Contents (note: there are blank pages within curriculum)

Monday	Tuesday	Wednesday	Thursday	Friday
First session 9am **Introduction to the course** **What is diabetes?** **Snacks**	First session **Discuss overnight blood glucose levels** **Hypoglycaemia**	First session **Discuss overnight blood glucose levels** **How to adjust insulin**	First session **Discuss overnight blood glucose levels** **Exercise [theory]**	First session **Discuss overnight blood glucose level** **Everyone discusses using KICk-OFF in school**
Break	Break	Break	Break	Break
<u>Second session 10.45am</u> **Signs and symptoms** **Insulin:- action, times, types** **Types of food and** **Carbohydrate Portion booklet and diary** **Insulin/CHO relationship**	**<u>Second session</u>** **Hypoglycaemia and KICk-OFF treatment continued** **Insulin /CHO ratio** **Work out CHO for packed lunch**	Second session **How to manage illness using KICk-OFF guidelines**	Second session **Exercise continued** **Healthy eating/weight control** **Sweets, treats and snacks** **Poster display** **Healthy eating lunch**	Second session **Alcohol** **Revision of CHO counting** **The teenage years,** **What happens next?** **Follow-up after the course** **Discuss school packs** **Recap weeks learning objectives** **Evaluation**
Lunch	Packed lunch	Lunch	Lunch	Lunch - buffet
<u>Third session 1pm</u> **Food labels** **Insulin/CHO relationship continued** **Introduction to correction doses** **Monitoring**	**<u>Third session</u>** **Practising counting grams of CHO + practical cookery**	Third session **Diabetes and long term health discussion** **Healthy lifestyle vs unhealthy**	Third session **Exercise - practical session.**	Third session **Parents discuss the KO course, follow-up care and continued support** **Students to do fun activity**
Break	Break	Break	Break	
<u>Fourth Session 2.30pm</u> **KICk-OFF quiz** **Recap objectives for the day** **Plan evening insulin dose** **Personal interviews**	**<u>Fourth Session</u>** **Practical session continued** **KO Quiz** **Recap objectives for the day** **Plan evening insulin dose**	**<u>Fourth Session</u>** **KO Quiz** **Students to plan evening insulin dose** **Recap objectives for the day**	**<u>Fourth Session</u>** **Post exercise discussion** **KO Quiz** **Recap objectives for the day**	<u>Continued</u> **Presentation to quiz winners** **Finish**

Assessment for learning tools to choose from

This can be done either formally or informally and at any time during the learning process. It does not have to be planned for within the curriculum. One of the following tools might be useful. They may be used to feedback to the learners where they are and how they carry on with their learning journey.

- **Traffic light cards**
  The students are asked how they feel about the current learning experience by showing:

Green	for confident
Yellow	for getting there
Red	for do not understand

- **Thumbs**
  The students are to indicate how they feel about the current learning experience by showing:

Thumbs up	for confident
In the middle	for getting there
Thumbs down	for do not understand

- **Quizzes within the theory book**
- **Question and answers picked by you to assess knowledge base.**
- **Observation of work completed either written or posters or role play**
- **Assessment can be done during the end of day personal interview**
- **Use of comments book for the course**
- **Learning objectives discussed at the end of the day**

Monday

Learning objectives for the day:

- Introduction to the course
- Agree ground rules for learning together
- Discuss: "What is diabetes?"
- Recognise signs and symptoms of diabetes
- Be aware of food groups/labels
- Introduction to CHO/insulin relationship
- Introduction to correction doses
- Blood testing
  - **W**hy is testing important?
  - **W**hen to test
  - **W**hat are we testing for?
- Take part in the KICk-OFF quiz

Today's programme

Session 1 **9am-10.30am**

Introduction to the course
What is diabetes?
Snacks

BREAK

Session 2 **10.45am-12.15pm**

Signs and symptoms.
Glucose/insulin/ketone relationship
Discuss food groups
Introduce insulin/CHO relationship

LUNCH

Session 3 **1pm-2.15pm**

Food labels
Correction doses
Monitoring BG for KICk-OFF course

BREAK

Session 4 **2.30pm-3.30pm**

Review the days objectives
KICk-OFF Quiz
Reminder sheets
HOME

MONDAY

Session 1:

Introduction

What is diabetes?

Learning objectives:

- To be introduced to the educators/visitors
- Ensure students are familiar with their surroundings
- Reiterate reasons for the course and the role of the student
- Ensure students are familiar with the treatment of a hypo
- Getting to know each other
- To have an understanding of "What is diabetes?"
- When to give insulin with snacks

Materials

- Patient pack:-
  Name cards, pen
  Food diary list
  Monitoring diary
  Theory booklet
  Children's workbook (CWB)
- Blue tack
- Clock
- Acetate of diary
- White board
- Scissors
- Sharps bin
- Cotton wool/tissues
- Flip chart and pens
- Programme page 1 CWB (Children's Workbook)
- Food models
- Hypo treatment poster (P1) and guidelines (P2)
- Lucozade drink and tablets
- Individual cartons of orange juice, cola (150ml-200ml)
- Plain and chocolate biscuits, snacks, fruit
- Glucogel/Glucotabs
- Name badges for educators and observers
- Visual aids, body board and magnets (x1)
- Large sheets of paper (x2)
- World map (P12)
- Celebrity pictures (with/without diabetes) (P11)

Students to bring:

- Meters/finger prickers
- Insulin and pens/syringes
- Contact numbers
- Consent needs signing for photos and travel

Educators	Nurse and dietitian
Preparation	Give out course information and show to their seat. Set up the room with overhead projector, drinks and snacks. Play music or radio (so no one feels uncomfortable if the room is quiet). Hypo treatment on the table. Flip chart and pens. Put up pictures around room (P11) and map (P12). Have activities on the table whilst waiting to start the day (word search). Set up area to display word bank

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
9am **9.04am** **9.10am**	**Introduction** Introduce the team members and observers and explain their role during the week **Ask:** **Students to introduce themselves and make their own name place card** This can be done in pairs **Explain:** **The lay out of the environment** ❑ location of the toilets, ❑ kitchen, ❑ fire exits and alarm ❑ drinks and snacks **Explain hypo treatment:** We expect you will all feel hypo at some point during the week due to the changes to your normal regime. Please take time to look at the hypo poster and information in your packs and follow the instructions even when you are at home. We will discuss this in more detail during the week. **(Show them where the hypo treatment is)** If you feel hypo we would like you to do a blood test first and record the result. **(check everyone knows which is the diary in the pack)** This information will help to build up a picture of your own individual insulin requirements. **Ensure** an educator helps in the treatment of a hypo until you have been through the advice and are happy with what to do	**Response:** Student to know who is in the team and who will be observing **Response:** Students to state name, age and school, how long they have had diabetes and make name place **Response:** Students to feel safe in their environment **Response:** Group to feel happy about doing a blood test if they feel hypo, informing the educator who will then help with treatment	❑ Word search ❑ Name badges for team and observers ❑ Badges, pens, card ❑ Sharps bin ❑ Poster display of hypo treatment and guidelines (P1 & P2) ❑ Show the treatment box to the group ❑ Students pack Theory booklet Diary Food diary Name card Pen Work book

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
9.15am	**Explain:** **The background to the KICk-OFF course for 11-16 year olds** KICk-OFF course has been modelled from the adult DAFNE course which has been running for over 10 years and is based on the teaching course run in Germany. It has been trialled within the UK – results 2013	**Response:** Students to have time to think about what KICk-OFF course is.	❑ Poster display of "Aims and learning objectives for the course." (P3) ❑ CWB ❑ Poster display of "This week is about...." (P4) ❑ "Learning objectives for day 1" (P5) ❑ Blood glucose graphs
9.16am	**Explain:** **Our aims and objectives for the course** (P3) We hope that the course will enable you to learn the skills needed to adjust your insulin dose more closely in line with the food you choose to eat and at a time that suits you. See poster "This week is about..." (P4) We hope that this course will enable you to become more independent but at the same time have more control over your diabetes, resulting in better blood glucose levels.	**Response:** Students to be aware of the aims and objectives for the week.	
9.20am	**Show and explain:** The programme for the week in the work book (pge 1) and what is included in their pack. Students to write their names on the booklets and look at graphs - set BG target **Go through the course learning objectives for the first day (P5)** (Poster display on the wall.) **Explain:** **What the role of the student will be:** It is your responsibility to use this week to find a way of managing your diabetes in a way that suits your lifestyle. We would like you to: Ask questions if you are unsure about what we are teaching Take part in the planned activities, as much as you feel able to. Think about your reasons for joining this course. (This will be discussed again shortly).	**Response:** Students to identify any problems with the programme or transport **Response:** Look at the aims and objectives for day 1	

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
	Discuss, explain and show the material to be used for the school. Often people need support at school with their diabetes. You will take away after the course an information pack/display that can be used in school to inform pupils and teaching staff about the new skills you have learnt and to inform them about diabetes.	**Response:** Ask questions Look at school pack and separate forms to be filled in related to hypo treatment	❑ Overhead projector ❑ "Working together" students sheets ❑ "Working together" Educators work book page 2 (EWB) ❑ Flip chart paper for headings ❑ Marker pens ❑ Postcards x 12 ❑ School pack and hypo sheet
9.25am	**Explain:** The importance of establishing ground rules so that everyone is comfortable with the working environment for the week. Give out worksheet "Working together"		
9.30am	**Ask:** **Students to complete the sentence starters** This is related to what they do and do not want within the group during the week. This is to be done individually/in silence (they need not put their names on). Allow 5 mins to do this. An educator should then collect these sheets in and collate information on a flipchart under the following headings (list in EWB page 2): We DO want people to…… We DON'T want people to…….. By the end of the week we hope to be able to.....	**Response:** Fill in sheets individually	
9.35am	**Explain to the students:** Icebreaker game. The aims of this are to get the group relaxed with each other by talking about themselves in a non-threatening activity and to encourage listening skills. **Hand out a pen and postcard and ask to divide it into 4 sections** Students to write down 4 things about themselves (1 in each box). BUT 3 things must be true and 1 must be a lie. (Allow 3 minutes to do this)		

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
	Encourage them to be as imaginative as possible to try to fool the rest of the group into not guessing their lie. Write example on flip chart. When each student has completed his/her card (Facilitator also fills in a card to join in with the game) students wander round to find a 'partner' and then take turns to read out the statements to their partner for him/her to guess the lie. They must meet everyone. At the end collect in pens/postcards and get everyone seated again, ready to discuss the ground rules. (10 mins)	**Response:** Each student to split card into 4 for the exercise Choose someone different each time to say a statement to and listen to theirs and guess the truth or lie	❑ Word bank R1 ❑ Flip chart with headings related to "working together sheets" and students statements written down for discussion
9.50am	**GROUND RULES** Using the flipchart, display the groups' own rules and expectations. Facilitator should go through each statement ensuring everyone understands what each point means and are happy to adhere to it. During discussion, ask group if they feel there are any obvious omissions, which can be added to the flipchart (with group agreement). The facilitator should also ensure that any omissions (e.g. issues about confidentiality) are added but only after priority is giving to discussion of the group's rules so they feel ownership. The rules should remain on display all week and referred to as necessary.	**Response:** Students to observe their collated statements and add any others	
9.53am	**Word bank explanation** Explain that the word bank (R1) is used to display words or terms used during the week that are confusing or hard to remember. Educators will post up words but the students may also suggest adding words they do not understand	**Response:** Students to know where and how the word bank is to be used	

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
9.55am **10.05am**	**Explain:** For the next half an hour we are thinking about "What is diabetes?" Split the group into 2 teams to look at where certain organs are in the body. Place 2 large sheets of paper on the floor and ask them to draw round the outline of one person. **Ask:** **Draw the following organs in the correct place:-** Heart, lungs, brain, kidneys, pancreas, intestines, bladder and liver (picture cards may be used to help R2) Check this is correct before moving on to the next activity. Use the body board to go through the answers. **Ask:** **Now we have an idea about where the main organs are in the body. Who can explain "what is diabetes?"** **Ask** **How much glucose should be in the blood stream if you do not have diabetes?** **Ask:** **How does the body sense that more insulin is needed to keep the blood glucose level normal?** Use the body board to explain the release of insulin.	**Response:** Each group to draw round one person **Response:** Draw in the organs listed **Response:** It is a condition whereby the body cannot control the amount of glucose in the blood. This is due to a complete or partial lack of insulin **Response:** Between 3.5-7mmol/L **Response:** Pancreas is like a blood glucose meter. It senses when the level of glucose in the blood stream is too high. When this happens more insulin is released.	❑ Large sheets of paper ❑ Marker pens ❑ Body board and magnets ❑ Pictures of main organs (R2)

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
10.10am	Ask: **What are the other jobs of insulin?** Display the poster (P6): CARBOHYDRATE=GLUCOSE=SUGAR **Ask:** **Where does glucose come from?** (Identify the glucose symbol P7) **Ask:** **How does glucose enter the blood stream?** Show the answer using the body board. **Ask:** **Where does the glucose go?** Use the symbols (glucose P7, insulin P8, cells P9, energy P10) to explain the process by displaying them on the wall **Ask:** **What is glucose used for?** **Explain:** Energy is needed for us to do our usual day to day activities. Some days we require more energy than others (give examples). It is like putting fuel in a car, without petrol the car will not run properly.	**Response:** Insulin helps to store spare glucose in the liver (sugar bank) and muscles. **Response**: From the carbohydrate containing foods we eat or drink **Response:** The food we eat is broken down by our chewing action and by chemicals in the stomach and guts. Glucose is then released into the blood stream. **Response:** The glucose travels to the cells in the body that need it. It enters the cell with the help of the insulin key **Response:** The cell uses glucose for energy	❑ P6 names related to sugar ❑ P7 Glucose/sugar symbol ❑ Body board and magnets ❑ P8, P9, P10 insulin, cell and energy symbols

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
10.20am	**Ask:** **What happens to the spare glucose we eat?** Show using body board, storage of glucose in muscles, fat or liver (use word bank for glucogen) Students to then watch the 5 min video explaining what is diabetes (if available). **Note to educators:** For the next exercise write out the statement "In your type of diabetes there are …… young people under the age of 19 years in (town)……." Put up the map of the world with red, yellow, green stickers to use. Put up pictures of people with and without diabetes around the room with post-it notes for children. **Explain:** Now we would like you to do some work posted up around the room and in your theory books to test what you know about diabetes. Around the room are pictures of people with and without diabetes. We would like you to put a post-it note on the pictures of people you think have diabetes. We would also like you to guess how many people have your type of diabetes in your area and put your answer on a post-it next to the question on the flip chart paper. Then look at the map of the world and using stickers mark where in the world people may have a greater chance of getting diabetes. Use red for very high, yellow for high, green for lower risk. The rest of the questions are on page 6 in the theory book for you to complete. We will then go through the answers and any questions you may have. (allow 10-15 mins)	**Response:** Spare glucose is stored in the muscles and liver as glycogen or as fat **Response** **Watch short video clip (if available)** **Response:** Complete tasks either individually or in pairs	❑ Body board and symbols ❑ Carbohydrate=glucose=sugar poster (P6) ❑ Theory book ❑ Laptop ❑ Flip chart paper with question "in your type of diabetes there are …… young people under the age of 19 years in (town)……." ❑ Post-it notes white, ❑ Pictures of people with and without diabetes (P11) ❑ Red, yellow, green stickers ❑ Map of the world highlighting incidence of diabetes (P12) ❑ Video clip from DUK what is diabetes saved under Monday ❑ Word bank

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
10.30am	**All come back together to go through the answers and ask:** **Who can get diabetes?** Look at the photos of people around the room and comment on who has diabetes and who does not have it. **Ask:** **What type of diabetes do you have?** **Explain:** There are different types of diabetes each treated differently. In your type of diabetes we have …… people under the age of 19 years in ……. (Local numbers included here). Look at students answers on the flip chart. In a school of 1400 there may be 3-4 people with diabetes. Some countries have a lot of young people with diabetes some have very few. **Ask:** **Do you know what they are looking at in their research to find out why people get diabetes?** **Age.** Under 40 years is more common for type 1. **Environment.** Look at the world map and comment on the students stickers. Explain for some reason still being researched some areas of the world place people at greater risk of getting diabetes than in other countries. It is known that there are places in the world e.g. Finland that have a greater number of people with diabetes. So it is thought that perhaps our environment and how we live puts some of us at a greater threat of getting diabetes	**Response:** Anyone can get diabetes at any age. You cannot tell from looking at a person if they have diabetes or not. **Response:** Type 1 diabetes **Response:** ❑ Age ❑ Environment ❑ Family history ❑ Viral infections e.g. stomach upsets/sickness and diarrhoea infections	

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
	Family history Some people have members in their family with diabetes. This does not mean that you will definitely give diabetes to your children. Include up to date ratio …6:100……(if dad has diabetes) **Viral Infections** Infections may cause the body to attack the insulin producing cells no one knows why this happens. You cannot prevent it. A lot of research is being done to try to find out the causes of this. **Ask:** **So if someone asks you why do you think you got diabetes? What will you say?** **The other questions people may ask are:** **1. Can you catch diabetes?** **2. Does eating too many sweets cause diabetes?** **3. Can stress cause diabetes?** **Reminder to the group** It is not your fault or anyone else's that you have diabetes.	**Response:** There are no known causes of type 1 diabetes. There is a lot of research happening into why some people get diabetes and others do not. **Your response would be:** **Response:** No, you cannot directly give diabetes to anyone **Response:** No **Response:** No	

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
10.40am	**Explain:** We have discussed the level of glucose that should be in the blood stream if you do not have diabetes. **Ask:** **Because you do have diabetes what level do you try to keep your blood glucose at?** This can be difficult to achieve all the time. The KO principles recommend these targets (show P13) as a guide for maintaining good diabetes control. We will discuss later in the week why this is so important. **Ask:** **Are there any questions?** **Explain:** Just before we have a break we want to explain about snacks and insulin. You do not need to have a snack but if you do want one then we have a selection on offer. In KO we advise you to give insulin with snacks containing 10g or more of CHO. Giving 1 unit of QA insulin with every 10g CHO. We will help you to decide if you need insulin or not. If your snack is less than 10g CHO you do not need insulin but if you decide to have another snack ,10g you will need to take insulin We have a choice of different sizes of snacks less than 10g **Breaktime** **This will vary depending on the level of ability of the group. It may be they want a break after diabetes and incidence page 11**	**Response:** Students to give their preferred blood glucose level and look at recommendations. These could be written on the graph **Response:** Students to ask questions	❑ Theory booklet ❑ Blood glucose target range P13 4-7 mmol/L before breakfast 4-7 mmol/L before other meals 5-8 mmol/L before bed 5-8 over night ❑ Selection of snacks ❑ BG graph

Monday

Session 2:

- **Signs and symptoms**
- **Insulin action**
- **Food models**
- **Insulin/CHO ratio**

Learning objectives:

- Discuss the signs and symptoms of diabetes
- Have a better understanding about insulin action, timings and types
- Be able to identify the different food groups
- To be introduced to insulin/CHO relationship

Materials

- White board
- Flip chart/pens
- Cards with signs and symptoms of diabetes and explanation on the back (R3)
- Food models
- Food picture plates
- Card definitions fat, CHO, protein (R4)
- Poster of 1 unit QA insulin to 10g CHO (P14)
- Scales
- Eatwell plate
- Pictures of people with weight issues (P15)
- Calculators
- Diaries
- 10g CHO examples of food already weighed out
- Insulin vials for demonstration,
- Injection devices (pens, syringes, pump), ID cards/necklaces
- Cards of all insulin names (R5)
- Insulin ratio cards (R6)

Educators	Nurse and dietitian		
Preparation	All the materials available for the session. Set up the room with overhead. Hypo equipment on the table Flip chart and pens. Set up table with samples of food for students to guess CHO content		
TIME	**EDUCATOR ACTIVITY**	**STUDENT ACTIVITY**	**MATERIALS**
10.45am	**Explain:** In this session we are going to continue discussing the signs and symptoms of diabetes and start to look at carbohydrate containing foods and how much insulin to give. **Ask:** **What signs and symptoms did you have at diagnosis?** Write answers on the board or each person to write on a post-it and put on flip chart. **Ask:** **What was your blood glucose level when you were diagnosed?** **Ask:** **The group to find one card from the signs and symptoms cards that has one of the symptoms they had when they were diagnosed.** (R3) **Discuss:** The reason for the signs and symptoms with the group using the body board. **Ask:** **Each student to read out an explanation for each symptom.**	**Response:** Students to give answers **Response:** Students to give answers if they can remember **Response:** Each student to find one card **Response:** ❑ Tired ❑ Frequency ❑ Thirsty ❑ Weight loss ❑ Vomiting/infection ❑ Loss of appetite	❑ Definition/picture cards for signs and symptoms of diabetes (R3) ❑ Body board ❑ Theory booklet ❑ Flip chart paper ❑ Post-it notes

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
10.50am **11am**	**Explain:** As the level of glucose rises within the blood stream the pancreas normally produces a measured amount of insulin to transport the glucose into the body cells. If there is not enough insulin in the body then a person may experience one or more of the mentioned signs and symptoms. This is a direct result of a lack of insulin in the body. Other signs are ketones and or glucose in the urine. **Ask:** **Are there any questions?** Recap using the second half of the video clip to reinforce the signs and symptoms (if available) . **Ask:** **Students to complete the quiz from page 6, 8 and 10 in the theory booklet.** They can do this in pairs (5 mins). Then go through the answers (AFL) **Explain:** We have discussed that insulin is the only treatment for type 1 diabetes and there are many different types of insulin available. Let's think about the types and action of insulin you use. There are several drug companies that make insulin they all do a similar job but have a different name. Just like clothes designers have their own labels. **Ask:** **What insulin names do you know?** Place insulin card names on table to help them to remember their insulin. R5 **Explain:** Insulin's have different action times and are generally known as "very quick acting (bolus)" or "long acting" (basal) Insulin	**Response:** ❑ Watch video clip (if available) ❑ Ask questions **Response:** ❑ Answer quiz questions **Response:** Children to write the names on a post it note and put on flip chart	❑ Theory book ❑ Insulin card names R5 ❑ Post-it notes ❑ DUK video clip about type 1 diabetes

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
11.05am	**Ask:** **From the list of insulins you have identified choose a group for them** **Note**: Educator to have 2 headings very quick (bolus) and long acting (basal) then read out insulin names and the students say which group to put them in. If the students have mentioned any of the older insulins make extra headings for quick and medium acting vs very quick and long acting. (If none of the older insulins are named don't confuse them by discussing). **Explain:** There are different action times for insulin depending on the job you want the insulin to do. Look on page 13 in the theory book and discuss the types of insulin the group use. They may add there own insulin time in the blank chart	**Response:** Stick name of insulin in the correct group **Response:** Group to look at page 13 and discuss their insulin action times	❑ Flip chart paper with 2 headings written on "very quick" and "long acting" ❑ Theory book page 13 or drawings of regimens on the flip charts ❑ Diaries
11.10am	**Ask:** **How many injections a day do you need to have?** **Explain:** This regimen is called basal bolus or MDI (multiple dose injections) In KO we teach that all meals/snacks with 10g or more of CHO need insulin. We will discuss in more detail during the week different ways of deciding when to give this food insulin. It is also important to make sure you have enough insulin working when the very quick acting insulin has finished its job. There are also ways of checking that this dose is correct and we will also teach you how to do this.	**Response:** 4-5 injections per day Very quick (bolus) with meals and snacks and long acting (basal) to maintain the blood glucose in between meals.	

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
	Ask: **What are the pros and cons for this type of regimen?** **What are the hardest things about this regime?**	**Response:** **Cons for basal bolus regime** ❑ More injections ❑ More blood tests ❑ More thought to work out insulin dose ❑ Injections at school **Pros** ❑ Eat what you want when you want ❑ More flexibility ❑ Better weight control if healthy diet followed ❑ Better blood glucose control ❑ Less hypos ❑ Less hypers ❑ Better control around exercise	❑ Flip chart ❑ Pens
11.15am	**Ask:** **Do you have any comments?** **Explain**: We have briefly discussed that KO is about matching the right amount of CHO to the correct insulin dose. If you have not done this before then we are going to start today to learn about counting how much CHO you are eating and how much insulin to give. If you do know how to count CHO and match with insulin then you may continue with your current regimen and this week will be about checking you have the correct dose of insulin for the CHO you eat.	**Response:** Students to make comments	

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
	Explain the ratio the group will start with for the course (unless they already have one): 1 unit of meal insulin (very quick acting insulin) per 10g CHO, (some will stay on their existing ratios). Show P14. Give out the cards that help to work out insulin dose. If some students are on a higher ratio give them both cards. R6	**Response:** Look at insulin/CHO ratio	❑ 1 unit of quick/meal insulin per 10g CHO (P14) ❑ Theory booklet ❑ Insulin to CHO ratio cards R6 ❑ CWB
	Ask: **Does everyone understand this ratio and what is meant by very quick/meal insulin?**	**Response**: Students to respond	
11.30am	**Explain:** Go to page 2 in CWB and explain how to work out the insulin dose for the CHO to be eaten on a 1:10 ratio. Then let the students practise on 2 examples then feedback the answers (15mins)	**Response:** Complete work sheet and feedback answers as a group	
11.45am	**Ask:** **To check your understanding about what we have just discussed please fill in the quiz questions on page 15 in the theory book (AFL)**		
11.50am	**Explain:** KICk-OFF is about matching insulin to CHO containing food, so we need to be sure which food raises blood glucose and therefore needs insulin		

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
12noon	**Ask:** **In pairs look at the 3 food group headings. Fat, Protein, CHO** (R4) **Ask:** **Each pair to give an example for each group and why it is important to the body hence the need for a varied diet** **Ask:** **2 people to choose plastic food and place in the correct group. Correct any mistakes and discuss the need for these 3 groups and their function** **Explain using the eatwell plate**: The amounts we should eat with each meal and why it is important to eat healthily and regularly. Use pictures to discuss causes of obesity/weight issues. (P15) **Ask:** **Now take out the food diary and look up the foods on page 3 in CWB writing down CHO content.** Then looking at P14 and using the insulin CHO ration cards R6 decide how much very quick acting insulin you would give for: 1 medium apple small tin of macaroni cheese 35g of brown rice cooked **Educator** Show how to write down CHO content of meal in diary	**Response:** Think about the 3 groups **Response:** Choose a food for each group explaining why we need to eat this type of food **Response:** Fat, protein and carbohydrate foods to be placed in correct group **Response** Use food diary to see how much CHO is contained in the foods. Insulin dose for: 1medium apple = 1.5 units Small tin of macaroni cheese = 3 units 35g brown rice cooked = 1unit **Response;** Observe how to write CHO content of meal	❑ Pictures of people with weight issues (P15) ❑ Food diary ❑ Plastic food ❑ Eatwell plate ❑ Calculator ❑ Cards showing fat, protein and carbohydrate (R4) ❑ Poster - 1 unit QA insulin per 10g CHO (P14) ❑ Workbook ❑ Insulin to CHO ratio cards (R6)

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
12.05pm	**Ask:** **Students to stand around the table looking at the display of food and put a post-it next to the foods they think have 10-12g CHO** **Discuss**: The students answers **Explain:** That food may have a different weight, texture, taste (sweet vs savoury) but the same CHO value. **Discuss correction doses** Just before lunch lets look at correction doses when the blood glucose is out of the target range pre-meal. Look at the blood glucose target range. (P13) Show on on flip chart CHO/insulin action on BG **Explain:** In general 10g CHO raises BG by 2-3 mmol/L, 1 unit of insulin lowers it by 2-3 mmol/L. With practise you will find out how 1 unit of QA insulin affects your blood glucose. But start by taking 1 unit to lower the BG by 3mmol/L, unless an alternative dose has been discussed with the diabetes team at the start of the course. We will practise this again after lunch **Ask:** **Any Questions?**	**Response:** Look at food weighed out and place a post-it next to the foods you think contain 10-12g CHO **Response:** Discuss answers **Response:** Students to question any part of this session	❑ Examples of 10g CHO of food:- Dry rice 40g (1tablespoon) 1 cereal bar 3 sugar cubes 3 Dextrose tablets 55-60ml Lucozade 100ml Coke 14g dry pasta 3 chunks of Cadbury's milk Chocolate 1 apple 2 satsumas Small bag of crisps from multipack Thin slice of bread ❑ Blood glucose target P13

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
12.15pm	**Recap incorporating an assessment for learning tool to help assess the mornings work. Page 2 in curriculum** **Ask:** Group to look at quiz questions in theory booklet on "Food, Diabetes and KO" page 19. Allow 5 mins to complete then feed back the answers Educators to note if anyone is still not sure about types of food and using the CHO diary, so the student may receive further guidance **Lunch Break 45 mins** All do a blood test. Correction doses will be given to children whose blood glucose falls outside of the KICk-OFF range of pre-meal blood sugars. This is discussed in the next session so the nurse/dietitian will give the advice. Show the students how to write it in their diary Educators to help the children work out their insulin dose with their food choice. **NOTE:** A lot of help is needed with this first meal as some of the information has not been discussed as yet. The children just need to choose their meal and observe how the educators work out the CHO amount and insulin dose. This is also a chance to check injection sites and technique as well as the meter they use. The theory booklet can be used to reinforce where to do injections in chapter on "Tools of the Trade," Page 39	**Response:** Complete the quiz questions and feedback answers **Response** Write down their insulin dose and CHO amount in diary with help from educators	❑ Diary ❑ Theory booklet ❑ Assessment for learning page 2 in curriculum

Monday

Session 3:

Insulin and CHO relationship continued

Correction doses

Monitoring

Learning Objectives:

- Understanding food labels. What do they mean?
- Practise insulin and CHO relationship
- Explore when to use correction doses
- Explore why blood glucose testing is important
- Explore when to test your blood glucose

Materials

- Diaries
- Meters
- Test strips
- Insulin pens
- White board
- Marker pens
- Ketostix
- Glucose sticks for urine
- Poster of blood glucose ranges (P13)
- Correction dose exercises in work book
- Food models
- Food labels
- Calculators
- CHO estimation and insulin dose 1:10 ratio in CWB

Educators	Dietitian/nurse
Preparation	Need flip chart, Food labels or packs of food, calculators, pens paper, sample of meters and strips and urine strips. Place food labels or packs of food on 2 tables each student needs to have pen and paper. Music may be played in the background as they complete activities to try and give a more relaxed environment for the afternoon

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
1pm	**Introduction to the afternoon:** This afternoon we are going to look at food labels and what we need to know about them. Then practise how to do correction doses and explore why testing is important. **Explain:** Food labels have lots of information on them to inform us what is in the food we are eating. They can be misleading at times. For the purpose of this exercise we are interested in the CHO content of the food. Sometimes the label gives us an amount for the whole food and we have to work out the portion we want and sometimes it gives us per portion. But today we are going to look at which number on the label is related to the CHO content of the food. Tomorrow we will work out how to calculate your portion size. **Show** the group a sample of 5 labels and explain where the CHO total is.	**Response:** Look at food labels to find out where the CHO total is	❑ Food labels and packs of food ❑ Pens and paper ❑ Work book ❑ Theory book ❑ Food diary ❑ calculators
1.05pm	**Ask:** **Split into 2 groups around 2 tables with food labels displayed. Each student either on their own or in pairs write down the total amount of CHO in that food and CHO content per 100g if available.** Educator checks their understanding of labels Note: Educators to make a note of anyone not understanding food labels. So more individual time can be given in future activities around this topic.	**Response:** Look at the food labels and write down the total CHO content for the portion or per 100g	

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
1.25pm	**Ask:** **In pairs or on their own (educator to decide) complete the worksheets on CHO estimation and insulin dose on a 1:10 ratio page 5 in the workbook**	**Response**: Fill in worksheet	❑ Diary ❑ OHP ❑ Work book
1.35pm	**Ask:** **the group to feed back the answers.** Observe if everyone has given a correct answer **Explain:** Checking your blood glucose level is a major part of managing diabetes. We are going to spend a few minutes thinking about why and when you should be checking your blood glucose level	**Response:** Feedback answers	
1.45pm	**Ask:** **Is blood testing important to you?** **Ask:** **Why do you think blood and urine testing are important?** Educator to choose a person to write up answer on the flip chart. **Explain:** Regular blood testing (at least 4 blood tests per day) helps to work out how much insulin is needed with food, around activities and during times of illness as well as checking your BGL are still in your target range. The body works best when BGL are normal. During times of illness or high blood glucose readings it is important to check the urine for chemicals called ketones. We will learn more about these on Wednesday. The point of all this testing is to achieve better blood glucose control and feel well.	**Response:** Give own views **Response:** ❑ Assess how much insulin to give ❑ Diagnose a hypo if necessary ❑ Before doing any activities ❑ During illness to prevent DKA ❑ Monitor control to prevent complications ❑ To pick up any patterns of poor control	

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
1.50pm **2.05pm**	**Ask:** **What blood glucose level should you be aiming for?** (Poster (P13) values also in the diary) ❑ Before breakfast? ❑ Before other meals? ❑ Before bed? ❑ Over night? **Discuss:** If your BGL is outside this target range then a correction dose may be given. 1 unit QA insulin may bring down the BGL by 2-3mmol/L. But with practise you will find out what works for you. **Show** Example R7 then ask them to do exercise on page 4 in CWB **Explain:** We are now going to practise together how to work out a correction dose. Look at pages 6 in the CWB (Answers in the educators work book page 7-8) **Ask:** **How do we monitor your diabetes control?** Look at page 34 in theory book for information related to HbA1 **Explain**: What HbA1 measures is how much glucose is stuck to the red blood cell over the past 10-12 weeks. Therefore the more glucose in the blood during the past 12 weeks the higher the result. Add this word to the word bank wall	**Response** ❑ 4-7 mmol/L before breakfast ❑ 4-7 mmol/L before other meals ❑ 5-8mmol/L before bed ❑ 5 - 8 mmol/L over night **Response:** Complete exercise page 4 in CWB **Response** Work together to answer questions on correction doses **Response** Blood test to check average glucose level	❑ Example on how to do correction dose R7 ❑ Correction dose practise work sheets page 4 (answer page 4 EWB) and 6 in CWB ❑ OHP work sheet R8 on correction doses answers also in EWB page 7-8 ❑ Display blood glucose levels poster (P13) ❑ Word bank ❑ Theory book

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
	Ask: **What is the normal range if you do not have diabetes?** This varies in different areas **Ask:** **What level should you aim for?** **Ask:** **How often should your HbA1 be checked?** **Ask:** **What should you do with the blood test/urine results you do?** Check all OK with recording BG and CHO amount in the diary. **Recap session by asking:** **When should you do a test?** Again emphasise this will mean doing over 4 blood tests per day. **Ask:** **What else do you check for during illness?** Explain ketones will be discussed later in week **Ask:** **Do you have any concerns about monitoring or correction doses?** Make notes of any comments and discuss briefly but stress that this will be dealt with in more detail later in the week. Are they all ok with their meter? This can be changed at the end of the day if a new one is available.	**Response** < 48mmol/mol - 6.5% **Response:** < 58mmol/mol - 7.5% **Response**: Every 3 months **Response:** ❑ Record it in the diary ❑ Decide which/how much insulin to give **Response:** ❑ Pre meal to decide on insulin dose ❑ Before and after exercise ❑ During illness ❑ To determine a hypo ❑ To check blood glucose control within target range throughout day and during night ❑ Before bed **Response:** Ketones **Response:** Students to express concerns	❑ Use flip /pens to write down their answers and worries. ❑ Diary
2.15pm	**Break-time** Insulin needed if eating over 10g CHO		

Monday	Learning objectives	Materials
Session 4: **KICk-OFF quiz** **Plan insulin dose**	✦ Review the day's experiences ✦ Quiz assessment of learning	❑ KICk-OFF quiz box: Questions for educator Bell Prize for winner at end of week ❑ Pens ❑ Laptop ❑ Theory booklet ❑ Poster of "Learning objectives for day 1" (P5) ❑ White boards and pens

Educators	Nurse and dietitian		
Preparation	KICk-OFF quiz instructions. Cards ready for questions. Chairs in 2 groups, flip chart and pens. Leave music on		
TIME	**EDUCATOR ACTIVITY**	**STUDENT ACTIVITY**	**MATERIALS**
2.30pm **2.50pm** **3.10pm** **3.30pm**	**Review the objectives for day 1 (P5)** **Ask after each objective how confident they feel about it. You can use the 5 finger assessment 5 for very confident to 1 not confident at all or alternate tool. (AFL)** **KICk-OFF quiz.** **Explain:** This quiz will continue all week **Educator to:** Split the students into 2 teams. Follow the instructions for the KICk-OFF quiz. (R11) **Reminder sheets** Give out reminder sheets (R9) to each students. This says what insulin they are on and any other changes they have been told during the day. Whilst waiting for parents students may complete the quiz questions in the theory booklet entitled: Types of diabetes; What is diabetes?; Signs and symptoms; Insulin ratios; Tools of the trade. Also write in the comments book. (R10) Remind students and parents that a packed lunch is needed for tomorrow and containers for the food they will be making. Ensure consent is completed for Thursady activity if needed. **Finish**	**Response** Students to highlight anything they feel has not been covered and they feel less confident about **Response:** Split into 2 teams **Response** Take home reminder sheets Complete the first quiz questions at the end of the first 4 chapters in the theory booklet.	❑ KICk-OFF quiz box: Instructions for the game Cards with questions Buzzer or bell Prize for end of week (R11) ❑ Flip chart and pens ❑ White boards ❑ Poster of day 1 objectives (P5) ❑ Theory booklet ❑ Music ❑ Reminder sheet (R9) ❑ Comments book (R10)

Tuesday

Learning objectives

- Practise individual insulin adjustment
- Continue with carbohydrate and insulin ratios
- Gain further skills in counting grams of carbohydrate
- Introduction to the glycaemic index
- Discuss the signs and symptoms, treatment and prevention of hypoglycaemia
- Give feedback to parent/carers
- Continue with school packs

Today's programme

Session 1 **9.00am-10.30am**

Discussion about individual blood glucose levels
Hypoglycaemia

BREAK

Session 2 10.45am-12.15pm

Hypoglycaemia
CHO/insulin ratio
Work out CHO content of lunch

PACKED LUNCH

Session 3 1.00pm-2.15pm

Practical session (cooking) on counting grams of carbohydrate

BREAK

Session 4 2.30pm-4.00pm
Quiz
Recap days objectives
Reminder sheets

Tuesday

Session 1:

Blood glucose levels

Hypoglycaemia

Learning Objectives

- Practise individual insulin dose adjustment
- Discuss the signs and symptoms, treatment and prevention of hypoglycaemia

Materials

- Overhead (portable)
- Learning objectives poster day 2 (P17)
- Laptop
- Acetate for individual blood glucose presentation (W13) and or graph
- Sharps bin
- Hypoglycaemia poster (P18)
- Hypo kit box
- Glucogel
- Dextrosol tablets
- Glucagen
- Sweet drinks
- Food samples for hypo treatment
- Hypo signs and symptoms cards (R12)
- Pens/paper
- Stickers
- Glue
- Paper
- Scissors

- **Students to bring**:
- Blood testing kit
- Insulin
- Theory booklet

Educators	Nurse and Dietitian
Preparation	Overhead projector, pens, acetate

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
9.00am	**Discuss:** Objectives for day 2 (P17). Check everyone happy with the plan for the day. **Show:** everyone how to write on an acetate their blood glucose levels from when they left yesterday, including any hypos and CHO eaten (R13). Or write them on a graph. Then explain how we are going to feed back everyone's blood test results and discuss CHO estimation. Go around the group discussing blood test results. Reinforce the use of correction dose. Fill in reminder sheets	**Response:** Look at objectives for the day **Response:** Copy blood glucose levels onto acetate and discuss results	❑ Objectives for day 2 (P17) ❑ Overhead projector ❑ Pens ❑ Acetate (R13) ❑ Marker pens ❑ Poster (P18) HYPO - LOW GLYC - SUGAR AEMIA – BLOOD ❑ Flip chart ❑ Signs and symptoms of a hypo cards, as prompts (R12) ❑ Theory booklet ❑ Snacks and drinks available labelled with CHO content ❑ Glue ❑ Scissors ❑ Sticker ❑ Reminder sheets (R9)
10.10am	**Ask:** **What does hypoglycaemia actually mean?** Show poster (P18) **Ask:** **At what blood glucose level can it happen?** NOTE : Each student may have a different experience and explain why it may happen if above 4mmol/L	**Response:** Group to give answers **Response:** Anything ,< 4mmol/L	
10.15am	**Ask:** Students to draw using pictures, words or role play their signs and symptoms of a hypo. Place out the hypo cards as prompts (R12) **Put music on whilst drawing** Feedback after break.	**Response:** Express signs, symptoms and experiences on paper	
10.30am	**BREAK TIME** If 10g CHO or more to be eaten give insulin		

TUESDAY

Session 2:-

Hypoglycaemia continued

CHO/insulin ratio

Learning Objectives

- Hypoglycaemia continued
- Introduction to the glycaemic index
- Carbohydrate and insulin ratio continued

Materials

- Scales
- Food models
- Spoons of different sizes
- Flip chart
- Pens
- Diaries
- Hypo sheet for school (R14)
- Calculators
- Examples of hypo treatment fast and slow acting
- Camera
- Theory booklet

Educator	Nurse and Dietitian
Preparation	Display packs of foods and food models. Work sheets for groups to do in pairs

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
10.45am **11am** **11.05am**	**Look at and discuss** everyone's pictures about how they feel when having a hypo. **Ask:** **The students to write on a post-it what they do and don't want people to do when they are having a hypo and put it on the posters** **Explain**: Which symptom occurs first, which follow and why confusion occurs. The first signs may be described as mild i.e. feeling hungry, dizzy, shaky then if untreated may lead a moderate hypo i.e. confusion, burred vision etc. Confusion or odd behaviour occurs because the brain is lacking the glucose it needs to think properly. If still untreated a severe hypo may lead to loss of consciousness **Explain:** Everyone should know what normally happens in the body if you do not have diabetes so that they can see why the signs and symptoms need treating immediately. Use the body board and P19 to explain how insulin and glucagon hormones are normally triggered and why a hypo needs prompt treatment **Explain:** That diabetes treatment is a fine balance between insulin, food and exercise. Draw diagram of triangle with 3 points labelled insulin, food and exercise.	**Response:** ❑ Show pictures ❑ Write on post-it what they do and don't want people to do when they are hypo **Response:** Look at the diagram of triangle to illustrate the balance	❑ Theory booklet ❑ Hypo postcards (R12) ❑ Body board ❑ Flip chart ❑ Pens ❑ P19 seesaw showing what affects blood glucose rising and falling or page 54 in theory book ❑ Post-it notes

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
	Ask: **What are the possible causes of a hypo?** Look at page 55 for help in the theory book **Ask:** **What should you do when you first feel the symptoms of a hypo?** **Explain:** The reason why some foods act quicker in raising the blood glucose level than others. CHO foods are made up of chains of sugar. Some foods have a long chain and some have a short one. These foods are then put into a table called the glycaemic index (put this word on the word bank). To decide which group they go into individual carbohydrate foods are tested to see how long it takes for the glucose to be released and raise the blood glucose level. That food is then given a score out of 100 and placed into 1 of 3 groups - fast, medium and slow. This is known as the GI. Demonstrate by asking the group to form a long chain. Make a ring on the floor with some rope and ask each person to enter one at a time. Do the same with 3 people in the chain then discuss how it took the large chain longer to get in than the shorter on. This is useful to know when deciding which food to use for a hypo. Look at the GI table on page 21 of theory book for some ideas.	**Response:** ❑ Too much insulin ❑ Extra/unplanned exercise ❑ Alcohol ❑ Error in CHO counting ❑ Hot weather **Response:** Test is possible and treat with some fast acting carbohydrate **Response:** Form a chain of 8 people then 3 people. Compare which chain takes the longest to enter the rope circle. Look at glycaemic index chart in the theory booklet page 21	• Theory book • Word bank

Time	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
11.10am	**Discuss:** Which foods the students would choose to treat the first signs of a hypo. Point out that if CHO foods are eaten with other foods this changes the speed at which the blood glucose rises, e.g. adding beans to toast delays the glucose release from bread. You will get to know which meal takes longer to raise the blood glucose level. **Discuss:** When the first signs of a hypo occur and the fast acting CHO is given you should wait 5 mins to see if the symptoms improve. If they do not then repeat the fast acting CHO treatment. When you start to feel better you should then follow the rules on page 56-57 to help prevent the hypo occurring again. All look at page 57 and discuss the table and show the posters P1, P2 **Educator:** **Put the students into 2 groups to work on 1 of 2 topics** **Group 1:** **Think about what you should do when you first feel the symptoms of a hypo and what follow-up treatment is needed.** Use page 56 and 57 in theory book and the GI page 21. It can be in a poster, chart display **Group 2** **Think about and write down what causes a hypo and how you may prevent a hypo.** Use posters/display to show the answers. Page 55 and 56	**Response**: Name which fast acting CHO they would choose **Response:** All to discuss the follow-up treatment using the theory book and posters	❑ Theory book ❑ P1 and P2 hypo treatment poster treatment and follow-up guidelines

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
11.15am	**Groups to feed back their work:** **Group 1** **Explain after their feedback:** That biscuits and chocolate are not advised for the first line treatment of a hypo as it takes too long to be absorbed due to the high fat content. Stress that some form of fast acting glucose should be carried at all times. Display examples of 15 to 20g CHO of fast acting carbohydrates Display examples of slower acting carbohydrate for: 1 hour until meal (15g) More than 2 hours until meal (20g) Hypo at meal time (take quick acting carbohydrate and reduce meal insulin by 1 unit) **Group 2** **Explain after their feedback:** Regular blood tests during times of potential risk of hypo will help to prevent them from occurring as well as looking at insulin dose and carbohydrate taken before exercise. **Note:** Hypos during the night need insulin adjustment the following night. Do not wait. Highlight page number for information sheet (page 61, Theory booklet). The effects of alcohol will be discussed later in the week if applicable to group age.	**Response to group task:** ❑ Check blood glucose level ❑ Take some fast acting CHO 15 – 20g ❑ When feeling better take long acting CHO ❑ Always carry hypo treatment **Response to group task:** ❑ Regular blood tests ❑ Adjusting insulin and CHO according to your lifestyle ❑ Check injection equipment is working ❑ Before taking alcohol think about how it will affect your diabetes control ❑ Test before/during/after exercise. ❑ Test during the night if there is a risk ❑ Remember in hotter weather insulin doses may need to be reduced	❑ Display examples of fast and slower acting carbohydrate ❑ Information sheets on management of hypos happening during the day and night in theory booklet, page 61

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
11.30am	**Ask:** **Do you think hypos are serious?** 1-2 mild hypos per week are acceptable but if they are occurring more frequently then changes are needed to the regimen. Hypos causing unconsciousness should not be routine. They need preventing. Contact your diabetes team if this does happen. **Ask:** **What other forms of treatment are there if the first line treatment already discussed does not work or someone is unconscious?** **Explain:** If a child is still able to take instructions then ask them to swallow Glucogel, either 1.5 tubes or third of a bottle. Rubbing it into the gums is not as effective. However if they have a reduced conscious level or are unconscious do not put anything in their mouth. Place in the recovery position **Ask:** **One person to demonstrate this position.** **Explain:** Glucagon is given when a person is unconscious but can still take up to 10mins to work. This should only be injected once and not be repeated as the glucagon stores in the body will have been used. **Note:** The use of glucagon will be discussed in more detail in the parent session, the children just need to know when it is used.	**Response:** Students to give their response **Response:** ❑ Glucogel which is a sugary jell. ❑ Glucagon is a hormone that releases stored sugar back into the blood stream. The hypo kit is called glucogen **Response:** 1 student to adopt the recovery position	❑ Glucagen kit ❑ Glucogel ❑ word bank for glycaemic Index, glucagons, glucagen, glucogel

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
	NOTE FOR EDUCATOR: Advice for schools is the same but they will call an ambulance if a child is unconscious or not fully recovered from a hypo. Families should know that schools will not give glucagon or they may not store it on site.		❑ Hypo sheet for schools R14 ❑ Camera ❑ CWB ❑ Diary ❑ Selection of ID cards R15 ❑ Theory book ❑ Insulin ratio tables in diary and R6 ❑ EWB
11.40am	**Ask:** **Students to fill in the hypo sheets for school** (R14). Collect in to include in the school pack. Take photo for the hypo sheet (if consent given. This can be continued any time during the week) **Discuss carrying ID cards** It is a good idea to carry some form of ID stating that you have diabetes and the treatment for hypos, and who to contact. Show different types	**Response:** ❑ Fill in hypo sheets for school ❑ Picture taken for school sheet **Response:** Look at ID cards	
11.45am	**CHO insulin ratio practise** **Ask:** **For next 10 mins. Look at chapter on ratios,** (page 14) and fill in the exercises in the CWB pages 8-10. This can be done in pairs or as a group. Use insulin ratio cards R6 to help, found in the diary	**Response:** Fill in work sheets in work book	
11.55am	**Educator:** Go through the answers page 37 EWB		
12.05pm	**Ask:** **Work out and write down CHO content of pack lunch** **Note to educator:**	**Response:** Work out packed lunch before lunch time	
12.15pm lunch	During lunch set up the practical activity for the next session. Ideally 3 educators to help if possible		

Session 3:-

Counting grams of carbohydrate

Practical session

Learning Objectives

- Continuing - counting grams of carbohydrate through a practical cookery session

Materials

- Food ingredients (see recipe)
- Packs of food
- Recipes
- Flip chart
- Pens
- Diaries
- Work book
- 100g calculator
- Calculators
- Paper plates
- Kitchen equipment:
  - Digital scales
  - Pots and pans
  - Bowl
  - Timer
  - Paper bun cases
  - Baking tins
  - Washing up materials

(tea towels, cloths, washing up liquid)

Students to bring:

- Containers for food

Educator		Dietitian and nurse	
Preparation		Whole session can be done in the cookery room. Set up the work stations with foods needed for recipes. Educators should start trying to identify students that might struggle with the maths to put them into appropriate groups for activities.	
TIME	**EDUCATOR ACTIVITY**	**STUDENT ACTIVITY**	**MATERIALS**
1pm **1.05pm** **1.20pm** **1.25pm** **1.45pm** **2pm**	**Ask:** **Students to give examples of carbohydrate containing foods** until the list is exhausted and they know which food raises their BGL and needs quick acting insulin **Explain:** The CHO of a serving. Show how to work out the CHO value from the tables on the packet of food and using the carbs per 100g table R16 **Ask:** **Students to look at example of maths in the theory book page 20** **Split group into pairs and ask:** Move around the work stations filling in page 14 in CWB and measure out the portion size you would eat. Write down the weight of the portion, the CHO content and insulin dose using your own ratio. **Feedback:** Go through answers on the board. Emphasise that you cannot always guess how much CHO is in your portion **Explain:-** This session is a practical session to learn how to work out how much CHO is in the food you prepare yourself. **Split into pairs and give each a recipe** **Break time will be within session 3**	**Response:** Examples of CHO containing foods **Response** Ask questions **Response:** Look at the example **Response:** In pairs measure out foods **Response:** Check answers. The rest of the group may comment on the answers **Response:** ❑ Split into different pairs ❑ Follow recipes page 16 CWB ❑ Tidy up after the food is prepared ❑ Complete work sheet Page 16 in CWB while food cooking	❑ CWB page 14 for CHO estimation ❑ sliced bread ❑ Packs of cereals ❑ Bead roll ❑ Fruit ❑ Ready meals ❑ Rice (cooked and uncooked) ❑ Pasta (cooked and uncooked) ❑ Potato (new, mashed, chips, crisp) ❑ Fruit muffins recipe and ingredients page 16 in CWB and page 15 for working out CHO content ❑ Scales x 4 ❑ Paper plates ❑ Utensils ❑ Calculators ❑ Pens ❑ Flip chart ❑ 100g calculator in food diary Note: for coeliac diet use gluten free flour and 2 teaspn of baking powder (gluten free)

Tuesday	Learning Objectives	Materials
Session 4:- **Counting grams of CHO continued** **Quiz**	✦ Continue learning skills of counting grams of CHO ✦ Complete reminder sheets	❑ Quiz ❑ Containers to carry home cooking ❑ Pens/paper ❑ Work book ❑ Objectives of the day poster (P17) ❑ Reminder sheets

Educator	Dietitian and Nurse
Preparation	Pens and Paper and background music

TIME	EDUCATOR ACTIVITY	STUDENT/CARER ACTIVITY	MATERIALS
	Continued While the food is cooking the students are to work out the total amount of CHO and how much CHO is in each serving then work out the insulin dose. Music can be playing if the students want it. If anyone finishes first then they can complete the quiz questions on page 60 in the theory book	**Response:** Finish practical session	❑ CWB page 15 for practical food CHO estimation ❑ Tuesday's quiz questions ❑ Food from previous session ❑ Objectives for day 2 (P17) ❑ Reminder sheet R9
3pm	**Recap objectives of the day** (P17). **Use AFL to find out how they feel about the objectives and make a note of those who need more help** **Give out reminder sheets**	**Response:** Students to comment if their learning objectives for day 2 have been met. Take home reminder sheet	
	Explain: Some foods need measuring out prior to cooking, (especially when home baking). The correct insulin dose can be given for the CHO quantity. It is also important to remember that the CHO content of some foods e.g. pasta and rice will change after cooking because they stock up water during cooking.		
3.15pm	**Quiz** 2 teams but different from yesterday. Educator to keep running total of individual score Do not ask too many questions today due to shortage of time	**Response:** Take part in quiz	
3.30pm	**Finish**		

Wednesday

Learning objectives for the day

- Further practise of insulin adjustment and correction doses
- Be able to define illness and apply KICk-OFF principles of care
- Discuss how diabetes may affect long-term health
- Continuation of carbohydrate counting

Today's programme

Session 1 **9.00am-10.30am**

Discuss overnight blood gluocse levels
Insulin adjustment and practise

Break

Session 2 10.45am-12.15pm

How to manage illness using KICk-OFF principles
Work shops

Lunch

Session 3 **1.00pm-2.15pm**

Diabetes and long term health
Discussion

Break

Session 4 **2.30pm-3.30pm**

Quiz
Answer any queries about insulin dose for the evening

Wednesday	Learning objectives	Materials
Session 1: **Discuss blood glucose level** **Practise insulin adjustment**	✦ Discuss overnight blood glucose levels ✦ Discuss causes of high and low blood glucose levels ✦ Practise insulin dose adjustment	❑ Overhead (portable) ❑ Objectives for day 3 (P20) ❑ Acetates/graphs, paper and pens ❑ Sharps bin ❑ Scales ❑ Calculators ❑ Hypo kit ❑ Children's Work book

Educator	Nurse and Dietitian
Preparation	Acetate and overhead projector, pens work sheets. Group may be split if some students need more help

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
9.00am **10am** **10.30am**	**On arrival ask:** Students to write down their BGL on an acetate/graph including any hypos and CHO eaten. Fill in reminder sheets **Discuss:** How they are feeling using an assessment tool **(AFL)** before looking at objectives for day 3 and discussing their BGL (P20) **Explain:** This next exercise is to look at the causes of high and low blood glucose levels. **Ask:** **All students to stand in the middle of the room** (or go outside if possible). Follow work sheet on page 9 EWB. Discuss the answers. **Blood glucose scenarios** Educator to go though on the overhead how to work out advising on the correct insulin dose R17, R18. Page 17 and 19 in the CWB (also page 10-12 in EWB) After break the students will do their own exercises **Break time**	**Response:** Copy blood glucose levels onto acetate **Response:** Assess how they feel so far and understand the learning objectives for day 3 Discuss BGL **Response:** Students to move to the are they think is the correct answer and discuss their reasons **Response:** Look at the examples and ask questions	❑ Objectives for day 3 (P20) ❑ Overhead projector ❑ Pens for acetates ❑ Educators work book for the high and low exercise page 9 ❑ Flip chart ❑ Reminder sheets (R9) ❑ R17 for high BGL. Page 10 EWB ❑ R18 for low BGL page 12 EWB ❑ CWB

Wednesday

Session 2:

Insulin adjustment and correction dose practise

Sick day rules and management

Learning Objections

- Students to recognise high blood glucose levels
- To be aware of diabetic ketoacidosis and apply KICk-OFF principles of care

Materials

- Flip chart and pens
- Body poster
- Sharps bin
- Ketostix
- Blood ketone meter
- Symbols for glucose, insulin and ketones (P7, P8, P21), if needed to explain sick day rules)
- Overhead projector
- Sick day rules sheets laminated
- Educators Work book sheets materials for sick day rules
- Emergency numbers for local centre and or hospital diabetes teams
- Work sheets R19

Educator	Nurse and dietitian plus one other if possible
Preparation	Set up 4 work stations. Two educators role playing in 2 stations. 1 educator helping at the unattended stations

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
10.30am **10.45am**	**Blood glucose scenarios continued** Put students into pairs and give out 2 scenarios each R19. Students then take the role of the diabetes nurse and dietitian and look at the scenario as if given to them in clinic for them to comment on. They analyse the problem and come up with a solution which is presented back to the whole group as if in a team meeting. Or it could be person with diabetes on the phone speaking to the nurse who gives advice. Use page 31 and 57 for help in the theory book **Recap - ask:** **What is the blood glucose range you are aiming for?** **Explain:** A high blood glucose level may be due to any of the reasons discussed in session 1. Now we are going to think about what happens when it is caused through illness. **Ask**: **Give examples of illnesses. What signs and symptoms would you expect to see if unwell with high blood glucose level?** Each student to describe a symptom. Use body board, (posters P7, P8, P21 if needed) and theory booklet (page 48 flow chart) to explain why ketones are produced. Then explain how to work out 10% and 20% rule. Look at page 50-51 in theory book for examples of working out the maths. The next exercise will practise what they should do if unwell.	**Response:** Use role play or work in pairs to feed back solutions to the problems on the handout **Response**: ❑ 4 – 7 mmol/L before breakfast ❑ 4 – 7 mmol/L before other meals ❑ 5 – 8 mmol/L before bed ❑ 5 - 8 mmol/L over night **Response:** ❑ Examples of illnesses ❑ Feeling tired ❑ Loss of appetite ❑ Passing large amounts of urine ❑ Feeling very thirsty with a dry mouth ❑ Losing weight ❑ Vomiting, infection, ❑ Abdominal pain ❑ Glucose in the urine ❑ Ketones in the urine or blood	❑ Childrens Work book ❑ R19 High and low examples for students ❑ Flip chart and pens ❑ Body board ❑ Posters P7, P8, P21 (if needed to explain about ketones) ❑ Equipment to test for ketones at each station ❑ Blood testing equipment ❑ Timer for the sessions ❑ Theory booklet ❑ Diary ❑ Instructions for session page 14 in educators work book and colour coded worksheets ❑ Laminated advice sheets as per instruction sheet: Sheet on low blood glucose results feels unwell R20 ❑ BG <14 mmol/L trace/neg ketones R21 ❑ Sheet on + and ++ ketones in urine or 1.0-2.9 in blood BG >14 mmol/L R22 ❑ Sheet on +++ ketones in urine or 3.0 in blood. BG > 14mmol/L R23

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
11.00am	**Put students in pairs.** Follow instructions for the session (page 15 in EWB). They all move round each station but all do the same worksheet. **(3 educators needed and ensure someone does the timing)**	**Response** Students in pairs for the activity	❑ Local emergency numbers ❑ SDR game in educators work book page 20
11.50am	**Recap using SDR game page 20 in educators work book** **Stress to the group that:** Diabetic ketoacidosis or DKA is a serious condition due to the lack of insulin in the body. Sugar/glucose is not used for energy so the body uses fat. This then causes vomiting, abdominal pain, breathlessness. If untreated may lead to coma requiring an emergency admission to hospital. If you are unwell and the advice sheets are not helping, vomiting persists or after 3 extra doses of QA insulin ketones are still large (3.0 or more in blood) call for help. Do not wait as DKA is very serious and life threatening. **Ask:** **Any questions?** **Give out local emergency numbers**	**Response:** **Students to answers questions giving reasons for answers** **Response** Students to check they know where the advice is in the book and local contact numbers and policies. **Response** Students to ask any questions.	
12.15pm	**Lunch**		

Wednesday

Session 3:

Diabetes and long term health

Learning Objections

- Explore what is meant by a healthy lifestyle
- Living with diabetes discussion:
  Healthy life vs unhealthy life style

Materials

- Pictures showing healthy and unhealthy lifestyles
- Blue tack
- Paper and pens
- Flip chart
- Posters showing high, low and safer (R24 and pictures) for lifestyle and diabetes exercise
- Instructions for the activity on health and diabetes page 22 in educators work book
- Instructions on complications, Wed. session 3 page 23 in educators work book
- Theory booklet

Educator	Nurse and dietitian
Preparation	Place chairs in a circle or groups can sit on the floor. Play background music if students want it

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
1pm	**Healthy lifestyle and diabetes** **Explain:** This session is looking at how to follow a healthy lifestyle when you have diabetes and the risk to health if you do not. (Page 22 in educators work book) **Split into 2 groups follow** Give each group a set of picture cards. One group to put them in the correct category high, low or safer thinking about their diabetes and the second group to put them in the category imagining they do not have diabetes. R24	**Response:** Individually place pictures in one of the 3 categories and discuss within group why they made this choice	❑ Instruction sheet. Health and diabetes Wed. session 3 – 1pm page 22 in educators work book ❑ Posters of high, low and safer x 2 sets and pictures. R24 ❑ Instruction sheet labelled Wed. session 3 Diabetes researcher page 23 in educators work book ❑ Equipment packs for each of the research topics. R25 ❑ Paper and pens ❑ Theory booklet ❑ Ragnar Hanas book
1.15pm	**Recap the groups discussion**		
1.25pm	**Ask**: **Both groups to come back together in a circle to discuss complications.** Follow instruction sheet page 23 in educators work book and give out categories (20mins for activity) R25	**Response:** take part in diabetes research activity In pairs each couple has a topic to investigate and present back to the group.	
1.45pm	**Present topics back (5mins each)** If there is not enough time it can be presented back in the morning		
2.10pm	**Ask:** **At end of presentations if there are any questions?**	**Response:** Students to ask any questions	
2.15pm	**Break**		

Wednesday

Session 4:

Quiz

Learning objectives

- Recap learning objectives through quiz
- Reminder sheets completed for home

Materials

- Flip chart and pens
- Body board
- Quiz questions
- Plastic food
- Learning objectives day 3 (P20)
- Reminder sheets

Educator	Nurse and dietitian
Preparation	2 teams for music quiz

TIME	**EDUCATOR ACTIVITY**	**STUDENT ACTIVITY**	**MATERIALS**
2.30pm	**Review learning objectives** (P20) Use this recap as a way of assessing knowledge about the day. Ask questions related to the learning objectives for the day (see page 25 in EWB for ideas) Don't use for quiz score. Assess how they feel about the day using one of the assessment tools. **(AFL)** **Reminder sheets given out**	**Response:** Students to comment on whether the learning objectives have been achieved.	❑ Flip chart and pens ❑ Calculators ❑ Music quiz questions for Wed. R26 laptop ❑ Buffet menu list ❑ Learning objectives day 3 (P20) ❑ Question for learning objective recap page 25 EWB ❑ White boards ❑ Laptop for music
3pm	**Split students into groups for the quiz** Use the music quiz today so that they have some fun from a hard day of theory. Use a different group mix. **Give out top tip for the day R9**	**Response**: Students to answer quiz questions	
3.30pm	**FINISH** **Do not forget sports kit for tomorrow. Check consent signed if needed for travel for sports activity** **Ask students to choose which food they would like for Friday's buffet lunch.**		

Thursday

Learning objectives

- Continuation of CHO/insulin ratio
- Understand the effects of exercise on blood glucose levels and how to manage activities both planned and unplanned.
- Look at healthy eating issues, sweets, treats and snacks
- Quiz

Today's Programme

Session 1 9am-10.30am
Discuss overnight blood glucose levels.
Exercise (theory)

BREAK

Session 2 10.45am-12.15pm

Exercise continued

Healthy eating/weight control
Sweets, treats and snacks

LUNCH

Session 3 1pm-2.15pm

Exercise, practical session

BREAK

Session 4 2.30pm-3.30pm

Post exercise discussion

Quiz

Reminder sheets

Thursday	Learning objectives	Materials
Session 1: **Blood glucose levels** **Exercise**	✦ Continuation of CHO/insulin ratio ✦ Exercise and diabetes	❑ Overhead projector ❑ Learning objectives day 4 (P22) ❑ Acetates/graphs ❑ Laptop ❑ Pens/paper ❑ Hypo treatment ❑ Insulin and testing equipment ❑ Snacks ❑ Sharps bin ❑ Food models ❑ Theory booklet ❑ Food diary ❑ Information booklet if possible on Get healthy, feel great ❑ Educators Workbook ❑ Children's work book

Educator	Nurse and dietitian
Preparation	Samples of healthy food displayed, examples of snacks

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
9am **10am** **10.05am**	**Discuss:** Learning objectives for day 4 (P22) **Discuss**: Overnight blood glucose profiles. Use the Diabetes detective questions R30 **Ask:** **Students to feedback complications poster** if not already completed yesterday **Ask:** **Who does any form of activity?** Students to report on any activities that they do **Ask:** **What are the benefits of being active?** Group to share ideas by writing a response on a post it and putting on board **Summarise benefits:** Exercise keeps you lean, fit, ready for action, alert, trim, healthy and should be fun. Activity can take many forms, it doesn't just include sport. Even cleaning, shopping etc can create these benefits. **Ask:** **What are your experiences of exercise and diabetes?** **Explain:** Exercise may cause a fall or rise in the blood glucose levels. The aim of this session is to consider how exercise affects your blood glucose levels and how you can use insulin and carbohydrate foods to prevent a hypo/hyper.	**Response:** Understand the learning objectives for day 4 **Response:** Share results with the group **Response:** Present complications poster **Response:** Sport, housework, shopping, disco, walking dog etc. **Response:** ❑ Keeps you fit and is fun ❑ Helps manage weight ❑ Feel good about self ❑ Improve body shape ❑ Helps build muscle ❑ Improves co-ordination ❑ Helps control blood glucose ❑ Helps insulin work better **Response:** Students to share their experiences of exercise and blood glucose control.	❑ Overhead project ❑ Learning objectives day 4 (P22) ❑ Flip chart ❑ Pens ❑ Diabetes detective questions R30

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
	Ask: **What happens during exercise, to the glucose and insulin levels in a person who does not have diabetes?** **Explain:** As blood glucose levels fall due to the exercising muscles needing energy, insulin production is reduced. After the exercise has finished the muscles need a new store of glucose (released from the liver) so more insulin is released to help carry the glucose into the muscle cells **Ask:** **What happens during exercise in someone with diabetes?** **Explain:** Type 1 diabetes means that your body cannot control the amount of insulin. Therefore if you have too much insulin and not enough glucose then you are at risk of a hypo. But during exercise your body needs glucose for energy so will release stores from the liver. However if there is not enough insulin to transport it into the body cells then the blood glucose level will be too high. **Ask:** **Has anyone ever experienced a rise in their blood glucose level after exercise?** Discuss any experiences.	**Response:** ❑ Insulin production is reduced during exercise to prevent blood glucose levels going too low ❑ Following exercise more insulin is released to help replace the store of glucose in the muscles. The glucose is released from the liver **Response:** ❑ Insulin level will not automatically fall and rise during exercise ❑ If there is too much insulin in the body and not enough glucose the blood glucose levels can drop and a hypo is more likely ❑ If there is too much glucose and not enough insulin the blood glucose level may be too high to continue with the exercise **Response:** Students to share their experiences of blood glucose rising after exercise	
10.30am	**Break**		

Thursday	Learning objectives	Materials
Session 2: **Exercise** **Healthy eating** **Weight control** **Sweets, treats and snacks**	✦ Learn how to manage exercise and diabetes ✦ Look at healthy eating issues, sweets treats and snacks	❑ Overhead projector ❑ Laptop ❑ Pens/paper ❑ Hypo treatment ❑ Insulin and testing equipment ❑ Body board ❑ Snacks healthy and unhealthy ❑ Sharps bin ❑ Theory booklet ❑ Hyperglycaemia and exercise in children's workbook ❑ 2 baskets ❑ Food diaries

Educator	Nurse and dietitian
Preparation	

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
10.45am **10.50am**	**Explain:** Following on from the discussion before break about high blood glucose levels after exercise we are now going to look at why this happens. **Ask:** **Look at the scenario in the CWB page 21 "Hyperglycaemia in exercise"** Try and work out the answer (in pairs) using the theory book page 62 (answer below) **Ask:** **What has happened?** Students may use body board to explain their answer **Educator recaps:** If at the time of exercise your blood glucose level is outside of the target range this may mean you do not have enough insulin on board. Distinguish between high blood glucose level due to a lack of insulin and having just eaten or drunk carbohydrate. Exercise may further increase the blood glucose level as the body releases glucose for energy but you do not have enough insulin to transport it into the body cells to produce this energy. This may be more likely in the evening or morning when your background insulin is starting to run out. If your blood glucose is 14mmol/L or more you must test for ketones. If they are present, you must not do any exercise until your blood glucose is less then 14mmol/L and ketones are negative. You will need to take a small amount of QA insulin.	**Response:** Look at the scenario and work out the answer **Response:** ❑ No insulin ❑ Lots of glucose in blood, cannot enter muscles so cannot release energy ❑ Liver releases more glucose into blood and breaks down fat to form energy, this makes ketones which are also released into blood ❑ Lack of insulin and demand for energy in exercise means blood glucose and ketone level rises	❑ Overhead projector ❑ Body board ❑ Symbols (glucose, energy, insulin, ketones P7, P8, P9, P21) ❑ "Exercise and diabetes" chapter in the theory booklet page 62 – 65 (to see what to do when the blood glucose level is 14mmol/L or more) ❑ Children's Work book

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
11am	**Explain:** After checking your blood glucose level pre exercise and you find it is <14mmol/L you may, depending on the type of exercise you are going to do, worry about a potential hypo. **Ask:** **What should you be considering in order to prevent hypos in exercise?** Ask students to write a suggestion on the white board and hold up for all to see. They can use page 63 in the theory book for help **Ask:** **Find out what types and amounts of carbohydrate you should use to prevent a hypo for:** **A) Short intensity exercise** e.g. sprinting? **B) Longer activity / less intense** e.g. football match, hiking, swimming, netball, horse riding?	**Response:** ❑ What is your blood glucose level before exercise? ❑ When was last quick acting insulin injected and is it still working? ❑ When was the last meal or snack eaten? ❑ Which injection site did you use? ❑ How intense or long will the activity be? **Response:** Students to explore the answer using the theory book page 65	❑ White board and pens ❑ Theory book ❑ Flip charts to collate groups activities ❑ Pens ❑ Glycaemic index list for reference in theory booklet page 21
11.15am	**Ask:** **Students to feedback answers**	**Response:** ❑ A) Quick acting carbohydrates (high glycaemic index) e.g. banana, fruit juice, jam sandwich ❑ B) Slower acting carbohydrates (low glycaemic index) e.g. flapjack, chocolate, pasta	

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
11.20am	**Explain:** It is not possible to know the exact amount of carbohydrate needed or insulin reduction that you need prior to exercise, but you can learn this for yourself by monitoring your blood glucose level and using the exercise advice chart as a starting guide. **Ask:** **Are there any sports that are unsuitable for people with diabetes?** **Explain:** Having diabetes should not stop you from participating in extreme sports. You may need a medical certificate to say you are fit to do the activity e.g. diving. You should make sure that you test your blood glucose level regularly and treat hypos. Carry extra CHO and ensure that the person supervising the activity knows you have diabetes and your warning signs and how to treat a hypo. **Ask:** **Work in pairs to go through one scenario in your work book page 22 (play some music in background)** Use the exercise advice charts page 62-65 in the theory book to help to decide what to do before exercise. Educator to go give each pair one scenario and go round and check their understanding (10mins)	**Response:** Not really but extra care needed for flying, paragliding, deep sea diving, mountain climbing, water sports, boxing **Response:** Work through scenarios using theory booklet pages 62 - 65	❑ Music ❑ Theory book ❑ Children's Work book page 22

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
11.35am	**Recap and Explain:** These advice charts are just a guide and any changes in insulin dose must be a personal choice because exercise has a different effect on everyone **Summarise:** ❑ Plan ahead ❑ Test BG before and after exercise (especially if the exercise is new to you) ❑ Reduce insulin dose if exercising within 4 hours of taking quick acting insulin ❑ Eat more CHO before or after exercise ❑ Carry hypo treatment ❑ Vigorous/prolonged exercise may keep blood glucose low for up to 24 hours after exercise has finished because muscles are still working to replace all their stores of glucose ❑ You may need to reduce insulin doses for next 24 hours and /or eat more CHO to prevent delayed hypos ❑ Consider drinking a sports drink before, during and after exercise to provide some CHO **Ask:** **What do you think you should do if your glucose level is >14 mmol/L prior to exercise?**	**Response:** ❑ Consider if QA or BI has run out ❑ Consider if it is due to recent snack containing carbohydrate and if there is enough insulin to deal with it ❑ Check for ketones ❑ If no ketones present take additional 1-2 units quick acting insulin pre-exercise ❑ If ketones are present do not do any exercise until they are negative and blood glucose is <14 mmol/L. Follow SDR in theory booklet to see how to do this	

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
11.40am	**Explain:** Just before lunch we are going split into 2 groups to think about healthy eating. You will be blind folded and asked to try different foods and decide if it has CHO in it or not. Then you produce a poster on how to make a meal healthy, how to choose healthy snacks and how much food our bodies need. **Educator to split the students into 2 groups** (if students want the music on have it playing in the background). Each group will do both activities **Activity 1** The educator will blind fold each student and ask them to taste each food and write their answer on the work sheet. Also stating if it contains CHO **Activity 2** Pick out 1 healthy DAFNE food plate and 1 unhealthy plate and discuss why they are different. Comment on a poster on how to make the unhealthy choice better	**Response:** Each person in the group is blind folded to try the fruit and veg. Naming it and stating if it has CHO in it or not **Response:** Choose 2 DAFNE plates, healthy and unhealthy.	❑ DAFNE plates ❑ Healthy food for tasting - educator to choose a variety of fruit and vegetables for this session and devise an answer sheet (to be done locally) ❑ Blind fold x 4 ❑ Glue, scissors, cellotape, pens paper ❑ Selection of snacks healthy and unhealthy ❑ Tissues ❑ Flip chart and pens ❑ Water and cups ❑ Theory book
11.55am	**Ask:** **Each group to look at each others posters**	**Response:** Display or discuss their healthy meal posters	
12noon	**Explain:** **We have discussed how to make what we eat healthier but we also need to think about when to give insulin with snacks.** Everyone to turn to page 25 in the theory book to look at recommendations.		

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
12.10pm **12.15pm**	**Discuss:** the recommendations about when to give insulin with snacks and what is meant by the term snack page 24 in theory book. More work will be done on insulin and snacks on Friday **Ask:** **Do you think the KICk-OFF principles may help you to maintain your weight or lose weight?** If you reduce your CHO portions and exercise regularly then you will lose weight over a period of time. You can eat sweets or cakes etc but try and eat them in moderation, not because it will affect your blood glucose level but because you may find you start putting on more weight than you would like.Further advice on page 73 of theory booklet or speak to your dietitian. Give out leaflets on healthy lifestyle if available **Ask:** **Any questions about healthy eating and exercise?** **Lunch** **Lunch time today will be a healthy meal to activity to be done after lunch.**	**Response:** Yes **Response:** Students to ask questions **re-inforce the message from the morning. Insulin**	❑ Leaflets that cover all the teenage issues Get Healthy, Feel Great if available ❑ Food diary ❑ Flip chart ❑ Pens **doses will need checking depending on the**

Thursday	Learning objectives	Materials
Session 3: **Exercise**	✦ Understand the effects of exercise on blood glucose levels ✦ Explore how to manage activities both planned and unplanned	❑ Sports kit ❑ Pens/paper ❑ Hypo treatment ❑ Insulin and testing equipment ❑ Snacks ❑ Sharps bin ❑ Students contact details for parents ❑ Transport and consent if needed ❑ Sports venue organised

Educator	Nurse and dietitian
Preparation	Sporting venue, possible transport

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
1pm **2.15pm**	**Sporting activity checklist** Check blood glucose level before activity Take hypo treatment to venue Snacks Check you have consent for travel if needed from parents Sports kit **Breaktime** This may be incorporated within the exercise time	**Response:** Participate in sport/activity	Exercise e.g. ROUNDERS, FOOTBALL, OR OTHER TEAM GAME TO BE DECIDED DEPENDNG ON VENUE. ❑ Sports kit ❑ Blood testing kit ❑ Snacks ❑ Mobile phone and student contact numbers ❑ Transport ❑ Hypo treatment ❑ Consent forms

Thursday	Learning objectives	Materials
Session 4 **Quiz**	✦ Recap learning objectives ✦ Continue with quiz. (This is the last round)	❑ Learning objectives for day 4 (P22) ❑ Quiz questions ❑ Reminder sheets R9

Educator	Nurse and dietitian
Preparation	Quiz questions.

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
2.30pm	**Post activity discuss:** The blood glucose levels from the exercise session. Stress need to check blood glucose before bed (especially if activity has been very strenuous) Identify things they may do differently next time		❑ Learning objectives day 4 (P27) ❑ Quiz questions ❑ Theory book ❑ R9 reminder sheet ❑ Comments book
2.50pm	**Discuss:** Learning objectives for day 4. Use an assessment tool to check on the students understanding of the days learning objectives **(AFL)** **Give out reminder sheets and comments book**	**Response:** Students to agree on the learning objectives for day 4	
3.00pm	**Educator to split the group into 2 different teams for the Quiz** **If there is time left the students can fill in the activity sheet on page 76 of theory book related to healthy eating**	**Response:** Students back in teams for quiz	
3.30pm	**End of session.** Educators available to help with insulin dose		

Friday

Learning objectives

- Continue CHO/insulin dosages
- Find ways of managing diabetes in school following the KICk-OFF principles
- Complete school packs
- Final parent session to discuss principles of KO
- Finish the course with a social event

Today's programme

<u>Session 1</u> 9.00am-10.30am

Group discusses overnight blood glucose levels

Everyone has a discussion about doing KICk-OFF in school

BREAK

<u>Session 2</u> 10.45am-12.15pm

Teenage years, alcohol and glucose levels
Giving insulin with snacks
Transition of care summary
Follow-up after KICk-OFF course
Evaluation
Discuss school packs
Recap weeks learning objectives

LUNCH

<u>Session 3 and 4</u> 1.00pm-3pm

Parents invited for discussion about KO course and follow-up care support/evaluation
Students to do fun activity – bowling or other activity as arranged by local educator
PRESENTATION TO QUIZ WINNERS
End of course

Friday	Learning objectives	Materials
Session 1: **KICk-OFF and school**	✦ Continue with CHO/insulin ratios ✦ Be able to manage diabetes in school following the KICk-OFF principles	❑ Hypo treatment ❑ Learning objectives day 5 (P23) ❑ Sharps bin ❑ Overhead projector ❑ Laptop ❑ Pens/paper ❑ Insulin and testing equipment ❑ Body board ❑ Snacks

Educator	Nurse and Dietitian
Preparation	Check travel arrangements to afternoon activity

<table>
<tr><th>TIME</th><th>EDUCATOR ACTIVITY</th><th>STUDENT/FRIENDS ACTIVITY</th><th>MATERIALS</th></tr>
<tr>
<td>9.00am

9.05am

10am</td>
<td>Discuss:
Learning objectives for day 5 (P29)

Students:
Discuss overnight blood glucose levels and CHO estimation. Final reminder sheet

Discuss:
We are now going to split into 2 groups and look at issues around managing diabetes and KO in school. It can be done as a newsletter/news report or role play to the rest of the group.
Each group to follow information on page 29-30 of CWB. Page 34-35 EWB

<table>
<tr><th>Group 1</th><th>Group 2</th></tr>
<tr><td>Injecting insulin in school with snack and meals</td><td>Sport</td></tr>
<tr><td>Hypos in school</td><td>School trips/holidays/driving</td></tr>
<tr><td>Carbohydrate counting in school</td><td>Informing other friends and teachers about KICk-OFF</td></tr>
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-</td>
<td>Response:
Discuss the learning objectives for day 5

Response:
Copy blood glucose levels onto acetate or graph

Response:
Follow instruction for activity in children’s work book page 29-30</td>
<td>❑ Learning objectives day 5 (P23)
❑ Overhead projector
❑ Pens, paper, glue,
❑ Acetates
❑ Food models
❑ Calculators
❑ Food diarys
❑ Paper plates
❑ Hypo treatment
❑ Holiday advice leaflets
❑ ID badges
❑ Children’s Work book
❑ EWB
❑ Reminder sheet R9</td>
</tr>
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TIME	EDUCATOR ACTIVITY	STUDENT/FRIENDS ACTIVITY	MATERIALS
10.20am **10.30am**	**Ask:** **Each group to feedback their work.** Ensure that the group thinks about all the practical issues about doing KICk-OFF in school:- ❑ Places to inject insulin, disposal of sharps ❑ Blood testing in school and carrying equipment ❑ Storage of hypo treatment and carrying hypo treatment ❑ Where to go if there is a problem with their diabetes management in school ❑ Do they eat in school or go to the shops at break-time? ❑ Would they feel confident in estimating the CHO content? ❑ How can the KICk-OFF team help with this? ❑ Do the P.E teachers understand what they need to do before doing exercise? If not what can they do to inform them? ❑ What is needed to ensure school trips are trouble free? ❑ What advice is needed about KICk-OFF in school for friends and teachers? ❑ Discuss driving issues if relevant to the age group **Break Time** **Educator:** to set up a café scene for next session incorporating snacking exercise **See educators advice sheet page 36 EWB**	**Response:** Each group to feedback their work as role play, news report	❑ Sheets of paper and marker pens ❑ Guidelines on the topics to be discussed in the work book ❑ Blue tack ❑ Flip chart ❑ Pens ❑ Plastic food ❑ Meal plates ❑ Money/dinner card ❑ Educators advice sheet for café role play in educators work book page 36 ❑ Leaflets on driving for new DVLA rules R28

Friday	Learning objectives	Materials
Session 2: **Alcohol and its effects** **If applicable to age of student** **Puberty** **Coping with diabetes** **Evaluation** **School packs**	✦ Be aware of the effects of alcohol ✦ Recap through role play, carbohydrate counting ✦ Be aware of the effects of puberty on diabetes care ✦ Discuss ways of coping with diabetes ✦ Evaluate the KICk-OFF programme ✦ Complete school packs	❑ Hypo treatment ❑ Handouts ❑ Overhead ❑ Laptop ❑ Sharps bin ❑ Arrangement for afternoon session ❑ Evaluation sheets R29 ❑ Poster P24 “A word of advice” ❑ Samples of types of alcoholic beverages ❑ Workbooks and sheets for carbohydrate counting exercise

Education	Nurse and dietitian
Preparation	Café set up,

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
10.45am	**Explain:** The first part of this session is to discuss the effects of alcohol (if age appropriate) on the body when you have diabetes. Followed by carbohydrate estimation and the effects of puberty on diabetes control. Finishing with what happens after this course **Explain:** It is important to be safe whilst enjoying an alcoholic drink. However let us not forget alcohol should only be consumed by people over 18 years of age. However we know that younger people do experiment with alcohol. **Ask:** **Has anyone had any experiences with alcohol – good or bad?** Write down the students comments **Ask:** **Students to turn to page x in work book to complete quiz on drinking alcohol when you have diabetes.** Educator may put them into groups or pairs for this activity to help generate discussion. They can use theory book, leaflets for help (5mins)	**Response:** Share experiences **Response:** Take part in the alcohol quiz	❑ Poster on "A word of advice" (P28) ❑ Set up bottles of alcohol and 3 headings strong .>x%, med. Low ❑ Body board ❑ Beer goggles and exercise sheet ❑ Educators Work book page 40 for alcohol quiz page 31 in CWB ❑ Page 42 in EWB for alcohol answer sheet for educator
11.05am	**Discuss:** The answers as a group. The educator explains the effects of alcohol on the body in relation to diabetes. Look at answer sheet for quiz answers	**Response:** Feedback answers to the quiz	

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
11.15am **11.30am** **11.35am**	**Explain:** The next activity is to give you an idea about the effects of alcohol on your sense of balance and co-ordination and vision. Also to see if you are still able to work out your CHO meal and check your blood glucose. **Educator:** Follow instructions page 43 in educator work book **Ask:** **How do you feel wearing these goggles and trying to complete the task?** **Discuss:** Although we have had fun playing with these goggles there is a serious message. Alcohol affects both your physical and mental ability to look after yourself. This is especially important when you have diabetes as we have discussed. **Ask:** **Are there any questions related to alcohol?** **Explain:** We are now going to test out our carbohydrate estimation skills. Follow instructions for exercise based on a café scene page 36 in EWB **Ask:** **As a group discuss and put the snack examples chosen into healthy or unhealthy basket.**	**Response:** Each person to have a go wearing the goggles to do the activity on the work sheet **Response:** Students to discuss how it made them feel **Response:** Students to ask questions **Response:** Students to take part in role play to check their carbohydrate counting skills **Response:** As a group look at snacks and place in the correct basket explaining their decision and insulin dose	❑ Snacking scenarios All in the children's workbook page 24-28 ❑ Snacking guidelines page 24 in theory book ❑ Laptops ❑ Beer goggles ❑ Work book for café role play ❑ Toy cash till, money, food ❑ Tables and chairs ❑ Calculators ❑ 2 baskets one labelled healthy snack and one labelled unhealthy snack

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
12noon	**Ask:** **In pairs follow the snack guidelines and complete 1 scenario from the CWB page 24.** Feed back answers. **Ask** **How much insulin they would give?** **Explain:** The next 10 mins we are going to look at whether puberty affects your diabetes control. **Ask:** **Did you think puberty, would affect diabetes control** **Ask:** **Could you all write on a post-it anything that happens to your diabetes control during puberty and what if anything you can do about it.** They may choose to write a letter or poem about how they feel having diabetes as a teenager to share with the group. **Explain:** Puberty can upset your blood glucose control. You have to be more on the ball during this time of rapid change. It happens because the hormone changes in the body that allow you to mature into an adult affect the job of insulin. This means that you need more insulin to keep your blood glucose levels in the range that suits you and makes you feel good. You may also fine that your blood glucose level is particularly high in the morning. Some of you will already have found this out	**Response** Complete 1 scenario per pair and feedback the answer. **Response:** Group to give answers **Response:** Yes **Response:** Think about how puberty has affected diabetes control and write it on a post-it or make a poem or letter.	❑ Paper, pens ❑ CWB page 24

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
12.10pm	**Ask:** **If you have found your blood glucose levels have been higher than normal has this caused problems in the family?** **Girls** Periods for girls can also affect blood glucose control. It mainly affects the blood glucose level up to one week prior to starting a period. Once the period has started glucose levels will settle down. This is often a very frustrating time and extra help and support may be needed from your diabetes team. During this stage in development comes the time to be more independent. You may hear your teams talk about transition of care. **Discuss school packs:** Educator to show the students the school pack which has been done R30. They may comment on anything they wish to have included or taken out. It will either be sent to each school or the local diabetes nurse could deliver it. The package and course can then be discussed with the teacher and possibly negotiate a place for it to be displayed (If this has not been done). **Explain: what is transition of care?** This means you taking responsibility for your diabetes instead of your parents. It does not happen straight away it is a gradual process and can be challenging for both you and your parents. Don't forget it is difficult for parents to give their child, who is growing up, more responsibility so be patient. It also means that the clinic you attend may change from a paediatric clinic to one for young adults. All your usual health checks will still be done but you may start to go into your appointment on your own if you choose to	**Response:** Group to make comments	▪ school packs R30 ▪ Follow-up appointment from local team

TIME	EDUCATOR ACTIVITY	STUDENT ACTIVITY	MATERIALS
	Explain: **Follow-up will be done by your own diabetes team** Discuss the advice to be given with the local team and inform the students	**Response:** Discuss follow-up arrangements for after the course	❑ Camera ❑ Notes from the first session on working together ❑ Evaluation sheets R29 ❑ Reminder sheets R9
12.20pm	**Ask:** **Does anyone have any questions about the morning activities?**	**Response:** Students to comment	
	Ask: **Do you feel confident to go away today with the information we have given you and experiment with these new skills**	**Response:** Students to respond	
	Ask: **Look at hopes for the week.** Each person comments on whether they have one thing they feel has been particularly useful.	**Response:** Look at hopes from the beginning of the week and discuss if they have been met. Think about 1 thing that has been most useful	
	Ask: **Student to fill in evaluation forms.**	**Response:** Students to complete forms individually and anonymously before the end of this session and hand in to the educator	
	Give out last reminder sheet		
12.30pm	**lunch**		

Friday	Learning objectives	Materials
Session 3 and 4: **Parents to discuss the course** **Students participate in social activity** **Quiz results**	Students: ✦ Fun session before finishing the course Parents: ✦ Time for parents to reflect on the week ✦ Allow time to ask questions ✦ Discuss follow-up	❑ Theory booklet ❑ Flip chart ❑ Evaluation forms R29 and R31 ❑ Quiz prizes

Educator	Nurse and dietitian		
Preparation	Students to do afternoon activity		
TIME	**EDUCATOR ACTIVITY**	**STUDENT ACTIVITY**	**MATERIALS**
1pm	**Students to do an activity** **<u>Parents session</u>** **Educator:** **To summarize the KO principles** **Ask:** **Have you any questions about KO or the week?** Educators to write down the queries then address these individually. Use the information booklet to refer to. **Ask:** **Please fill in the evaluation forms and give back to the educators (R31). They are anonymous.** **Discuss the follow-up care that the local team have to offer.** Include any contact details for local DUK groups or equivalent. **When students have finished activity. Announce the quiz winner or before if people have to leave early**	**To be decided locally** **Response:** Questions **Response:** Fill in evaluation forms	❑ Course theory booklet ❑ Flip chart ❑ Pens ❑ Evaluation forms R29 for children R31 for parents ❑ Quiz prize
3.30pm	**Course finishes.**		

Notes

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