

## Notes:

**Name:**

**Date:**

**Dietitian:**

**Contact Number:**

**Hospital Site:**

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Patient information

## Healthy Eating for people with Diabetes

Nutrition and Dietetics Department

**This booklet contains information on healthy eating with Diabetes including:**

**What is diabetes?**

**Can diet help my diabetes?**

**Food guidelines for people with diabetes**

### What is Diabetes?

Diabetes is a condition in which the body is unable to control the glucose (sugar) in the blood. Everybody has glucose in their blood, but in diabetes, the glucose level goes higher than the normal range of 4-7 mmol/l.

If you have diabetes, the glucose level in your blood can become raised. This is because your body does not make enough insulin (a hormone made in the pancreas), or your insulin is unable to work properly.



## Can diet help my diabetes?

The healthy diet for diabetes – choosing carefully **what** to eat, **how much** to eat and **when** to eat it, can help you to control your blood glucose levels and keep them within the normal range.

The main points to help you make changes to your lifestyle are:

1. Eat regular meals
2. Include some starchy carbohydrate at your meals
3. Choose more slow-releasing carbohydrate foods
4. Eat less fat, especially saturated fat
5. Include more oily fish in your diet
6. Eat more fibre
7. Eat sugar in moderation
8. Keep your salt intake low
9. Reduce alcohol intake (if you drink it)
10. Lose excess body weight
11. Do regular physical activity

## 11. Do regular physical activity

Doing some physical activity should be part of your diabetes treatment, as well as following a healthy diet and taking your medications.

The benefits of doing regular activity include:

- Lowering blood glucose levels
- Lowering blood pressure
- Improving blood cholesterol levels
- Keeping joints healthy and reducing back pain
- Reducing and maintaining a healthier weight
- Improving your fitness levels and self-esteem
- Improving your breathing and ability to sleep

Everybody should be aiming for a minimum of 30 minutes moderate intensity activity a day, at least five times a week. The 30 minutes does not need to be in one session, but can be divided throughout the day, for example 2 x 15 minutes or 3 x 10 minutes.

Moderate activity should make you feel warm and get you slightly out of breath, but you should still be able to hold a conversation throughout.

To increase your activity, try to:

- Take the stairs instead of the lift
- Take a walk everyday. Walking to your local shops or get off the bus one or two stops earlier or walk to a further bus stop before getting on.
- Ask about activities happening at your local health centre, leisure centre or gym.
- Try an activity that you could do with a friend or family member; such as swimming, dancing or sport such as tennis or bowling.

## Waist circumference

- We now know that your waist circumference is a better way to show your risk of diabetes, heart disease and high blood pressure. You could say it is not just how much fat you are storing, but where it is stored, that is more important.
- In diabetes a greater waist circumference makes it more difficult for your body to use its own insulin effectively.
- The waist is measure as the halfway point between the lowest rib and the hip bone.
- Waist circumference measurements:\*
- English/European and African Caribbean men should be below 94cm (37inches)
- Asian men should be below 90cm (35 inches)
- English/European, African Caribbean and Asian women should be below 80cm (31.5 inches)

## WHAT IS YOUR BMI?

## WHAT IS YOUR WAIST CIRCUMFERENCE?

## ARE YOUR MEASUREMENTS IN THE HEALTHY RANGE?

\*<http://www.diabetes.org.uk>

## Food guidelines for people with diabetes

### 1. Eat regular meals

Eating regular meals helps to control your blood glucose levels.

- Always start the day with breakfast
- Do not skip meals
- If you are feeling ill, try to have smaller meals at your usual meal times.

### 2. Include some carbohydrate at your meals

Carbohydrate foods raise your blood glucose levels.

Carbohydrate foods include: bread; cereals; pasta; rice; chapatti; wholegrain crackers; starchy vegetables, such as potato, yam, corn and sweet potato; all fruit; and some dairy products. Pulses for example, baked beans, split peas, kidney beans contain some carbohydrate but are also a good source of protein.

These carbohydrate foods should make up a quarter to a third of your meal, Discuss this with your Dietitian.

Eat similar amounts of carbohydrates at each meal.

### 3. Eat more slow-release carbohydrate foods

Some carbohydrate foods are more slowly digested and the glucose is released into the blood more slowly. These foods can help to keep you fuller for longer. Slow release carbohydrate foods eaten in moderation are best for controlling your blood glucose levels.

- Try to include a slow-release carbohydrate food at each meal.

Choose high fibre varieties where possible: –

#### **Bread:**

Wholemeal, wholegrain, granary, multiseeded, oat bread, richly fruited bread, barley breads, linseed, rye, soya, and wholemeal pitta/chapatti.

#### **Breakfast cereals:**

Porridge (preferably whole oats), muesli, All Bran®, Shredded Wheat®, Shreddies®, Oatibix®, Oatflakes®, Weetabix®, Bran Flakes. Look out for added salt and sugar.

#### **Rice, pasta and cereals:**

- The best rice varieties are basmati rice, wild rice and long grain rice.
- All types of pasta are fine; just make sure you don't overcook it.
- Pearl barley, bulgur (cracked) wheat, and couscous are also good choices.
- You can try whole wheat or brown varieties.

#### **Starchy vegetables and pulses:**

- Boiled new potatoes (small are best), sweet potatoes, yam, taro, sweet corn, cassava, plantain.
- Baked beans, kidney beans, lentils and black eyed beans are all great choices.

#### **Biscuits and crackers:**

- Multigrain crackers with seeds, cracker wheat, low fat digestives, oatmeal biscuits, rich tea, oatcakes, garibaldi.
- If you are trying to lose weight, limit to one or two biscuits/crackers per day.

## **10. Lose excess body weight**

Being overweight makes it harder to control your blood glucose levels. You are also more likely to:

- Have a heart attack in the next 10 years
- Have to use daily insulin injections to treat your diabetes in the future
- Have high blood pressure, which can lead to kidney damage and heart disease

If you are overweight, aim for gradual weight loss of approximately 0.25-0.5kg (1/2 to 1lb) per week. A 5-10% weight loss for someone who weighs 100kg would mean losing 5-10kg.

5-10% weight loss can:

- Improve blood glucose control
- Lower high blood pressure and reduce the risk of a heart attack
- Improve blood cholesterol level

Aiming for a healthy weight means achieving an appropriate weight for your height. This is measured using a **Body Mass Index (BMI)**, which tells us your weight in relation to your height.

**BMI=weight (kg) ÷ (height (m) x height (m))**

Healthy weight ranges (BMI) for different groups of people:

English/European: healthy range is between BMI 19-25 kg/m<sup>2</sup>  
 African/Caribbean: healthy range is between BMI 22-27 kg/m<sup>2</sup>  
 Asian/Indian: healthy range is between BMI 18-23 kg/m<sup>2</sup>

## 8. Keep your salt intake low

Having too much salt in your diet may increase the risk of high blood pressure, which can lead to a stroke and heart disease.

To reduce your salt intake you can:

- Reduce your intake of ready-made and salty foods
- Avoid adding salt to your meals at the table
- Use only a small amount of salt in cooking
- Choose 'no added salt' or reduced salt products
- Use lemon juice, herbs and spices to flavour foods instead of salt
- Read food labels and aim for less than 6g salt per day

Sea salt and rock salt are just the same as ordinary salt. Garlic salt and celery salt are also high salt products as are stock cubes, powders and liquids. Salt substitutes for example, Lo Salt®, Selora® or Pansalt® are not recommended. Discuss with your dietitian.

## 9. Reduce alcohol intake (if you drink it)

- Try to drink in moderation, for example 1-2 units per day
- (1 unit is equal to 1 very small glass of wine (125ml), ½ pint beer, 1 single pub measure spirits e.g. whisky, gin, vodka or rum). A standard 175 ml glass of wine is nearly 2 units.
- Have at least 2 alcohol-free days per week.
- Always eat some slow-release carbohydrates when drinking alcohol. Alcohol on an empty stomach can increase your chance of hypoglycaemia (low blood glucose) if you take certain tablets or insulin injections for your diabetes
- Choose sugar-free or diet mixers (slimline, diet, lite or zero) if adding them to your drinks.

### Fruit:

- All fruit is good, aim to have 2-4 portions a day.
- There is no need to avoid bananas, grapes or tropical fruit- just have one portion at a time (see page 7). Choose bananas and mangoes which are less ripe.

### Milk and milk products:

- Low fat is best – including soya milk, yoghurt (plain, or 'diet' varieties if fruit yoghurt), custard

## 4. Eat less fat, especially saturated fat

Eating too much fat can cause weight gain and increase your risk of heart disease. Being overweight makes it harder to control your blood glucose levels.

- Reduce the total amount of fat in your diet, particularly saturated fat (animal fats, full cream milk products, take-away foods, palm oil, coconut oil/cream)
- Include small amounts of mono-unsaturated or poly-unsaturated fats and oils, for example olive oil and sunflower-based spreads, peanut oil or rapeseed oil (pure vegetable oil in most supermarkets).
- Limit high fat snacks such as crisps, nuts, cakes, biscuits – fruit or 'diet' yoghurt varieties are a better choice.

## 5. Try to include more oily fish in your diet

Oily fish, such as mackerel, fresh tuna, trout, salmon, kippers and pilchards, contain a type of poly-unsaturated fat called Omega-3. This fat has been shown to be protective against heart disease.

- Aim to have one to two portions of oily fish a week. A portion is 140g of fresh, frozen or tinned fish (NB tinned tuna does not count – only fresh tuna).
- Fish oil supplements are not recommended, unless you do not eat fish. Discuss this with your Dietitian.
- Other sources of Omega-3 fats can be found in rapeseed, flax and linseed oils; green leafy vegetables; wholegrain breads and cereals; and Omega-3 enriched eggs and milk.

## 6. Eat more fibre

Fibre is part of a healthy diet.

- Try to have at least five portions of fruit and vegetables each day.
- Include pulses, beans and oat-based foods (porridge, oatcakes) as often as possible. The type of fibre (soluble fibre) found in these foods is particularly good for managing your diabetes and blood cholesterol levels
- Eat wholegrain breads, and high fibre cereals
- Drink plenty of fluids. A good amount to aim for is 6-8 glasses each day.

A portion of fruit and vegetable is:

- 1 apple, orange or banana
- 1 slice of a large fruit, such as melon or pineapple
- 2 small fruits such as plums, kiwis or satsumas
- 1 cupful of raspberries, strawberries or grapes
- 2-3 tablespoons of fresh fruit salad
- 2-3 tablespoons of stewed or canned fruit (in natural juice)
- ½-1 tablespoon of dried fruit
- 1 small glass unsweetened fruit juice (125ml)
- 2 -3 tablespoons of vegetables: raw, cooked, frozen or canned
- A small side salad

## 7. Eat sugar in moderation

Table sugar (sucrose) and most other sugars in small amounts will have little effect on your blood glucose levels, provided they are included as part of the total carbohydrate content meal. However, sugar has no nutritional value other than adding calories (often unwanted) to the diet. So it is best to use sugar only in very small amounts, for example, 2-3 teaspoons spread across a day.

It is better to change to an artificial sweetener for example Canderel®, Splenda®, Hermasetas, Truvia® and supermarket own brands. Avoid using 'natural' sweeteners like honey.

Avoid sugary drinks such as ordinary fizzy drinks. These can contain up to 12 teaspoons of sugar in a single can. You can drink the sugar-free version instead.

- Choose 'diet/lite/zero' fizzy drinks or 'no added sugar' squashes.
- Try to avoid the sugars that cause your blood glucose level to rise quickly (for example glucose, corn syrup, maltose, honey, dextrose, golden syrup and malt)

You can include foods which contain a small amount of sugar; such as baked beans, 'diet' or plain yoghurt or cereals.