

Healthy Eating with Type 2 Diabetes

Your personal guide



What is Type 2 Diabetes?

The food we eat is digested in our stomach and is broken down into 3 main nutrients - proteins, fats and carbohydrates. The carbohydrates are further broken down into glucose (sugar) and absorbed into our blood.



The glucose gets transported around the body in the blood stream to provide our body cells with energy.



Insulin, which is produced by the pancreas, works alongside the glucose. The insulin acts as a key which opens the cell door to allow the glucose to enter. The cell then uses the glucose for energy.



In type 2 diabetes the insulin stops helping the glucose to get into the cell. This could be because the cell door is furred up with fat deposits and the key no longer fits the lock or there is not enough insulin being produced to work alongside the glucose.



This causes the blood glucose (sugar) level to rise.

Weigh the right way

When keeping a track of your weight it is important to get a good reliable reading. Here are a few tips to make sure you get it right.

- Always use the same scales (make sure they work)
- Place the scales on a hard surface, such as a tiled or wooden floor – carpet can affect the reading
- If you weigh yourself without shoes, continue to do so
- Only weigh yourself once a week – do it on the same day of the week and roughly the same time of day
- Remember, your weight will vary throughout the day depending on what you have eaten and what you have been doing

Keep track of your progress on the chart below:

(tick the + column for weight gain and - column for weigh loss)

Date	Weight	+	-	Date	Weight	+	-

Food choices

Although each person's carbohydrate needs will be different depending on their energy requirements, it is recommended that each meal contains approximately 30-50g of carbohydrate

Breakfast

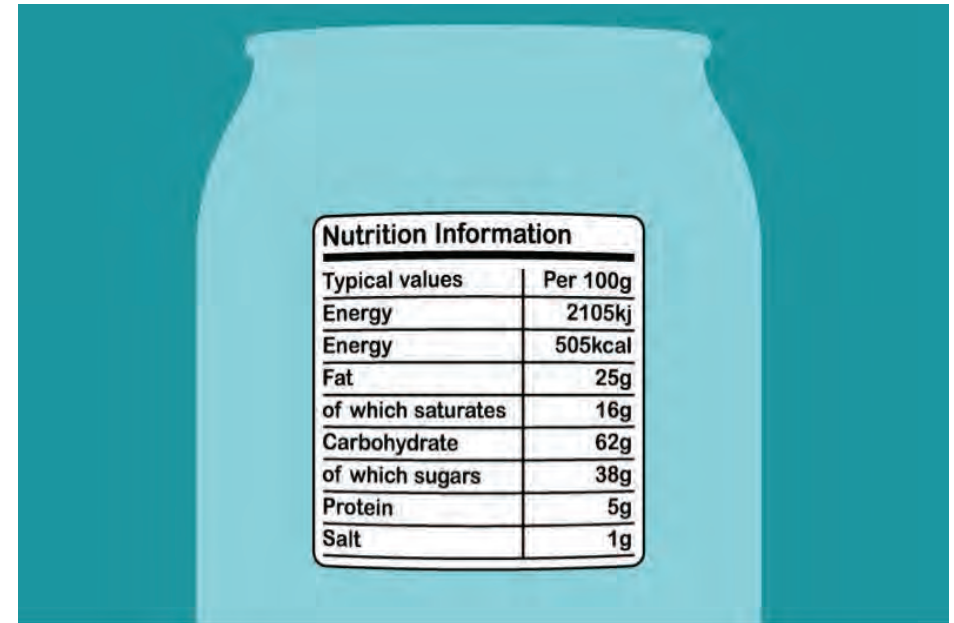
- 2 x Shredded wheat/Weetabix
- 2 x medium slices of bread
- 5 tablespoons of corn flakes, bran flakes or fruit and fibre
- 4 tablespoons of porridge oats (dry)
- 2 tablespoons of muesli

All of these foods contain approximately **30g** of carbohydrate

Meals

- 2 x medium slices of bread, 3 inches of french stick or 1 bagel
- 1 medium chapatti, 1 standard pitta bread or ½ large naan bread
- 4 rounded table spoons of cooked rice or 4 heaped tablespoons of cooked pasta
- 1 medium jacket potato
- 4 egg sized boiled potatoes or 4 tablespoons of mash
- 20 small chips
- 2 slices of yam or 1 small plantain
- ¼ pizza
- 2 medium Yorkshire puddings

All of these foods contain approximately **30-40g** of carbohydrate



The image shows a blue jar with a white nutrition label. The label is titled 'Nutrition Information' and has two columns: 'Typical values' and 'Per 100g'. The rows list Energy (2105kj, 505kcal), Fat (25g, 16g of which saturates), Carbohydrate (62g, 38g of which sugars), Protein (5g), and Salt (1g).

Nutrition Information	
Typical values	Per 100g
Energy	2105kj
Energy	505kcal
Fat	25g
of which saturates	16g
Carbohydrate	62g
of which sugars	38g
Protein	5g
Salt	1g

This label on your food packets will tell you how much total carbohydrate is in this particular food item. It is important to look at the total amount of carbohydrate to work out how much is in the portion you are eating.

Eg. this label states that there is of carbohydrate

Eatwell Guide

Check the label on packaged foods

Each serving (150g) contains

Energy	Fat	Saturates	Sugars	Salt
1046kJ 250kcal	3.0g	1.3g	34g	0.9g
	LOW	LOW	HIGH	MED
13%	4%	7%	38%	15%

of an adult's reference intake

Typical values (as sold) per 100g: 697kJ/ 167kcal

Choose foods lower in fat, salt and sugars

Use the Eatwell Guide to help you get a balance of healthier and more sustainable food. It shows how much of what you eat overall should come from each food group.

6-8
a day

Water, lower fat milk, sugar-free drinks including tea and coffee all count.

Limit fruit juice and/or smoothies to a total of 150ml a day.

Eat at least 5 portions of a variety of fruit and vegetables every day

Fruit and vegetables

Frozen peas

Raisins

Chopped tomatoes

Choose wholegrain or higher fibre versions with less added fat, salt and sugar

Potatoes

Whole grain cereal

Cous Cous

Porridge

Whole wheat pasta

Bagels

Rice

Spaghetti

Lentils

Beans lower salt and sugar

Tuna

Plain nuts

Chick peas

Lean mince

Low fat soft cheese

Semi skimmed milk

Soya drink

Plain Low fat yoghurt

Oil & spreads

Choose unsaturated oils and use in small amounts

Beans, pulses, fish, eggs, meat and other proteins
Eat more beans and pulses, 2 portions of sustainably sourced fish per week, one of which is oily. Eat less red and processed meat

Dairy and alternatives
Choose lower fat and lower sugar options

Per day  2000kcal  2500kcal = ALL FOOD + ALL DRINKS

Eat less often and in small amounts

Key messages



Eat at least five portions of a variety of fruit and vegetables every day.



Base meals on potatoes, bread, rice, pasta or other starchy carbohydrates; choosing wholegrain versions where possible.



Have some dairy or dairy alternatives (such as soya drinks); choosing lower fat and lower sugar options.



Eat some beans, pulses, fish, eggs, meat and other proteins (including two portions of fish every week, one of which should be oily).



Choose unsaturated oils and spreads and eat in small amounts.



Drink 6-8 cups / glasses of fluids per day.



If consuming foods high in fat, salt or sugar have these less often and in small amounts.

Potatoes, bread, rice, pasta and other starchy carbohydrates

Starchy foods are a really important part of each meal. Try to have 5-6 portions per day if you are female, 6-8 per day if you are male. Try to choose the wholegrain types as these will help you feel fuller for longer.

These foods contain B vitamins which help release energy from the food we eat and help the body to work properly.

Example:

Breakfast: wholegrain cereal (2 portions)



Fruit and vegetables

Try to have at least 5 different types per day. During weight loss ensure you have the correct portion size of fruits and spread them out during the day.

These foods are full of essential vitamins and minerals which help protect us from life threatening diseases such as heart disease, diabetes, cancer, kidney disease, liver disease.

Example:

Breakfast: chopped banana on cereal

Lunch: mixed salad in or with a sandwich

Evening meal: 2-3 different types of vegetables

Snacks: mid-morning (1 portion of fruit)

mid-afternoon (1 portion of fruit)



Dairy and alternatives

Dairy foods are a good source of calcium, which help keep our bones strong. Try to include 2-3 portions per day. Try to choose low fat and low sugar types.

Example: 3-4 cups of tea or coffee with skimmed or semi skimmed milk (1 portion)



Beans, pulses, fish, eggs, meat and other proteins

Protein rich foods contain essential vitamins and minerals, these foods help our body to repair itself and provide us with a strong immune system. Too many of these foods are unnecessary and may lead to weight gain if eaten in excess, therefore only 2-3 portions per day is required.

Example:

Lunch: sliced meat or tuna or beans (1 portion)



Oils and spreads

Some fats are essential as part of a healthy balanced diet as they provide us with energy and some important vitamins (vitamin A and D). However, eating too much fat can be unhealthy.

Saturated fats (less healthy) e.g. butter and lard are solid at room temperature and are associated with increased risk of heart disease. Unsaturated fats are liquid at room temperature and considered to be healthier fats.

Choosing mono-unsaturated spreads and oils e.g. olive and rapeseed oil helps to lower the 'bad' cholesterol and increase the 'good' cholesterol. There are also poly-unsaturated fats e.g. sunflower, soy and sesame oils.

It's important to remember that all fats are high in energy (kcal) and portion sizes should be small.

Aim for 2-3 portions per day.

Example:

1 tsp oil per person when cooking (1 portion)
1 tsp unsaturated spread per person on bread (1 portion)



Eat less often and in small amounts

This section now sits outside the main section of the Eatwell guide. These foods are higher in fat and sugar and provide little nutritional value to our diet. We can still enjoy them as part of a balanced diet but it is recommended that we eat small portions of these and reduce how often they are consumed.

Example:

1 small packet of crisps (1 portion)
1 biscuit (1 portion)



Drinks

Water, lower fat milk, sugar-free drinks including tea and coffee all count.

Aim to drink 6-8 glasses per day.

Note: Limit fruit juice and / or smoothies to a total of 150ml a day.



Finally...

Check the label on packaged foods.
Choose foods lower in fat, salt and sugars.

per 30g cereal:					
SERVINGS	ENERGY	FAT	SATURATES	SUGARS	SALT
16	460kJ 110kcal	0.7g	0.1g	5.1g	0.2g
	6%	LOW 2%	LOW 1%	HIGH 6%	MED 4%
% of an adult's reference intake.					
Typical values per 100g: Energy 1530kJ / 360kcal					

Potatoes, bread, rice, pasta and other starchy carbohydrates

2-3 portions per meal =

5-6 portions per day for females

6-8 portions per day for males



Corn flakes (4-5 tablespoons)
= 2 portions



Bran flakes (4-5 tablespoons)
= 2 portions



Chapati
small = 1 portion
large = 2 portions



Pitta bread (x 1/2)
= 1 portion



Wheat biscuits (x2)
= 2 portions



Porridge (4-5 tablespoons)
= 2 portions



Chips
4-5 = 1 portion
8-10 = 2 portions



Potatoes (egg size)
= 2 portions



Bread (medium)
1 slice = 1 portion
2 slices = 2 portions



Bread roll (x1)
= 1 portion



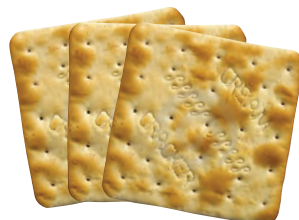
Jacket potato (fist size)
= 2 portions



Cooked rice (4-5 tablespoons)
= 2 portions



2 crisp breads
= 1 portion



3 cream crackers
= 1 portion



Cooked pasta (4-5 tablespoons)
= 2 portions



Cooked spaghetti (4-5 tablespoons)
= 2 portions

Vegetables

5 or more portions per day (each picture = 1 portion)



Carrots ($\frac{1}{3}$ of a plate)
= 1 portion



Mixed salad ($\frac{1}{3}$ of a plate)
= 1 portion



Peas ($\frac{1}{3}$ of a plate)
= 1 portion



Okra ($\frac{1}{3}$ of a plate)
= 1 portion



Mini sweetcorn ($\frac{1}{3}$ of a plate)
= 1 portion



Broccoli ($\frac{1}{3}$ of a plate)
= 1 portion



Cauliflower ($\frac{1}{3}$ of a plate)
= 1 portion



Sprouts ($\frac{1}{3}$ of a plate)
= 1 portion

Fruit

2-3 portions per day (each picture = 1 portion)



Fresh orange (150mls)
= 1 portion



Satsumas (x2 small)
= 1 portion



Orange (handful size)
= 1 portion



Small banana
= 1 portion



Plums (x2 small)
= 1 portion



Apple (handful size)
= 1 portion



Cherries (handful)
= 1 portion



Raisins ($\frac{1}{2}$ handful)
= 1 portion



Grapes (handful)
= 1 portion



Apricots (x2 small)
= 1 portion



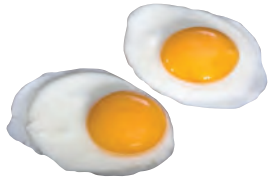
Dried apricots (x3)
= 1 portion



Strawberries (handful)
= 1 portion

Beans, pulses, fish, eggs, meat and other proteins

2-3 portions per day (each picture = 1 portion)



Eggs (x2)



Bacon
(x2 small rashers)



Sausages
(x2 thin)



Chickpeas
(x1 palm of the hand)



Baked beans
(x1 palm of the hand)



Pork/lamb chop 2-3oz / 50-70g
(x1 palm of the hand)



Chicken 2-3oz / 50-70g
(x1 palm of the hand)



Steak 2-3oz / 50-70g
(x1 palm of the hand)



Green lentils
(x1 palm of the hand)



Red lentils
(x1 palm of the hand)



Meatballs 2-3oz / 50-70g
(x1 palm of the hand)



Ham
(x1 large slice)



Sardines



Soya mince



Red kidney beans
(x1 palm of the hand)



White fish 2-3oz / 50-70g
(x1 palm of the hand)



Salmon steak 2-3oz / 50-70g
(x1 palm of the hand)



Fish fingers
(x2)



Butter beans
(x1 palm of the hand)



Cannellini beans
(x1 palm of the hand)

Dairy and alternatives (calcium rich foods)

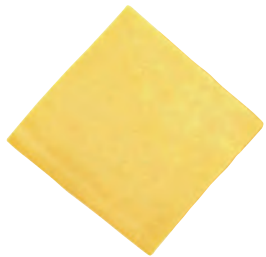
2-3 portions per day (each picture = 1 portion)



Milk ($\frac{1}{3}$ of a pint)



Soya milk



Cheese slice



Grated cheese (20g)



Cottage cheese (small pot)



Low fat soft cheese



Yogurt
(small pot)



Yogurt drink
(small pot)

Oils and spreads

2-3 portions per day (each picture = 1 portion)



Low fat spread
(5g / 1 teaspoon)



Mono or poly-unsaturated oil
(5g / 1 teaspoon)

Eat less often and in small amounts

Foods high in fats and sugars



Sugar (5g / 1 teaspoon)



Tomato sauce/salad cream
(5g / 1 teaspoon)



Peanuts
($\frac{1}{2}$ handful)



Scone (x $\frac{1}{2}$)



Plain digestive
biscuit



Orange sponge
biscuit



Fun size
chocolate bar



Biscuit bar



Crisps (25-30g bag)

Think about what you drink

What is a unit?

A UK
unit is 10ml
of pure
alcohol

2.8 units



Pint bitter / lager
3.5%
182 calories

1 unit



Light spirits
37.5%
120 calories

1 unit



Dark spirits
40%
55 calories

1.5 units



Red wine 125ml
12%
93 calories

2.1 units



White wine 175ml
12%
130 calories

9 units



White wine bottle
12%
556 calories

1.4 units



Alcopop
5%
200 calories

1 unit



Cream liqueur 45ml
17%
199 calories

Adding
3-4 units per
day to your usual
diet can lead to an
increase in weight
of around 4lbs in
four weeks

The maximum recommended
number of units for men and
women is currently 14 units a week –
ideally not all in one go and at least
2 days alcohol free.

Getting more active

1. Set weekly activity targets
2. Incorporate 30 minutes of moderate to intense activity such as:
 - Walking to the shop instead of taking the car
 - Go for a walk every day – increase the distance gradually
 - Take the stairs instead of the lift
 - Get off the bus 1 or 2 stops earlier and walk the rest of the way
 - Rigorous housework
 - Gardening
 - Ballroom dancing

Try new
activities - look
in on your local
leisure centre
and see what
inspires you

NHS Choices (2015) "Physical activity guidelines for older adults"
www.nhs.uk/Livewell/fitness/Pages/physical-activity-guidelines-for-older-adults.aspx
Accessed 03/11/17

Check your habits

	Yes	No
Are you eating regular meals? (breakfast, lunch and evening meal)		
Do you think about your portion size?		
Do you snack between meals?		
Do you eat 5 portions of fruit or veg per day?		
Do you eat/drink too many foods that are high in fat and sugar?		
Do you regularly use cooking oil, butter or ghee?		
Do you regularly eat out in restaurants/café's, have takeaways or buy pre-pack meals?		
Do you do any moderate physical exercise? (anything that makes your heart beat faster)		
Do you sit down for most of the day?		
Do you drink more than the recommended daily alcohol units per week?		
Do you eat supper?		

Why little healthy changes mean a lot



5lbs of fat



5lbs of muscle

Notice the muscle size is much smaller than the fat model, however, they both weigh the same



The equivalent of 2 biscuits each day above your calorie needs, for 3 months could cause around a 5lb weight gain



Walking at a moderate level of intensity for 30 minutes every day for 3 months will help to burn off 5lbs of body weight

Here are examples of some small daily changes



Cut out the extra 2 slices of toast with spread
= 300kcal



Do 30 minutes walking
= 180kcal



Making both these changes everyday could help you to lose up to 1lb in 1 week



Cut out 60 grams of crisps
= 300kcal



Do 40 minutes gardening
= 200kcal



Making both these changes everyday could help you to lose up to 1lb in 1 week



Remember, by doing physical activity, as well as burning energy (kcal), you can increase the amount of muscle you have. The more muscle you have, the more calories you will burn each day. Your weight may not change on the weighing scales but your body size will appear smaller.

Notes

Community Diabetes Service
Chapeltown Health Centre
Spencer Place
Leeds LS7 4BB
Tel: **0113 843 4200**
Email: **longtermconditions@nhs.net**

www.leedscommunityhealthcare.nhs.uk

