

TOP TIPS FOR OPTIMISING GLUCOSE LEVELS IN PREGNANCY

Working to achieve the best possible glucose levels for pregnancy can feel challenging at times.

There are certain actions that make a big difference to glucose levels and they are listed below.

Tick off the ones you feel you are getting right so you can identify the next action to focus on.

EATING THE RIGHT TYPE OF CARBOHYDRATE



Different carbohydrates can have very different effects on blood glucose levels after eating. Choosing the right type of carbohydrate can make all the difference to keeping the 1 hour post meal glucose below the target of 7.8mmols/l.

Carbohydrates that are unrefined, high in fibre with a low glycaemic index (below 55) create a slower and lower rise in glucose levels after eating.

The table attached lists the foods that most women find don't work well in pregnancy with better alternatives.

TIMING OF BOLUS INSULIN



Giving your bolus insulin ahead of eating can help limit the post meal rise in glucose levels

In early pregnancy giving insulin 10-15 minutes before and as your pregnancy progresses extending this time to 30-40 plus minutes.

EATING THE RIGHT AMOUNT OF CARBOHYDRATE



It is important to eat enough carbohydrate to provide enough energy and nutrition to support a healthy pregnancy.

However too much carbohydrate makes it impossible to achieve the post meal glucose targets.

Carbohydrate is better tolerated when eaten in smaller quantities so eating small amounts at meals with carbohydrate containing snacks between can be very helpful.

You may find the carbohydrate amounts below a good place to start.

Breakfast: 15-20g carbohydrate

Lunch and dinner: 40-60g carbohydrate

Mid-meal snacks: 10-15g carbohydrate

□ **GETTING BREAKFAST RIGHT**



Breakfast is the most challenging meal for keeping the post meal glucose in target; carbohydrate is not well tolerated at this time of day. Most women have to spread their breakfast over 2 smaller meals containing 15-20g.

Good breakfast choices:

- ✓ 1 slice whole-wheat toast (C15g) with a topping e.g. poached or scrambled eggs / mushrooms / tomato / cheese / ham / bacon / avocado.
- ✓ 1 small pot yoghurt (C13g) with one small chopped fruit or cup of berries (C7g) topped with nuts / seeds
- ✓ 25g jumbo porridge oats (C15g) soaked overnight in crème fraiche and 1 cup berries (C7g), top with nuts / seeds
- ✓ 40g jumbo porridge oats (C25g) cooked with water and single cream added to taste

□ **BEING ACTIVE IMMEDIATELY AFTER EATING**

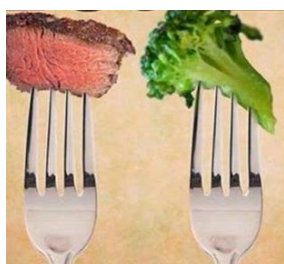


Being active for 10-15 minutes just after eating can make your post meal glucose level as much as 2 mmols/L lower and so help achieve the post meal glucose target.

This can be going for a walk or being active around the house or work place.

AVOID BEING INACTIVE IMMEDIATELY AFTER EATING

□ **BULKING UP MEALS WITH MORE PROTEIN AND VEGETABLES / SALAD**

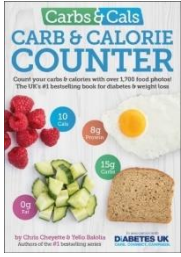


Eating more protein foods such as meat, fish, chicken, cheese, eggs, tofu, Quorn, pulses and vegetables will fill you up more and stop you feeling hungry. These foods also flatten out the post meal glucose rise and so help achieve the post meal glucose targets whilst avoiding dips in glucoses later.

□ **AVOID EATING CARBOHYDRATE LATE IN EVENING**

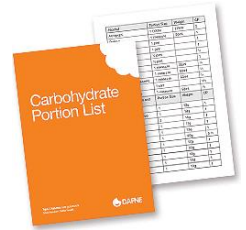
Overnight can be as much as a third of your day so getting glucose levels as near normal pre bed and overnight can really help optimise glucose levels for pregnancy. Eating your evening meal before 7.30 pm and keeping evening snacks to minimal carbohydrate or carbohydrate free (unless eaten to avoid a hypo) can make all the difference to achieving the pre-bed, overnight and even fasting glucose targets.

□ ACCURATE CARBOHYDRATE COUNTING



There are a number of useful resources to help with accurate carbohydrate counting:

- Carbs & Cals book or app (Chris Cheyette & Yello Balolia, Publisher - Chello)
- DAFNE Carbohydrate Portion List
- MyFitnessPal App
- Food Labels: use the “total carbohydrate” amount when working out how much carbohydrate is in the food.
- Restaurant’s web sites: Nutritional information



□ **KEEP**

A FOOD DIARY



Keeping a food diary can help you learn what meals and carbohydrate choices are working well for you keeping those post meal glucoses in target. It can also help you see which choices are best avoided.

□ STAY IN TOUCH

It can be challenging to keep up with changes in insulin requirements as your pregnancy progresses

Women who are in regular contact with the diabetes educators report better glucose levels and feel in better control.



• SNACKS

Snacking mid meal can be really helpful to avoid post meal hypos, help manage hunger and optimise nutrition.

Making snack choice healthy, high in fibre and avoiding refined forms of carbohydrate really helps keep glucose levels stable between meals.

Good types of carbohydrate snacks are: fruit, yogurt, wolewheat crackers & oatcakes with protein toppings. Additional lists are available from clinic.

It can feel tempting to go for sweeter more refined carbohydrates especially if trying to avoid a hypo but these foods, even if covered with insulin, make it difficult to keep the next pre meal glucose in target.



CARBOHYDRATE CHOICES

REFINED CARBOHYDRATES TO AVOID (High GI)	TRY INSTEAD (Low GI)
<p>All white breads: loaf, rolls, pitta, naan, non-traditional baguette, croissant, chapattis, Panini, wraps.</p>	<p>High fibre breads: Rye bread and sourdough bread have the lowest GI. Whole-wheat, stoneground, granary and multi-grain varieties of breads have lower GIs. Chapattis made with whole meal flour</p> <p>Freezing bread first can help lower the GI</p>
<p>White flour based foods: Cakes, biscuits, cream crackers, water biscuits, Ritz, Tuc, Yorkshire pudding, dumplings, Pizza, Pastry (pies, pasties, quiche, sausage rolls, spring rolls). Breaded and battered foods e.g. fish fingers, battered fish.</p>	<p>Oatcakes, whole-wheat crackers and crisp-bread e.g. Ryvita, cracker wheat. Wheatmeal Digestives, Hobnobs, Hovis biscuits (one or two)</p>
<p>Low fibre and sugar coated breakfast cereals: Cornflakes, Rice Krispies, Special K, Sugar Puffs, Cocoa Pops, sweetened muesli.</p>	<p>High fibre cereals: Porridge oats (Jumbo) Most don't tolerate any cereal in pregnancy. You may tolerate small amounts of some high fibre cereals earlier in pregnancy: All Bran, Bran Buds, Shredded Wheat</p>
<p>Rice, pasta, grains: No types need to be avoided.</p>	<p>The best rice is basmati. Brown rice and whole-wheat pasta may give benefit. Cooling rice, pasta and potato after cooking and then eating cold or re-heating will lower the GI Couscous, Bulgur wheat, semolina, tapioca, Quinoa</p>
<p>Processed potato products: Oven chips, French Fries, Smiley faces, waffles, Croquettes, frozen roast potatoes, instant potato, ready meals with instant potato topping</p>	<p>Home cooked potatoes – boiled is best Sweet potato, yam, cassava</p>
<p>Processed savoury snacks: Hula Hoops, Quavers, Pringles, Monster Munch, French Fries, Skips, baked crisps</p>	<p>Sliced potato crisps, for example Walker's or Kettle crisps. Ryvita snacks Vegetable crisps Salted or natural popcorn</p>
<p>Cold drinks: Fruit juices and smoothies, full sugar squash and fizzy drinks. Lucozade.</p>	<p>Sugar free squash, Sugar free carbonated drinks. Water.</p>
<p>Sugar: Sugar, glucose, maltose, dextrose, honey, treacle and syrup</p>	<p>Artificial sweeteners if a variety are used and in small quantities Splenda, Sweetex, Hermesetas, Nutrasweet, Candarel, Stevia</p>
<p>Preserves: Jam, marmalade, Honey, Lemon curd, maple syrup, chocolate spread</p>	<p>Marmite, Vegemite, Peanut Butter (if no allergies)</p>
<p>Sweets / Desserts: Melon, Mango, Pineapple, dried fruit sweets, chocolates, mints Sweet puddings and Ice cream, Tinned fruit in syrup</p>	<p>Fresh fruit, frozen fruit, tinned fruit in natural juice (juice drained off) Sugar free Jelly Yogurt, "fromage frais" (under 15g total carbohydrate / pot)</p>
<p>Condensed, evaporated milk</p>	<p>Crème Fraiche, Cream</p>
<p>Ready meals/stir in sauces/take away: Some ready meals and sauces contain significant amounts of sugar, for example sweet and sour sauces, jar or packet Chinese sauces. Chinese takeaway. Tomato soup, Baked Beans, tinned spaghetti</p>	<p>Tomato-based pasta sauces. Tomato-based/dry curries. Reduced sugar baked beans (drain off sauce)</p>
<p>Bed-time and Malted drinks such as Ovaltine, Horlicks, drinking chocolate.</p>	<p>Cadbury's Highlight, Ovaltine Options, cocoa powder.</p>