



South West Yorkshire
Partnership Teaching
NHS Foundation Trust

Carbohydrate Counting: Practical Support at Annual Reviews

Jennifer Thawley, BSc Hons, PG Dip, RD, Specialist Diabetes
Dietitian & Team Lead

Community Nutrition & Dietetics, Barnsley Physical Health &
Wellbeing Care Group

Email: jennifer.thawley@swyt.nhs.uk

With **all of us** in mind.

Why Carb Counting Matters



Improves HbA1c



Reduces glucose variability



Can prevent significant post-meal spikes



Increases food flexibility



Builds confidence and self efficacy

What is carb counting?

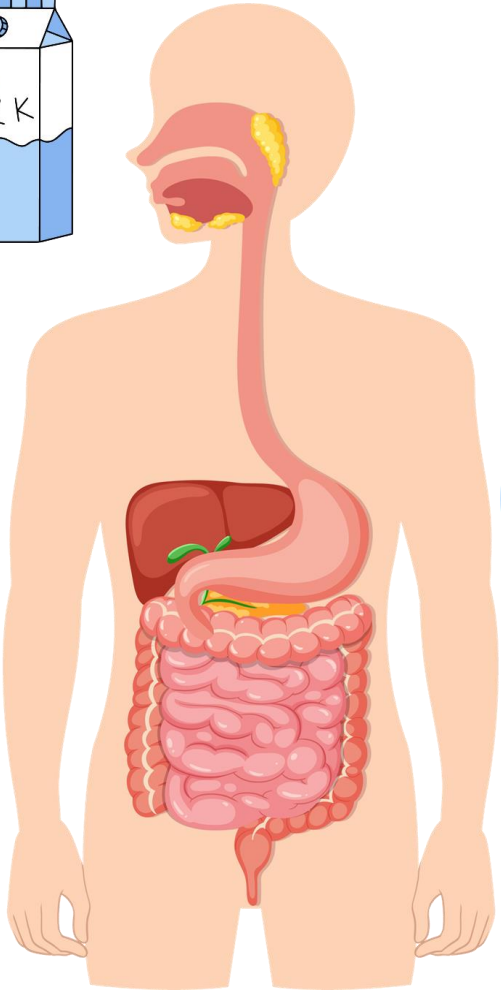
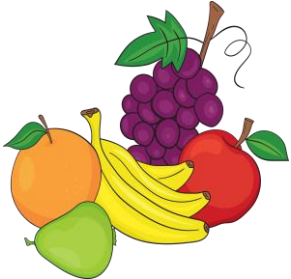
3 levels of complexity

Level	Description	Who
1. Basic awareness	Knowing carbohydrate foods & portion size awareness	All patients with diabetes need to know this.
2. Consistent carb intake	Similar carbohydrate portion with all meals. Sometimes with sliding scale corrections.	Type 2 Diabetes taking set doses of mixed insulin or set doses of basal bolus insulin. Type 1 Diabetes taking set doses of basal bolus insulin.
3. Advanced Carb Counting	Insulin to carbohydrate ratio e.g. 1:10g, correction doses e.g. 1:3mmols/l.	Those with Type 1 Diabetes and Type 2 Diabetes- taking variable multiple daily injections (MDI) or Type 1 Diabetes on a Pump

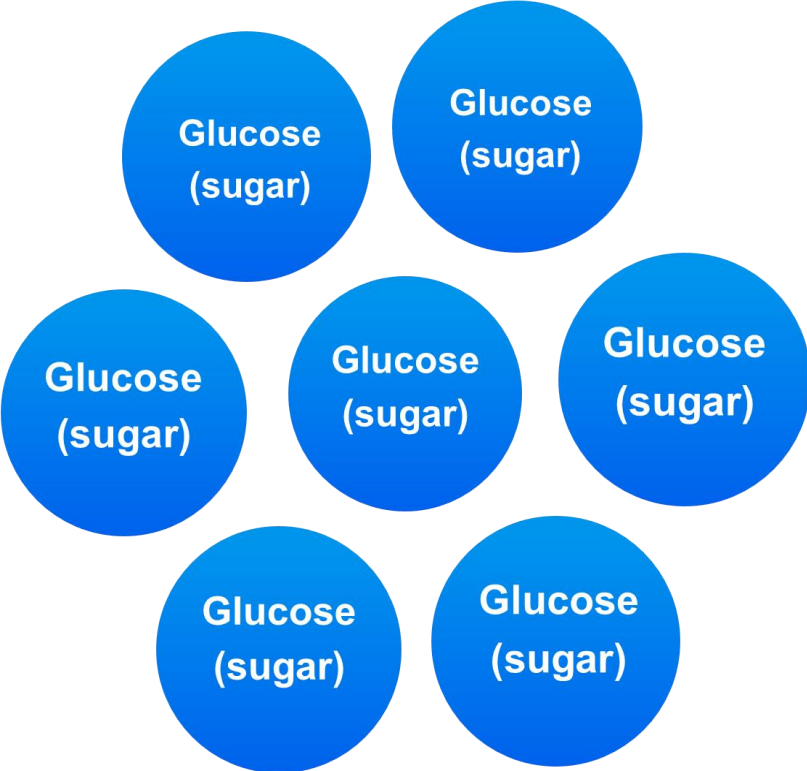
Identifying foods that affect blood glucose



ALL Carbohydrates



**Break down into Glucose -
Also known as sugar...**

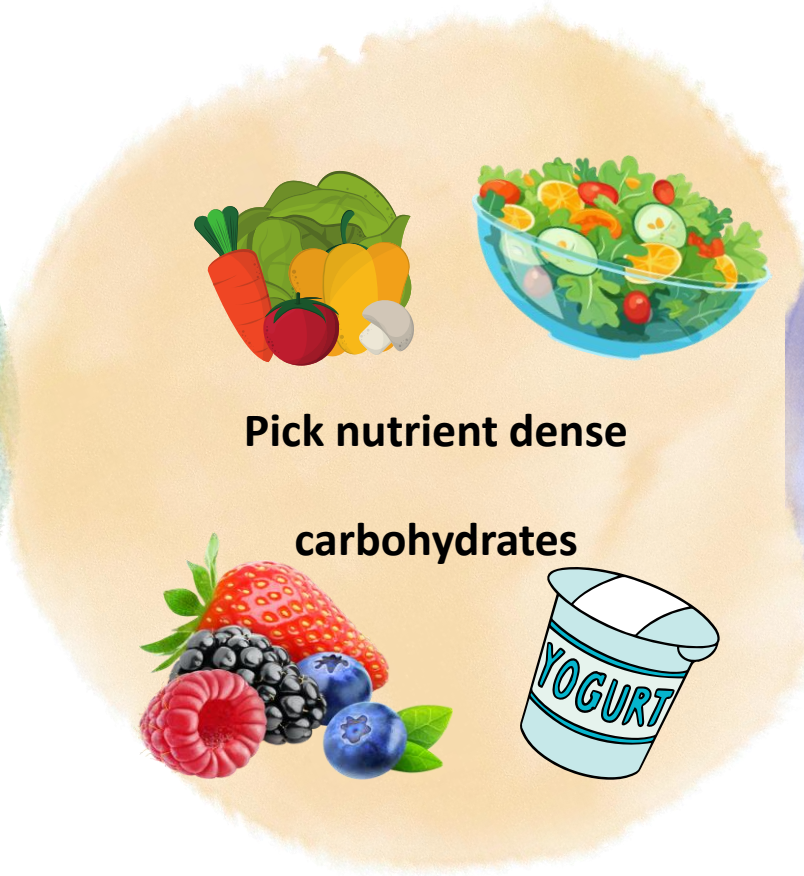


Focusing on Carbohydrates Helps To Manage Glucose Levels Almost Right Away



Reduce your portion sizes of Starchy carbohydrates

This graphic features a green circular background with illustrations of starchy carbohydrates: a bowl of oatmeal, a loaf of bread, a pile of french fries, a bowl of rice, and several potatoes.



Pick nutrient dense carbohydrates

This graphic features an orange circular background with illustrations of nutrient-dense carbohydrates: a variety of vegetables (carrot, bell pepper, tomato, mushroom), a bowl of green salad, a cup of yogurt, and a selection of berries (strawberry, raspberry, blueberry, blackberry).

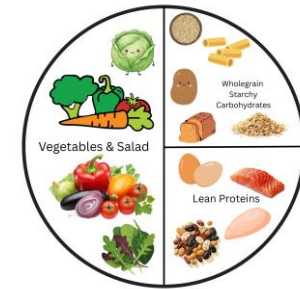


Limit high calorie high sugar carbohydrates

This graphic features a purple circular background with illustrations of high-calorie, high-sugar carbohydrates: wrapped candies, a chocolate bar, a soda can, a cupcake, a donut, and a bag of chips.

Practical Tools

- Carbs & Cals App or Book
- Basic Carbohydrate portion lists online
- Food labels
- Healthy Eating Plate visuals
- Using similar cups/spoons/plates and bowls for all meals



DiABETES UK
KNOW DIABETES. FIGHT DIABETES.

Nutrition information		
Typical Values	Per 100g	Per Slice (46g)
Energy	1057kJ	486kJ
-	251kcal	115kcal
Fat	3.7g	1.7g
Of which Saturates	1.1g	0.5g
Carbohydrates	39.4g	18.1g
Of which Sugars	4.1g	1.9g
Fibre	6.4g	2.9g
Protein	11.7g	5.4g
Salt	0.96g	0.44g

Screening Questions: How Much Does Your Patient Really Understand?

Key Questions for all patients

1. Have you heard about the FREE Diabetes programme in Barnsley? DESMOND (Type 2), DAFNE (Type 1)
2. Did you know that your blood sugars aren't just being affected by 'sugary foods.'

Key Questions for those taking Sulphonylureas, Mixed/twice daily insulins

1. Do you test your blood glucose daily?
2. When do you take your medication for Diabetes?
3. How confident do you feel identifying the carbohydrates in your diet?
4. Are you eating regularly and are you mindful of how portion size of carbohydrate affects your blood sugar?

Key Questions for those taking variable basal bolus insulin.

1. Do you test your blood glucose before eating?
2. When do you take your insulin in relation to your meals?
3. Do you adjust your insulin for meals? And how do you decide how much insulin you're going to take?
4. How confident do you feel identifying carbohydrates?
5. How do you identify the carbohydrate amount in your meals?

In the first instance you can signpost to useful and reliable sources of information as discussed today. But referral to DESMOND or DAFNE is the gold standard. We do see patients 1:1 if group is inappropriate.

When to refer on;

Red Flags: Frequent hypoglycaemic episodes, erratic blood glucose readings, very high HbA1c that is persistent or rising despite first line advice and medication review, significant weight loss, those totally avoiding carbohydrates/very limited dietary intake, those showing signs of diabetes distress.

Look beyond HbA1c for the real story behind your patients' glucose results.

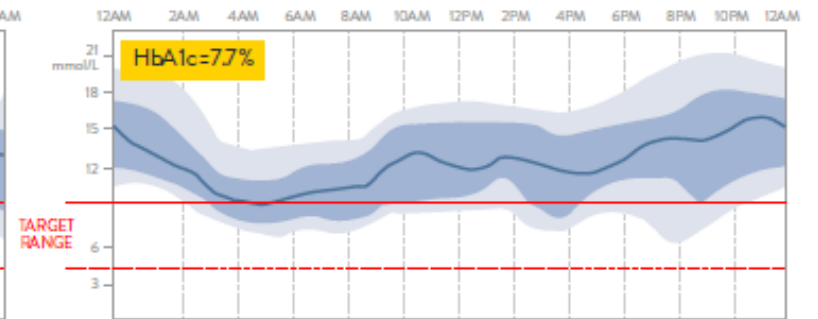
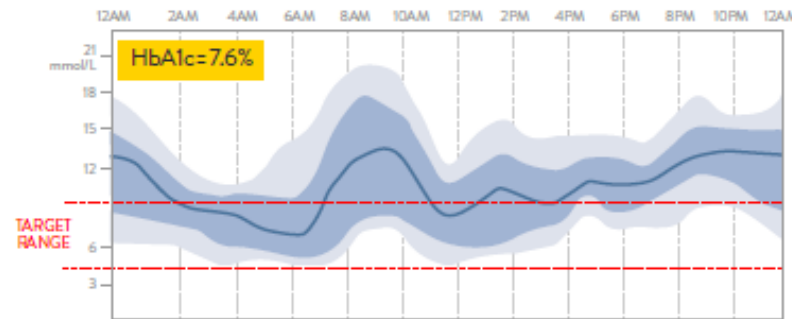
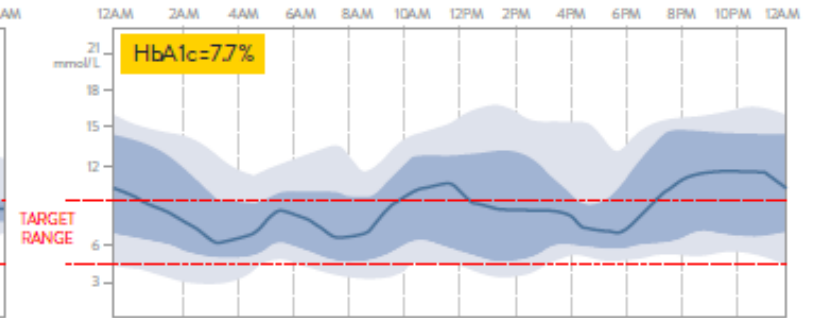
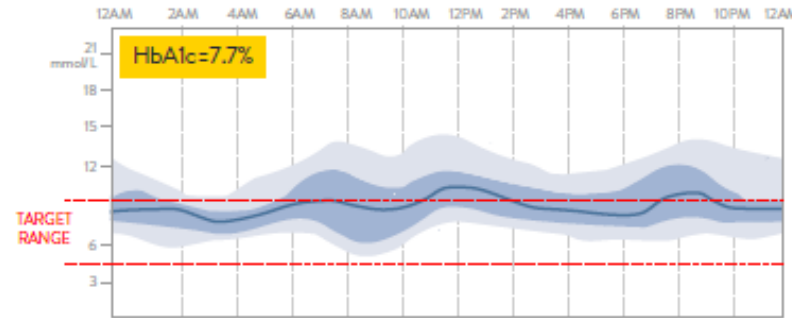


The major obstacle

Limitations of SMBG

Limitations of HbA1c

Four patients with the same HbA1c (7.6-7.7%) have very different glucose variability¹.



Data Source: Kindly provided by Abbott

Referring to
structured group
programme or
diabetes dietitian

Barnsley Integrated Diabetes SPA

Group is first line. DAFNE for Type 1 Diabetes, DESMOND for Type 2 Diabetes. It's vital you have this conversation before referring.

1:1 referral criteria- Those with LD, Memory issues, poor sight, poor hearing, English not first language.

Useful Links

- NICE Guidance: Type 1 Diabetes <https://www.nice.org.uk/guidance/ng17>
- NICE Guidance: Type 2 Diabetes <https://www.nice.org.uk/guidance/ng28/chapter/Initial-medicines>
- DESMOND and DAFNE info
- Diabetes UK Website: Carbohydrates and Diabetes, What You Need To Know https://www.diabetes.org.uk/living-with-diabetes/eating/carbohydrates-and-diabetes?gad_campaignid=15219795775&gad_source=1&gbraid=0AAAAAD4lfZVdgWnJ_LdaJMykHdG8nNl3B
- Carbs & Cals: <https://carbsandcals.com/>
- Diabetes UK Learning Disabilities: [Improving care for people with diabetes and a learning disability | Diabetes UK](#)
- Libre View: <https://pro.freestyle.abbott/uk-en/freestyle-portfolio/digital-health-solutions/libreview.html>
- [Dexcom Continuous Glucose Monitoring \(CGM\) | Dexcom](#)