcal
- Alcohol- 7kcal



Energy Neutral = no change in weight



Energy Surplus = **weight gain**



Energy Deficit = **weight loss**

Weight Loss

A 100 calorie
increase/decrease per
day → 4-5 kg (8-
11lb) per year

Evidence suggests an energy deficit of approximately 600 calories each day is required to achieve a gradual weight loss of approx. 0.5-2lb per week.

5% weight loss has substantial health benefits and can help delay the development of Type 2 diabetes.



Physical Activity

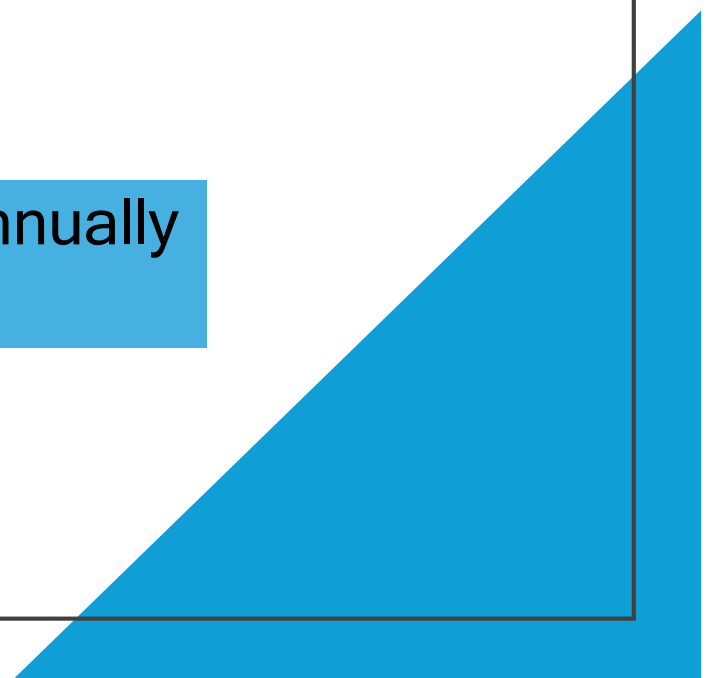
Increased daily activity can help you to -

- control your weight
- reduce your risk of heart disease, high blood pressure and stroke
- help control blood glucose levels and improve insulin resistance. It is also good for your mood, managing stress and getting better sleep.

Walking, swimming, gardening, housework, dancing and cycling are examples of ways of increasing your physical activity levels. It is important to note that any increase of movement/activity is a step in the right direction.

Next Steps and Helpful Resources

Monitoring- You should have a HbA1c test annually to measure your blood glucose levels.



Free 15-week weight management programme

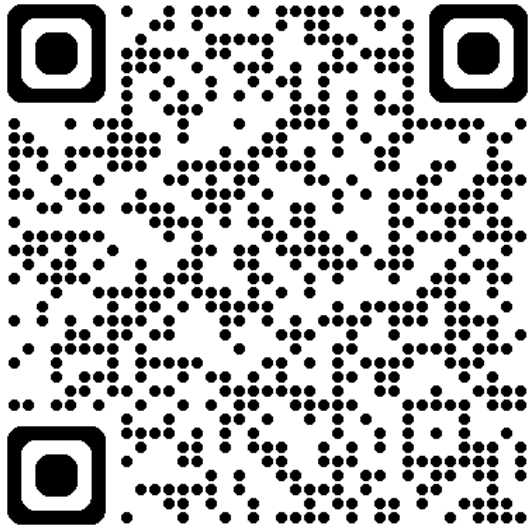
Weigh to go!

FREE

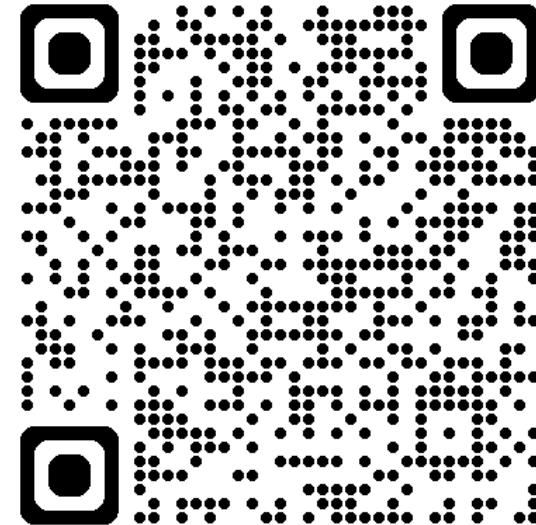


Helpful Resources

Diabetes UK
Website- Preventing
Type 2 Diabetes



My Diabetes My
Way Online Course



Lanarkshire Weight Management Service



Adult Healthy Weight



Child & Young Person Healthy
Weight



Weigh to Go



Mental Health & Wellbeing



Diet & Nutrition



Green Health



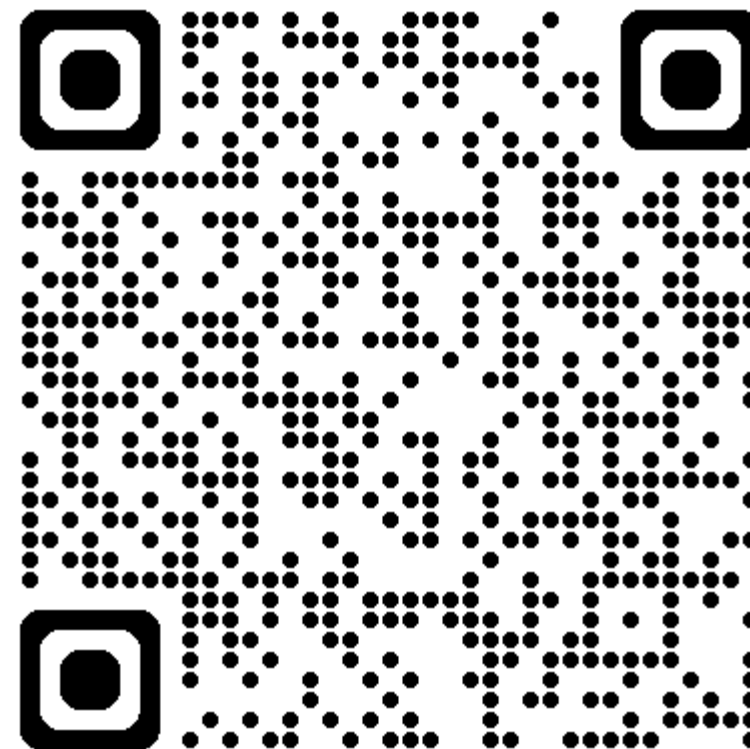
Prediabetes

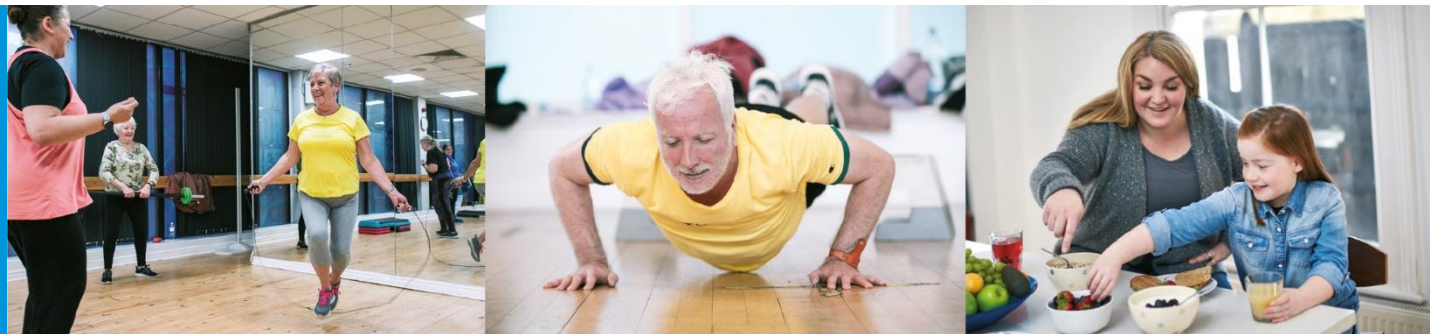


Weight Loss Medications



Physical Activity





Any Questions?



Questions from the event...

- **Use of GLP-1 medications for weight loss?** GLP-1 medications work by mimicking the natural release of hormones in the body and help to control appetite, slow digestion and support blood glucose control. These medications reduce appetite making you less inclined to eat when you are not hungry, and then in turn support you to maintain an energy (calorie) deficit. However, these medications work best when combined with healthy dietary choices, increased physical activity and long-term behaviour change strategies. [Weight Loss Medications | NHS Lanarkshire](#)
- **Irritable Bowel Syndrome** – British Dietetic Association food facts sheet for [Irritable bowel syndrome \(IBS\) and diet - BDA](#)
- **What would be the best fruits for less sugar and what are the ones to avoid with a lot of sugar?** Although fruit is a source of carbohydrate in our diet and is broken down into glucose, fruits are rich in vitamins, minerals, antioxidants and fibre, which are beneficial for our health. We should not cut fruit out of our diet, we should focus on portion size (80g of fruit/ 150ml fruit juices or smoothies) and spreading portions out across the day.

- **Does Fluoxetine cause weight gain?** Some antidepressants can affect appetite and weight but the effects can vary between individuals. However, Fluoxetine is not as strongly associated with weight gain as other antidepressant medications. If you have any concerns over medications you are currently prescribed, please discuss with your GP.
- **Would it be a good idea to only eat when hungry?** – Listening to hunger and fullness cues is a very helpful tool in weight management, but skipping meals can often lead to over eating later in the day. Adopting a regular eating pattern helps to keep your blood sugar levels well balanced throughout the day.
- **Is using a Libre blood glucose monitor helpful?** – Continuous blood glucose monitors such as Libre can be used to help understand blood glucose patterns and to show how different foods affect your blood glucose levels. However, this type of monitoring is not generally used for people living with prediabetes. In Scotland, this type of blood glucose monitoring is only available to those living with type 1 diabetes / some people with type 2 diabetes who meet eligibility guidelines.
- **I have an underactive thyroid does that affect your blood sugars?-** Having an underactive thyroid can slow down your metabolism, making your body less efficient at using the glucose found in your blood for energy. This can make your cells less responsive to insulin. Weight gain and changes in fat metabolism are also linked to this condition and can have an impact on blood glucose levels. Therefore, it is important to maintain a well-balanced diet and regular physical activity to help support insulin sensitivity.