



# IMPROVING DIABETES CARE IN SCOTLAND 2018

UNDERSTANDING THE PRESENT AND SHAPING THE FUTURE



# **Education Update SDEAG Shaping the Future**

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**Carolyn Oxenham**

## Diabetes in Scotland: Priorities for Improvement

**Aim:** To improve the experience and clinical outcomes for patients living with diabetes across Scotland.

### Prevention and Early Detection of Diabetes and its Complications

To establish and implement approaches to support the prevention and early detection of type 2 diabetes, the rapid diagnosis of type 1 and the implementation of measures to promptly detect and prevent the complications of diabetes.

### Type 1 Diabetes

To improve the care and outcomes of all people living with type 1 diabetes.

### Person-Centred Care

To ensure people with diabetes are enabled and empowered to safely and effectively self-manage their condition by accessing consistent, high quality education and by creating mutually agreed individualised care plans.

### Equality of Access

To reduce the impact of deprivation, ethnicity and disadvantage on diabetes care and outcomes.

### Supporting & Developing Staff

To ensure healthcare professionals caring for people living with diabetes have access to consistent, high quality diabetes education to equip them with the knowledge, skills and confidence to deliver safe and effective diabetes care.

### Inpatient Diabetes

To improve the quality of care for people living with diabetes admitted to hospital by improving glucose management and reducing the risk of complications during admission.

### Improving Information

To ensure appropriate and accurate information is available in a suitable format and effectively and reliably used by all those involved in diabetes care.

### Innovation

To accelerate the development and diffusion of innovative solutions to improve treatment, care and quality of life of people living with diabetes.

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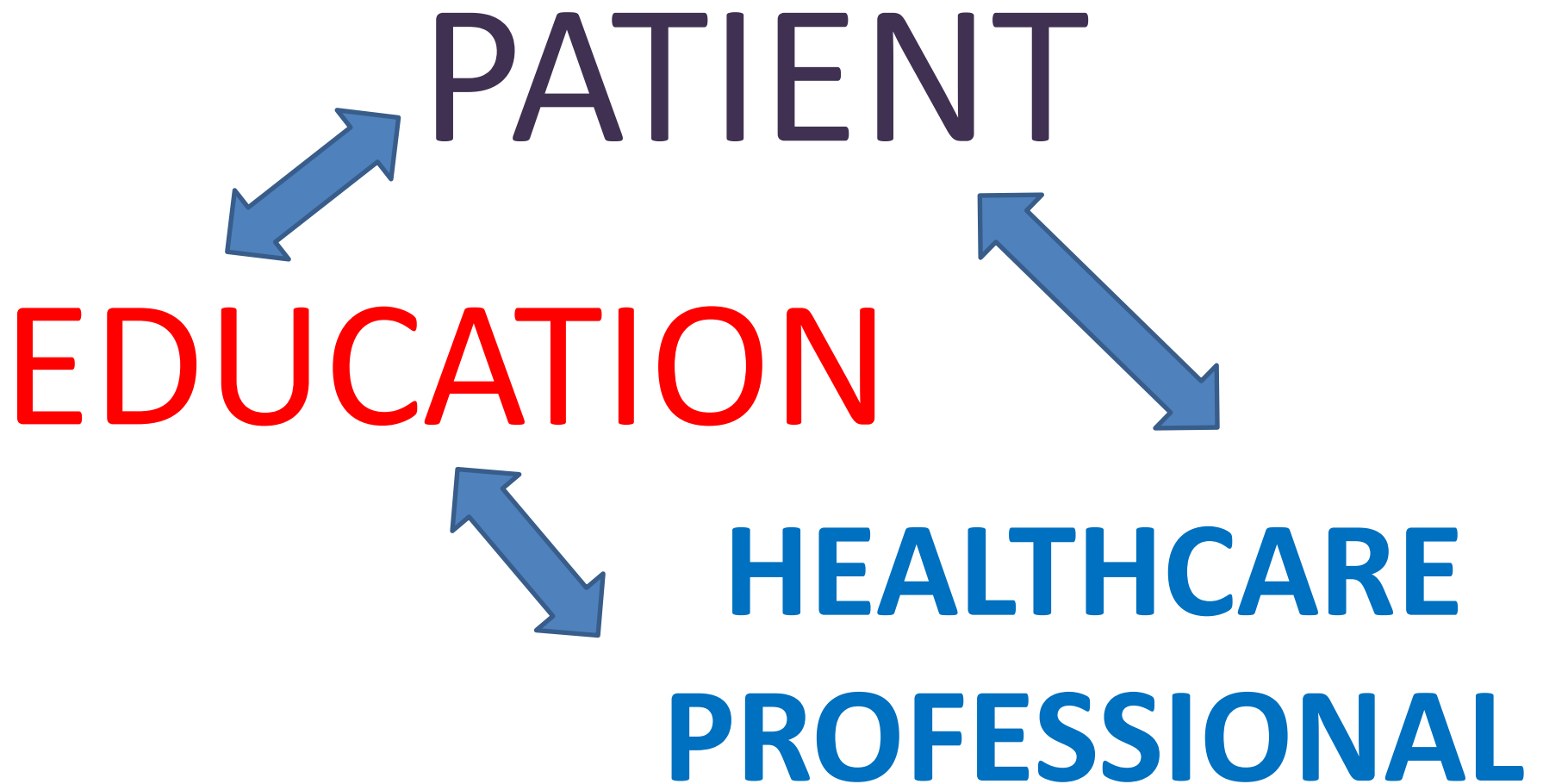
To improve the quality of care for people living with diabetes admitted to hospital by improving glucose management and reducing the risk of complications during admission.

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# Type 1 Structured Education



HEIDI

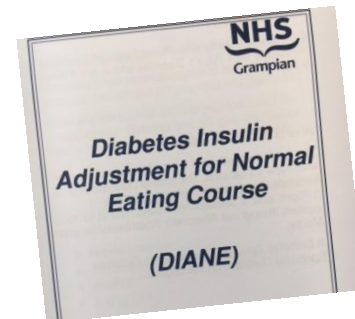


RECLAIM

FOOTSTEPS

CARBIT

TOBE



## KNOW THE NUMBERS

Every person with Type 1 diabetes has to manage their condition to live a healthy, happy life. This quick guide shows the blood glucose readings that you should be aiming for.

### BLOOD GLUCOSE GUIDANCE FOR TYPE 1 DIABETES

**HbA1c**  
(SHOWS CONTROL OVER 3 MONTHS)  
Less than  
**58**  
MMOL/MOL

**7 DAY AVERAGE**  
(OF DAILY BLOOD GLUCOSE CHECKS)  
Aim for  
**8**  
MMOL/L

### WHAT TO AIM FOR DURING THE DAY

BEFORE BREAKFAST



**5-7**  
MMOL/L

BEFORE MEALS



**4-7**  
MMOL/L

2 HRS AFTER MEALS



**5-9**  
MMOL/L

BEDTIME



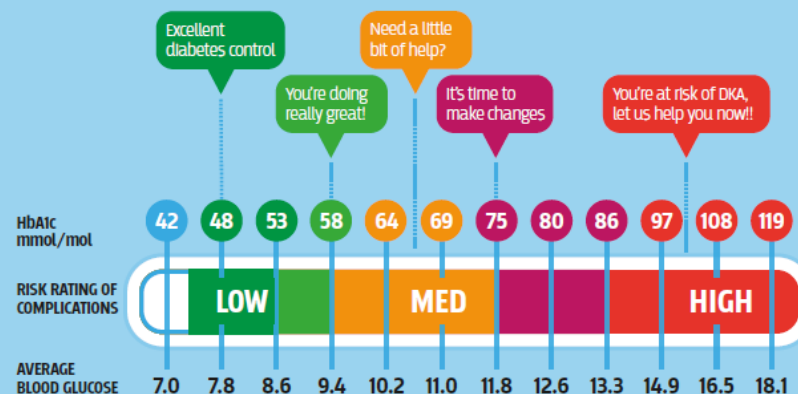
**6-8**  
MMOL/L

### TOP 3 TIPS FOR MANAGING BLOOD GLUCOSE

- 1** Give insulin **5-15** minutes before meal times
- 2** Check your blood at least **5** times a day
- 3** Improve your carb counting skills... **1... 2... 3**

Remember, a lot of things can affect your blood glucose readings such as shift work, exercise and illness. Do you need a little help? Is there something you're struggling with? Keep talking to your Diabetes Team about how to improve your self-management.

## HbA1c - HOW ARE YOU DOING?



### Things to remember:

Your HbA1c is a measure of your blood glucose over the last 8-12 weeks.

The target HbA1c for people with Type 1 diabetes is less than 58mmol/mol.

Very high blood glucose levels will put you at risk of developing Diabetic Ketoacidosis (DKA) which if left untreated could cause you to become seriously ill and need an emergency hospital admission.

Lowering your HbA1c by just 10mmol/mol reduces your risk of complications by 20%.

Date: \_\_\_\_\_ Current HbA1c: \_\_\_\_\_ Last HbA1c: \_\_\_\_\_

Discussions: \_\_\_\_\_

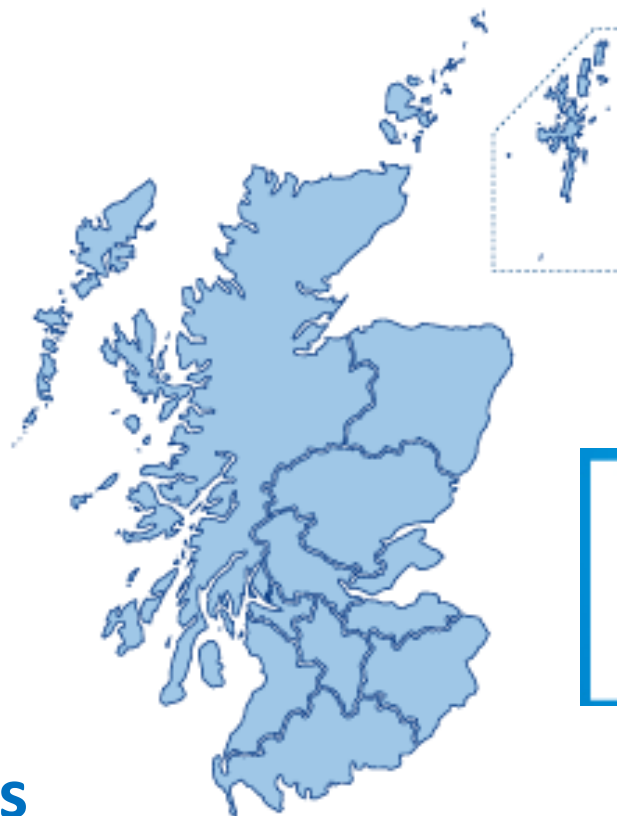
Next steps: \_\_\_\_\_



# T2 Structured Education



**X-pert Diabetes**



**Footsteps**



## Assessment of Patient Education in Diabetes in Scotland



&

## Tool for the Assessment of Patient Education in Diabetes in Scotland



## Structured diabetes patient education in Scotland

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### Abstract

This article describes how Scotland is addressing the need to review structured diabetes education to support self-management and record this on the national database. A National Education Coordinator (NEC) was appointed to lead the development of structured diabetes education. The NEC was supported by an education lead from the 14 health boards and representation from paediatric, minority ethnic and patient groups.

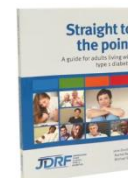
Through literature searching, discussion, workshops and a consensus approach, the criteria for structured patient education were developed appropriate for the Scottish context. A process to review education programmes was established and reviewers trained in this role. Reviewers are professionals, patients and carers. Recording of education on the database utilises the process of education delivery. A website has been developed to host educational resources and signpost people to other appropriate information.

Four reviewed education programmes meet structured patient education criteria. Patients attending these programmes have their attendance recorded on the national database. The website is regularly sourced. It was concluded that Scotland has a process to review patient education programmes as to whether they meet structured education criteria, and a process to record attendance at this education on its national database: the website continually updates staff and patients on

- Patient Handbooks
- Leaflets
- Websites
- Pregnancy
- Insulin Pump starts
- Rolling Programs/Topics
- Education Days
- CGM starts
- Apps CHO/fitness



- Health care professional education
- House of Care
- On Line
- My Diabetes My Way
- Think Check Act
- 3<sup>rd</sup> Sector



NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

**DIABETES UK**  
CARE. CONNECT. CAMPAIGN.

**DIABETES AND HIGH HbA1c**  
INFORMATION PRESCRIPTION

Your last two HbA1c results are        and       .

Your general practice is responsible for making sure you have all necessary appointments. Making sure you have been given to have health benefits. Discuss and agree with your doctor or nurse a suitable personal target for HbA1c.

**What is HbA1c?**  
HbA1c is your average blood glucose for the last two months. It is the best measure for long-term blood glucose control and helps to predict the risk of complications. It is important to know your HbA1c and to aim to keep it as low as possible. A target HbA1c will be set for you by your doctor or nurse. It is important to know your HbA1c and to aim to keep it as low as possible.

**When is high HbA1c a problem?**  
High HbA1c can lead to complications. It is important to know your HbA1c and to aim to keep it as low as possible. A target HbA1c will be set for you by your doctor or nurse. It is important to know your HbA1c and to aim to keep it as low as possible.

**How can I lower my HbA1c?**  
If it is important to understand that your HbA1c will change. It is important to know your HbA1c and to aim to keep it as low as possible. A target HbA1c will be set for you by your doctor or nurse. It is important to know your HbA1c and to aim to keep it as low as possible.

**Keep to a healthy weight**  
☐ Get down to a healthy weight.  
☐ Get down to a healthy weight.

**Get a healthy balanced diet**  
☐ Get down to a healthy weight.  
☐ Get down to a healthy weight.

**Get some advice**  
☐ Get down to a healthy weight.  
☐ Get down to a healthy weight.

**Helping out**  
☐ Get down to a healthy weight.  
☐ Get down to a healthy weight.

**AGREED ACTION PLAN**  
My personal goal is: \_\_\_\_\_





# STEP

## Scottish Type 1 Educational Programme

ADULT GUIDANCE 2016

### KNOW THE NUMBERS

Every person with Type 1 diabetes has to manage their condition to live a healthy, happy life. This quick guide shows the blood glucose readings that you should be aiming for.

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#### TOP 3 TIPS FOR MANAGING BLOOD GLUCOSE

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Remember, a lot of things can affect your blood glucose readings such as shift work, exercise and illness. Do you need a little help? Is there something you're struggling with? Keep talking to your Diabetes Team about how to improve your self-management.

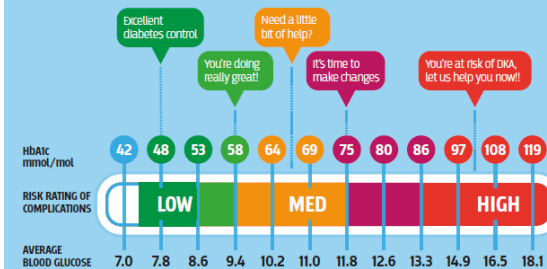


WELCOME WENDY | RESOURCES | NEED HELP? | LOG OUT



In the modules above you'll find a range of resources to help you learn more about diabetes and support people with the condition. You can complete the modules in your own time but we recommend you complete them in order. When you exit the course, we'll save your progress for next time.

### HbA1c - HOW ARE YOU DOING?



# NEWLY DIAGNOSED WITH TYPE 2 DIABETES



## NEWLY DIAGNOSED WITH TYPE 2 DIABETES

Diabetes UK is the leading UK charity for people affected by and at risk of diabetes. We're here with all the information, advice and support you might need to manage your condition well. We're here to put you in touch with others with diabetes, and campaign tirelessly for better care and improved healthcare services. Our world-class research changes lives and is bringing us closer to a future without diabetes.

This education pack is funded by The Scottish Government Diabetes Improvement Fund

\*Mon-Fri, 9am–7pm. The cost of calling 0141 numbers can vary according to the provider. Calls may be recorded for quality and training purposes.

The information provided in this guide is correct at time of publication. It is not a substitute for seeing a healthcare professional and is not intended to replace the advice given by a healthcare professional.

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### WHAT IS TYPE 2 DIABETES?

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Continued overleaf

T: 0141 212 8710 1

**DIABETES  
SCOTLAND**

Shaping the Future Stirling 2018

# SELF MANAGEMENT

## Shaping the Future Stirling 2018



**BUILDING A HEALTH SERVICE  
FIT FOR THE FUTURE**

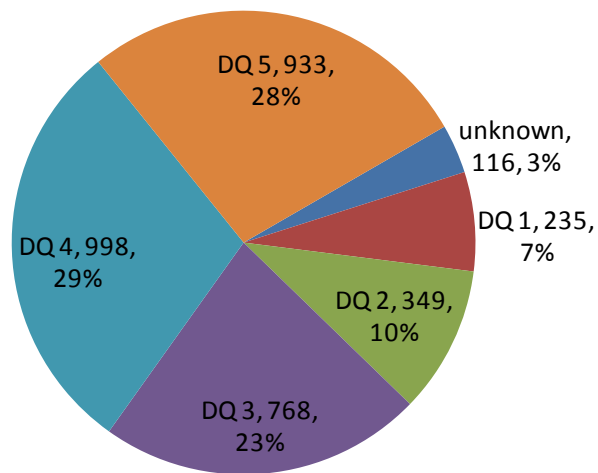


**“ The average  
person with diabetes  
will spend 3 hours  
with a Healthcare  
Professional and will  
take care of  
themselves for the  
remaining 8757  
hours in a year”**

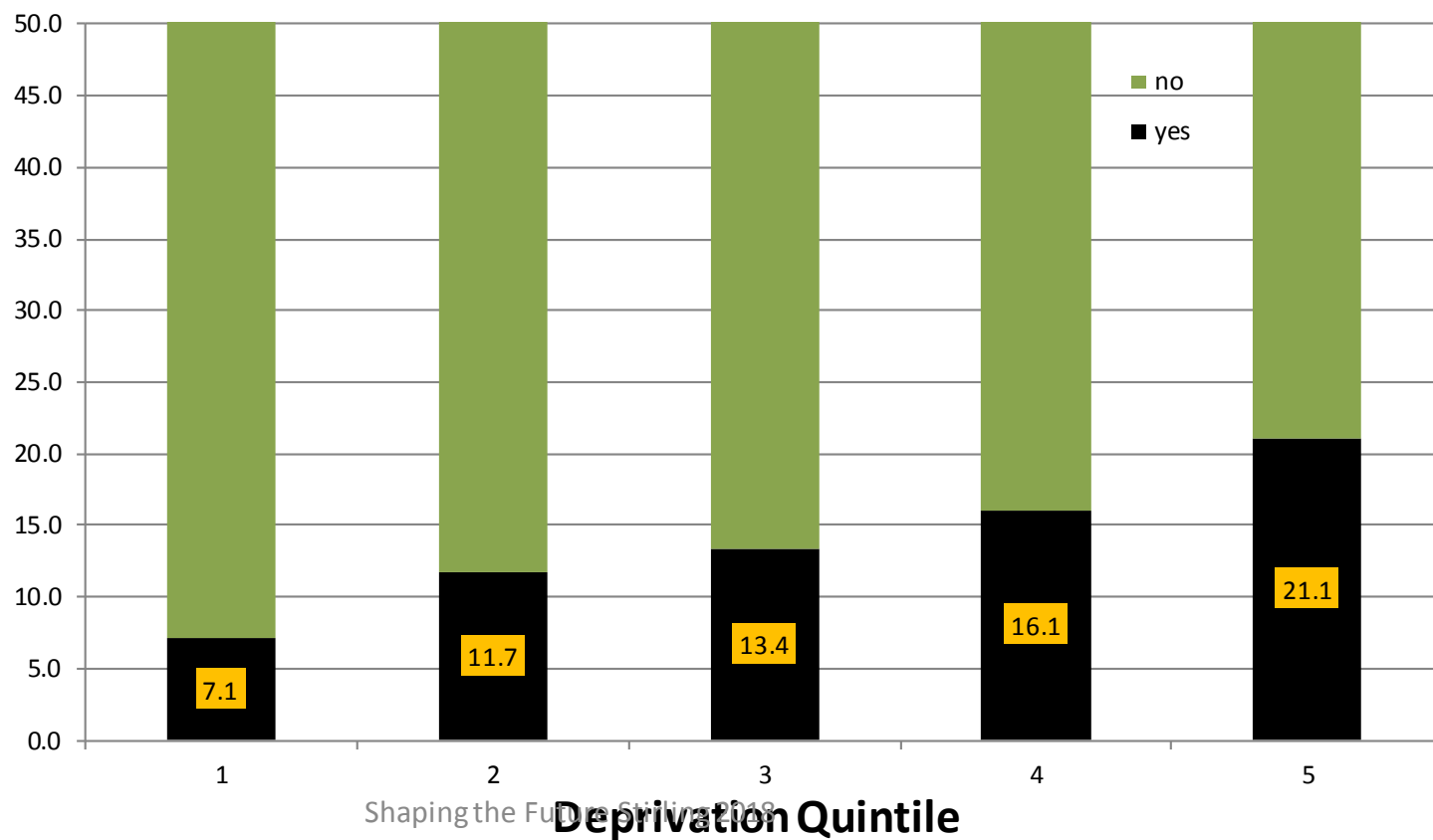
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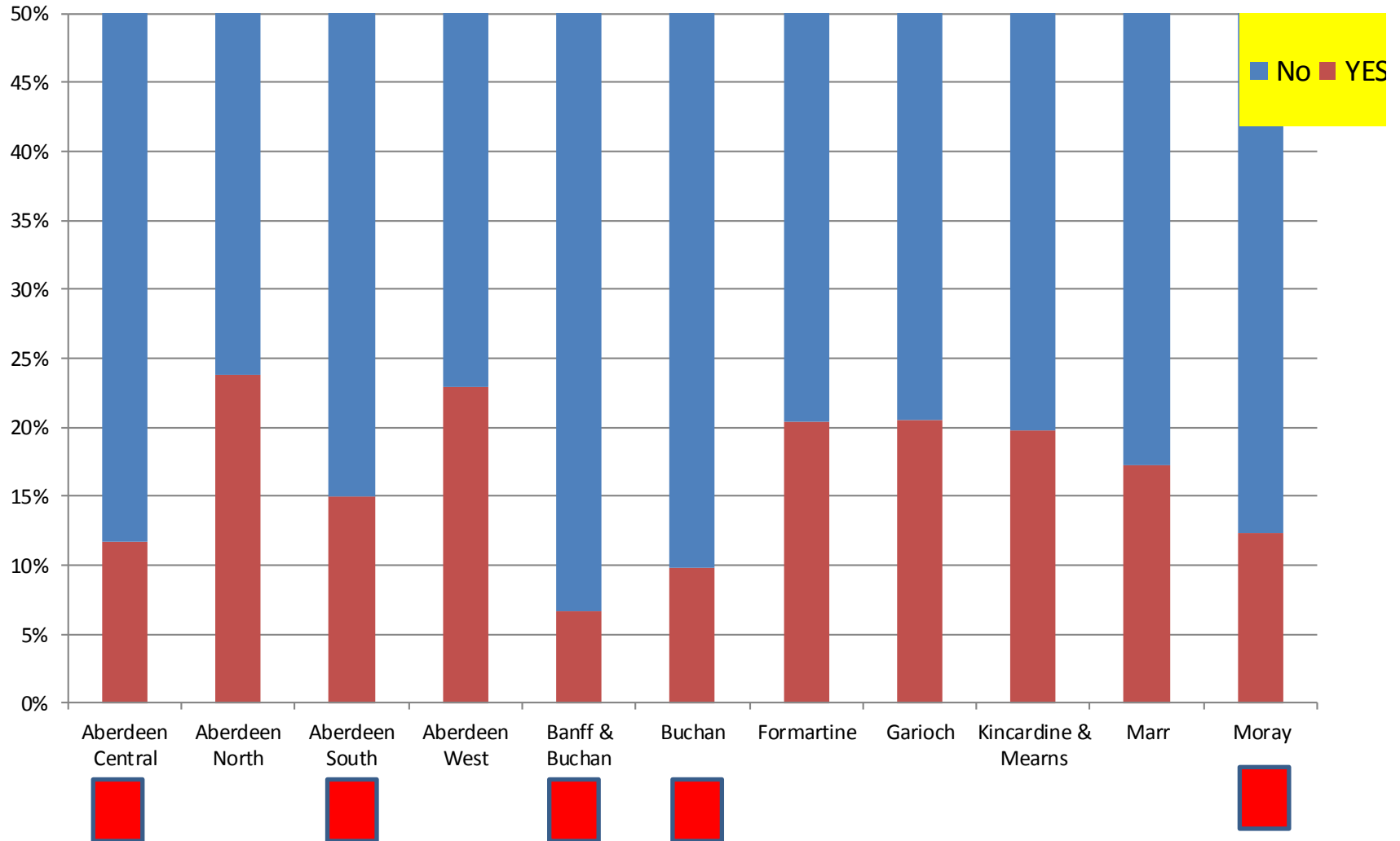
## Type 1 Diabetes population : SIMD



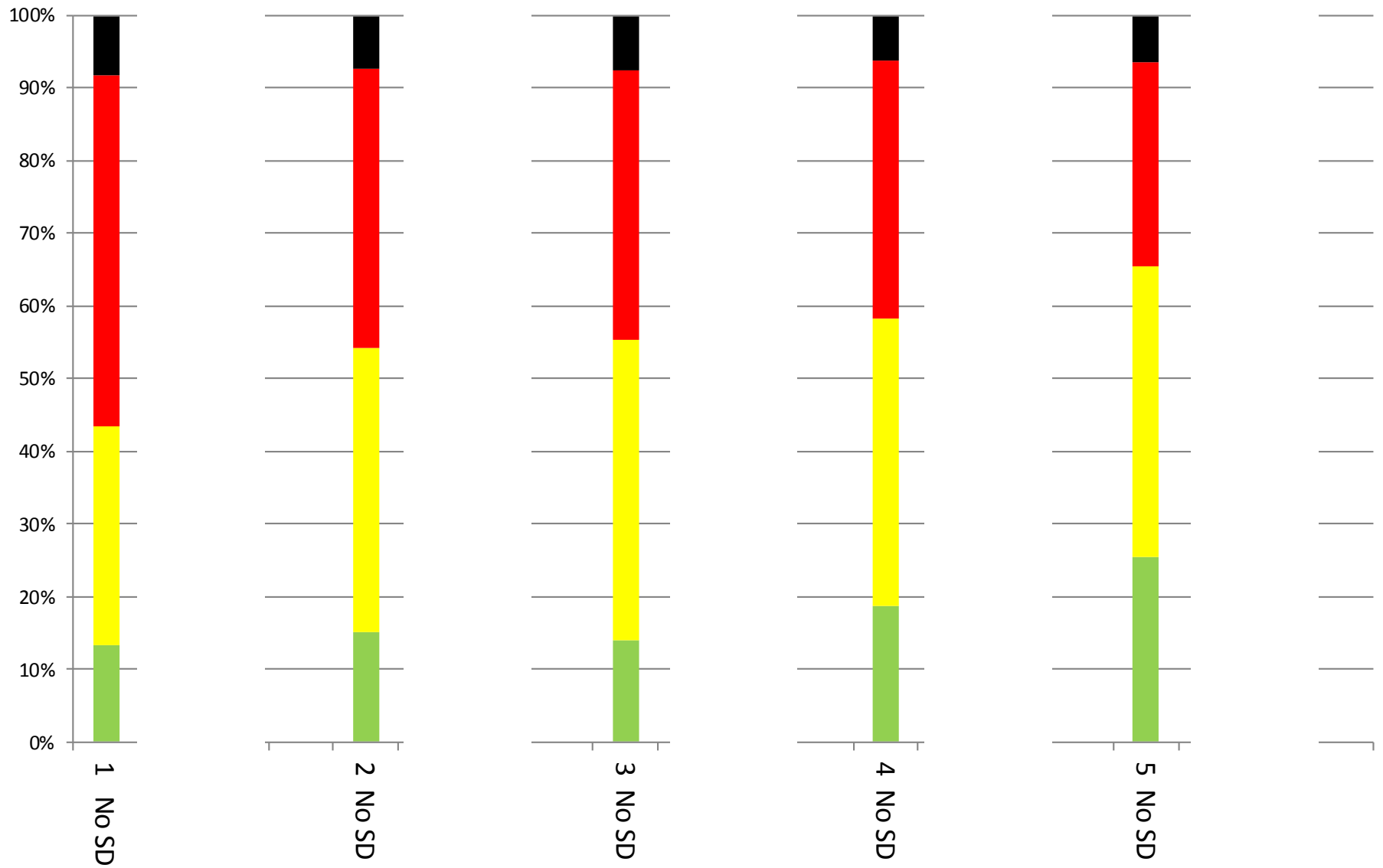
## Uptake of Structured Education



# Uptake of Structured Education



#T1D



## Insulin Management Home Page

### Welcome To Insulin Management Online Learning Programme

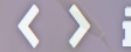
This online learning programme has been specifically designed to provide background information and practical advice to support people with type 1 diabetes to make living with diabetes easier and enable you to manage your diabetes more effectively. The content is based upon the Tayside Insulin Management Programme, or TIM as it is also known, which is an education programme for people with Type 1 Diabetes following a basal bolus insulin regimen. TIM was developed to enable people on this insulin regimen to:

- Learn all aspects of carbohydrate counting and insulin dose adjustment.
- Enhance their knowledge and skills in relation to their diabetes.
- Achieve maximum quality of life, while controlling blood glucose levels.
- Reduce the risk of long-term complications.

Carbohydrate counting gives you more choice and flexibility with the type and amount of food you eat. It can also help you maintain your blood sugar levels within your target ranges.

# HEIDI ON-LINE

## HEIDI Session 2



Introduction

What is diabetes?

The balancing act

Food and your feelings

Nutrition

Counting carbohydrate

**Food labels**

Reference tables

Making it easier!

Estimating  
carbohydrate

Food diary

Calculating ICR

Correction dose

Summary

### Food labels

Most packaged food has a label which shows nutritional information. Here's an example of a label for a digestive biscuit.

You will see from the label that it shows 'carbohydrate' and then underneath 'of which sugars'. When you are carbohydrate counting you are only interested in the total carbohydrate and can ignore 'of which sugars'.

Carbohydrate is usually shown per 100g of the food or per recommended portion.

Using the portion measure is very simple to do and is useful for foods where you will actually eat that portion size, such as biscuits, yoghurts and cereal bars.

So take a look at the digestive biscuit label:

If you eat 1 biscuit, how much carbohydrate will you be having?

check answer

#### Nutrition information

Average values	Per 100g	Per biscuit (14.8g)
ENERGY (kj) (kcal)	2014 481	298 71
FAT of which SATURATES	21.3g 10.1g	3.2g 1.5g
CARBOHYDRATE of which SUGARS	62.9g 16.6g	9.3g 2.5g
FIBRE	3.6g	0.5g
PROTEIN	7.2g	1.1g
SALT	1.3g	0.2g

Typical number of biscuits per pack: 20

Digestive biscuit label

[Introduction](#) [What is diabetes?](#)[The balancing act](#)[Food and your feelings](#)[Nutrition](#)[Counting carbohydrate](#)[Calculating ICR](#)[Correction dose](#)[Summary](#)

## Nutrition

Nutrition is the process of taking food in for health and growth. It refers to all the nutrients that we need to survive and be healthy.

Recap from week 1: There are 5 main macro-nutrients, or 'big nutrients'. Click on each nutrient for more detail:

[Protein](#)[Fat](#)[Carbohydrate](#)[Fibre](#)[Alcohol](#)

Protein is made up of amino acids. These are essential nutrients needed for growth, repair and maintenance of the body.



Protein is found in a wide variety of foods, but is in higher amounts in foods such as meat, fish, eggs, nuts and beans.

It contains 4kcal per gram and excess dietary protein is used as an energy source or stored as fat. Protein is broken down differently in the body to carbohydrate and so does not cause a big rise in blood glucose and so is not counted when carbohydrate counting.



Pixabay / CCO 1.0




HEIDI Session 4

## Let's go for a virtual meal!

Welcome to our virtual restaurant, we serve many different types of food and alcohol, including popular cuisine from exotic areas in the world.

You choose, anything you fancy, it is all calorie free!!

Select a menu ..


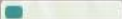

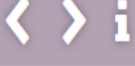


Image from [OpenClipart.org](https://openclipart.org)

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you fancy, it is all calorie free!!

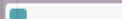
## Indian Menu

### Starters

**Poppadums with chutney** ☐

**Onion bhaji**  
Freshly chopped onions mixed with lentils and a selection of herbs and spices, shaped into balls and deep fried. Served with a cooling yoghurt sauce ☐

**Chicken pakora**  
Tandoori chicken breast dipped in spicy gram flour batter, fried and served with a chilli sauce ☐

Main Course12 of 14

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# Diabetes Education Scotland

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## Websites regarding Patient Education

There are various websites that support and develop patient education.

In Scotland, the Assessment of Patient Education in Diabetes in Scotland & Tool for the Assessment of Patient Education in Diabetes in Scotland (APEDS & TAPEDS) can be accessed [here](#).

The Reviewers' Handbook for the Assessment of Patient Education in Diabetes in Scotland can be accessed [here](#).

The [Diabetes UK Fife voluntary group](#) leads the way for people with diabetes in Fife.

[Healthtalkonline](#) is website with patient's stories supports people living with long term conditions like diabetes.

[The Knowledge Network](#) provides information and resources on caring for older people.

The [digital story library](#) holds a collection of short audiovisual stories about people's real-lived experiences of health and social care in Scotland.

The [NHS Institute of Innovation and Improvement Diabetes in-patient workshop](#) hosts patient stories on diabetes and its management in a hospital setting.

[Listen to Barbara](#), as part of the patient voices programme, shares how diabetes lives with her, not Barbara living with diabetes.

Volunteers are often required for many aspects of patient care. Read more about volunteering [here](#).





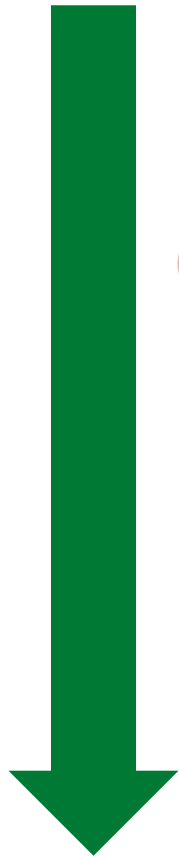
The Diabetes Practitioners'

# **Motivation Action Prompt**

Health Behaviour Change Training Toolbox

**Vivien Swanson, Wendy Maltinsky, University of Stirling**

## Blended Learning



- Two weeks pre-
  - diary task
  - BCT questionnaire
- Training intervention Full DAY 1. 0,5 day 2
  - action and coping plans
  - satisfaction questionnaire
- 3 weeks post training
  - BCT questionnaire
- 6 weeks post-training
  - Email follow-up
- 3 months post training
  - BCT questionnaire

11 Boards  
165 participants  
Multi-  
professional

# The Consultation Framework

We use the MAP framework for delivering interventions and have related this to stages of a consultation to support the process of change. The remainder of this manual will look at the process of change in stages and the accompanying consultation framework and techniques as

## Techniques/Tools

### Opening

- 01** Agenda setting
- 02** Typical day
- 03** Behavioural Satisfaction
- 04** Share Information

### Motivation

- M1** Explore importance and confidence
- M2** Pros and cons of change
- M3** Identifying goal(s)
- M4** Self-monitoring

### Action (using prompts)

- A1** Planning
- A2** Problem solving
- A3** Use of prompts and cues
- A4** Rehearsing
- A5** Reviewing and contracts
- A6** Establish social support

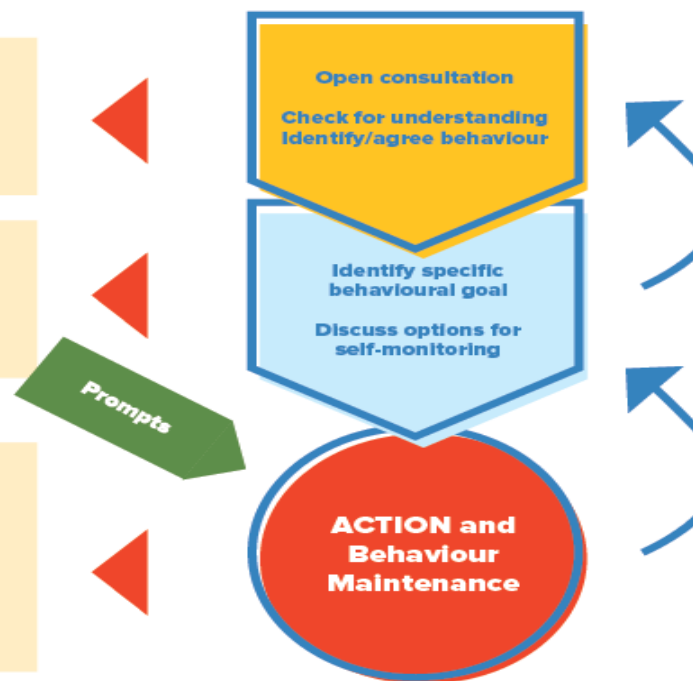
## Consultation Framework

- **Agenda Setting**
- **Behavioural Satisfaction**
- **Share Information**

- **Reveal motivation**

- **Work out the plan including prompts to build and overcome habits**
- **Establish social support**
- **Set review period and processes, commitment and contract**

## MAP Behaviour Change Process: Motivation, Action and Prompts



**A good action plan should include the following elements (with examples):**

ACTION PLAN	SAMPLE
What is the behavioural goal?	Ride my bike
When will I do it?	5 p.m. after work
When will I start?	On Tuesday the 16th of October...
How often?	Monday, Tuesday and Thursday's
For how long?	30 minutes
How far?	I will cycle the high street and to the next village and back
Who will support me?	My husband; I know he'll come with me
How will I measure this?	I'll use an app
How will I know when I have achieved it?	I'll enter the data each data for 2 weeks and then review and I'll measure my heart rate too.
When will I review this plan?	In one month

## **A2: Problem Solving: Coping Plans**

Action plans specify what and when to do something as well as the detail of how much and how often. However, it is easy for someone to revert to habit. Challenges or barriers can more easily be overcome if they are anticipated and planned for in advance (see Appendix 11 for a template).

### **Steps to Success**

Small steps, taken slowly,  
build stairs to success...



**Behaviour change in five minutes**

- Theory based training in BCTs
- self-reported use of BCT in 50% of attendees at 6 week follow-up
- most plans (56%) were rated as high quality
- developing coaching and training network
- developing video clips of BCTs
- positively rated interactive activities and personal behaviour change
- range of professionals

**Future plans –**

• build on success of initial training