Seren Structured Education for Type 2 Diabetes

CYP Welsh National Paediatric Diabetes Network

SEREN

Type 2 Diabetes at diagnosis workbook

1.3 Type 2 diabetes

Education and information

1.3.1 When giving children and young people, or their families or carers, information about type 2 diabetes:

- tailor the timing, content and delivery of information to their needs and preferences, paying particular attention to people with additional needs such as autistic people or those with learning disabilities, people who have physical or sensory disabilities and people who have difficulties speaking or reading English
- ensure that the information given supports shared decision making between the child or young person and the multidisciplinary diabetes team.

  Follow the recommendation in NICE's guideline on shared decision making and babies, children and young people's experience of healthcare. **[2023]**

1.3.2 Offer children and young people with type 2 diabetes and their families or carers a continuing programme of education from diagnosis. Include the following core topics:

- the importance of managing glucose levels, including achieving and maintaining glucose and HbA1c targets
- how and when to take capillary blood glucose measurements (self-
- how diet, increasing physical activity and reducing body weight can reduce the symptoms of type 2 diabetes and lead to remission
- how diet, physical activity, body weight and intercurrent illness affects blood glucose levels
- how metformin can help, and its possible adverse effects
- the complications of type 2 diabetes and how to prevent them.

1.3.3 Tailor the education programme to each child or young person with type 2 diabetes and their families or carers, taking account of issues such as:

- personal preferences
- emotional wellbeing
- age and maturity
- cultural considerations
- existing knowledge
- current and future social circumstances
- life goals. **[2015]**

1.3.4 Give children and young people with type 2 diabetes who are taking insulin, and their families or carers, information and education about:

Contents

Contents

Section 1: All about me and my family

Objectives

- Understand that **there are a range of emotions** that can be felt **following a diagnosis** of diabetes
- Understand that there are **different members of the diabetes team and roles**
- Share **information about themselves and their family / care givers**

Outcomes

- Identify feelings at diagnosis
- Identify diabetes team members and their roles
- Identify the role of my family / care givers in supporting me.
- Build a positive relationship with the team, based on mutual respect and understanding

Activity 1.3

My hobbies - continued

Fill in the section and answer the questions below to tell us what you like doing:

Things we do together as a family:

My activity is limited by:

I try to be active in some way every day:

True ☐ **False** ☐

I enjoy playing sport / taking part in physical activity

True ☐ **False** ☐

I try to be active in some way every day:

True ☐ **False** ☐

I usually try to be active for at least ☐ Minutes, every day.

Social Media / Phones/ Ipads/ Gaming / Computers

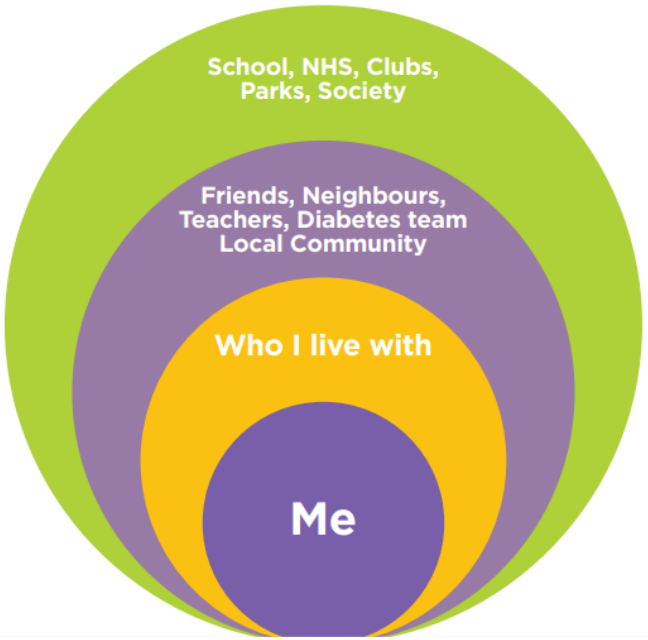
Quick Check!!

My screen time is usually around ☐ hours per day.

Being online in different ways can connect us and allow us to engage with our friends, teachers and family. It can be a great way to learn about things we like and also the world we live in. Sometimes we can get lost in the moment and before we know it hours have passed us by while we scroll online.

The Systems Around

- We are part of lots of different groups.
- The people we live with, extended family members, friends, neighbours, teachers, health teams and wider society.
- Being part of these groups make up who we are and the experiences we have.
- All of these groups can have an influence over the things we do and decisions we make.
- We can also have an influence over some of the groups too.



Activity 1.1

Who is around me?

Can you fill in this for you and the groups around you.

- How old are you, what are some of your favourite things?
- Who do you live?
- Who are some of your wider family, your friends, teacher, neighbours?
- What school do you go to? What clubs might you be part of?

Things that interest me/people I like to follow on Social media / online are

Do you know that the recommended screen time should be less then 2 hours a day?

TOP TIPS

- Aim to reduce your screen time by heading out for a walk or to catch up with friends at the park! Maybe leave your phone / tablet at home?

Team Member	Their role
Paediatric Diabetes Dietitian:	To help you learn more about the foods that affect your blood glucose levels and empower you and your family to make healthy food and lifestyle choices.
Paediatric Diabetes Doctor/Consultant:	Consultant led clinic appointments are every 3 months. Your consultant is responsible for your overall care and diabetes management.
Paediatric Diabetes Psychologist:	To help you understand your feelings and emotions
Paediatric Diabetes Specialist Nurse:	Will provided education around how to manage your diabetes such as giving an injection, wearing a sensor and checking a blood glucose along with linking with school and other agencies.

You might also be lucky enough to have other members in your diabetes team, such as a youth worker or a specialist pharmacist. These are part of what is called the

Self assessment Section 1:

All about me and my family

Name of educator: **Date of session:** / /

			
I understand that there are a range of emotions that can be felt following a diagnosis of type 2 diabetes.			
I know there are different team members in the diabetes team & I understand their roles			
I understand that with the support of my family and friends we can manage type 2 Diabetes			
How do you feel about looking after your diabetes?			
How do you feel about looking after your diabetes?			
What questions do you have?			

You are also likely to start on some medications to help improve your blood glucose levels and / or help your body's own insulin work better. Your Diabetes Team will discuss your individual needs and the medication options most suitable for you to manage your type 2 diabetes.

Not everyone will be on the same medications!

Can you tell us what happened before you were diagnosed with having diabetes?

How did you feel before diagnosis? Tick or add symptoms you were you having.

Thirsty

Feeling tired and finding it difficult to concentrate

Stubborn infections

Needing to go the toilet more frequently

Noticed changes to skin

Quiz: True / False

Insulin is produced by the pancreas?	**True** ☐	**False** ☐
Type 2 diabetes is managed just with medication?	**True** ☐	**False** ☐
Activity and healthy lifestyle choices help manage living with type 2 diabetes?	**True** ☐	**False** ☐
Insulin resistance is when the body isn't able to use the insulin it is making as effectively to help manage blood glucose levels?	**True** ☐	**False** ☐
Having diabetes means I can't do the same things as my friends?	**True** ☐	**False** ☐

Tests at diagnosis

You will have had some blood taken when you first came into hospital. Some of the tests take longer than others to come back from the laboratory, so it is likely that these results will be discussed with you when you see your diabetes team in clinic.

The tests that we carry out are:

HbA1c: This measures the amount of glucose in the blood over the last 3 months and is used to determine if you have diabetes, the target is 48mmols/ mol (This will be checked at each 3 monthly clinic appointment with your diabetes team.)

Antibodies: To check the type of diabetes that you have.

Routine Bloods: to check if you are dehydrated or that your blood is not too acidic

Urine sample

Some of these tests will be also checked when you come to diabetes clinic at your annual review.

Nutrients

Food consists of three main nutrients which provide the body with energy: carbohydrate, protein and fat. When you eat food, the nutrients are broken down into smaller building blocks.

Protein

- Meat
- Fish
- Eggs
- Cheese
- Nuts
- Soya

Amino acids
* Small effect on blood glucose

Fat

- Margarine
- Butter
- Oil
- Cream

Fatty acids
* Small effect on blood glucose

Carbohydrate

- Starchy foods e.g.
  - Bread
  - Pasta
  - Potatoes
- Natural and added sugar e.g.
  - Fruit
  - Milk
  - Sweets
  - Chocolate

Glucose
Increases blood glucose

*** Protein and fat can have a small effect on glucose levels. Your team may teach you more about this at a later stage**

List which vegetables you want to try at your next main meal?

.....

What counts as a portion?

Being mindful of your portions of food will make a big impact upon your health. There are simple ways to measure these below:

Carbohydrates:

- Cooked rice & pasta: **Use a flat open hand**
- Cooked Potatoes: **Use a clenched fist**
- Cooked Porridge: **Use two cupped hands.**

Protein:

- Cooked fish / chicken: **Use open hand.**
- Cooked red meat: **Use palm of hand.**
- Cooked lentils and Beans: **Use two cupped hands.**

Fats:

- Use sparingly

Sweets and treats:

- 2 packaged snacks a day- Max

KEY MESSAGES

- **Carbohydrate is an important nutrient needed for energy and growth. However, your dietitian may advise you on specific amounts which suit different peoples lifestyles**
- **The portion of carbohydrate served will impact your blood**

What barriers might I expect to come up against?

What might help to overcome these?

What happens is I don't meet my goal?

TOP TIPS

- **Re-visit your goal(s)**
- **Success is not everything- trying and working towards a goal is something to be proud of, even if you haven't achieved your exact goal**
- **Don't compare yourself to others. Your goals are individual to you**

You will revisit these goals with your diabetes team at your clinic appointments.

It is also important to remember that sometimes your goals might change and also not to feel that you have failed if you do not achieve what you initially have set out to in that time frame.

Metformin

This is a medication used to treat Type 2 diabetes

How does metformin help my diabetes?

Metformin works in a few different ways:

Metformin helps to lower your blood glucose levels by improving the way your body uses insulin. It also reduces the amount of glucose released from your liver.

How to take it:

It is best to take Metformin tablets with, or just after your meal.

- If you take it once a day then this should be with your main meal.
- If you take it twice a day then this should be with breakfast and your evening meal.

Are there any side effects?

Taking metformin with food will help to avoid you developing some of the possible side effects. These can be:

- Feeling sick
- Being sick
- Diarrhoea
- Stomach ache
- Metallic taste
- Loss of Appetite

Next Steps

- Reviewing draft and making changes
- Feedback from CYP and their families
- Family Day
- Translation
- Location of educational materials and access
- Ongoing assessment as the materials are used