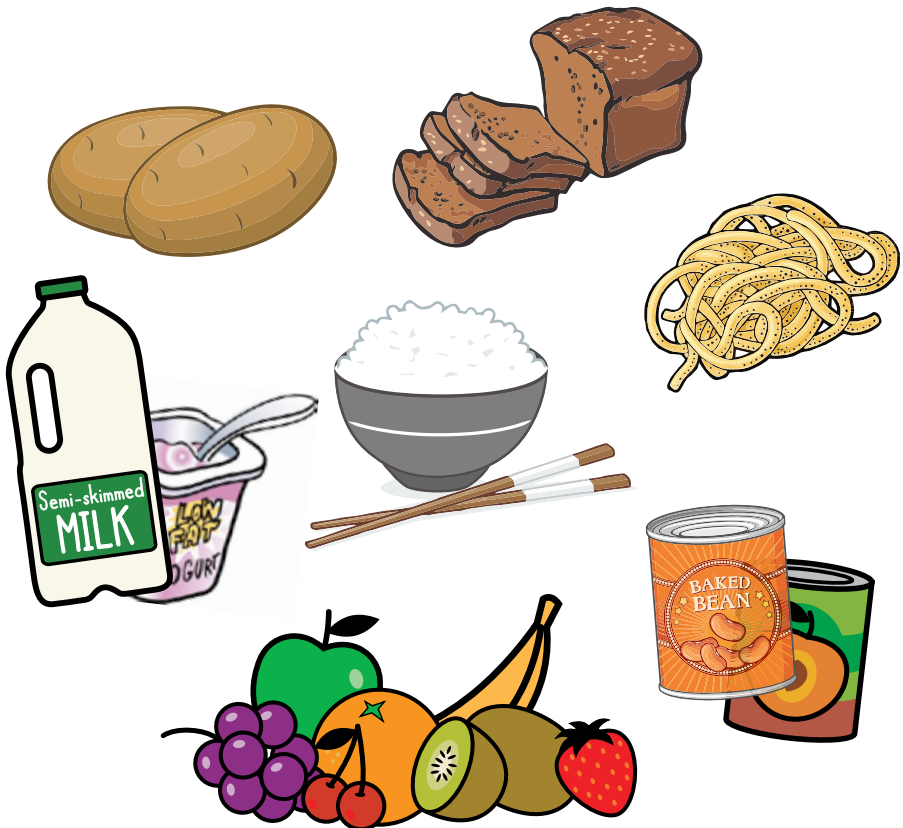


A guide to carbohydrates



Introduction

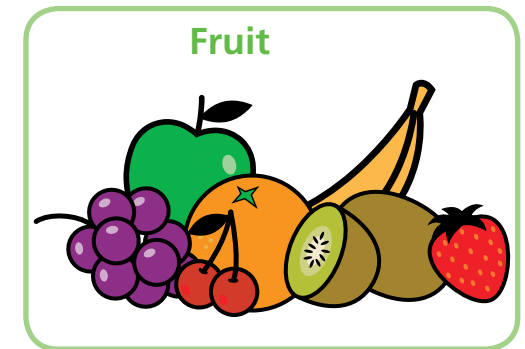
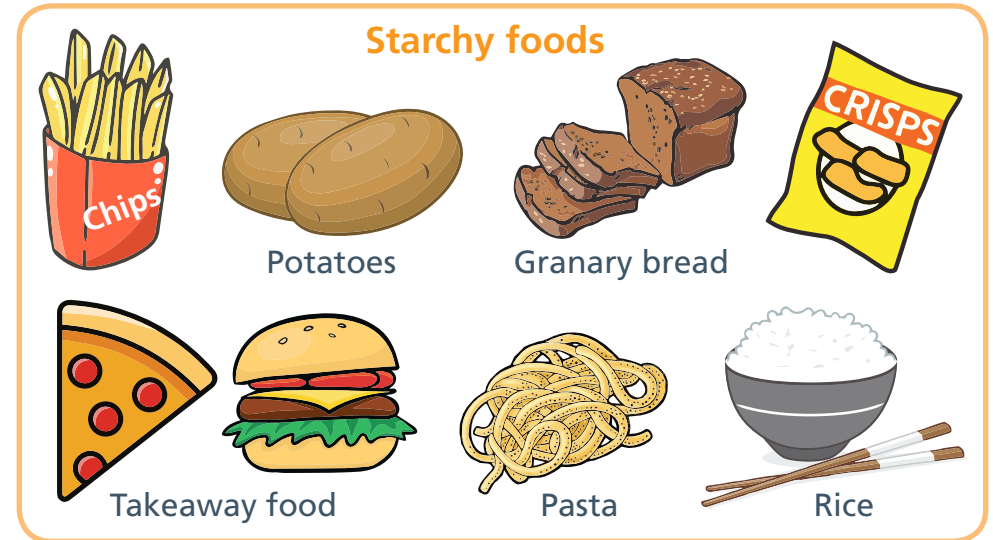
Your nurse or dietitian has hopefully explained ‘**what is diabetes?**’ As a recap, your body produces and uses insulin to help use certain foods (nutrients) in the diet called carbohydrates to provide energy. When you have diabetes the insulin your body produces is either not enough or is not working as efficiently as it should be. This is causing your blood glucose levels to rise above the normal range.

Controlling your intake of carbohydrates can help to reduce your blood glucose levels and help to keep them steady. To achieve this you could have similar portions of carbohydrates from meal to meal.

This guide will help you to identify where carbohydrates are found in your diet and give you an introduction to understanding how many grams you might be having with each meal.

Where are carbohydrates found?

Carbohydrates all break down into glucose and will affect our blood glucose levels. Foods containing carbohydrates are:



How many carbohydrates should I be eating?

- Starchy carbohydrates are your body's main source of energy so we recommend you include a source of these with every meal.
- Having regular carbohydrates can help to reduce your risk of hypoglycaemia (blood glucose levels below 4mmol/l).
- Ideally you should be aiming for meals to contain a similar amount of carbohydrate day to day as this will help to keep your blood glucose levels steady.
- Initially you could aim for meals to provide between 30-50g per meal and your snacks to provide less than 15g.
- Your dietitian may recommend a more specific amount if you are trying to achieve a particular goal.

Diabetes portion plate guide



What foods do I need to include in my carbohydrate allowance?

Count:

- ✓ All fruit including dried and tinned.
- ✓ All milk and yoghurts including dairy alternative versions.
- ✓ All starchy foods and grains i.e. bread, potatoes, pasta, cereal, rice, chapatti etc.
- ✓ All foods that have sugar added in when they are processed or are made from wheat / flour i.e. cakes, biscuits, crisps, cakes, chocolates, sweets, ice creams, sauces.
- ✓ Any fluid that has carbohydrate in i.e. fruit juice, smoothies, milky coffees, hot chocolates, malt drinks, full sugar pops or cordials.
- ✓ Baked beans.
- ✓ Meat / fish **IF** battered / breaded / coated.



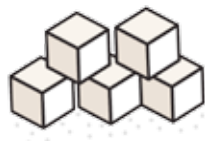
Do not count:

- ✗ Plain sources of meat / fish / eggs.
- ✗ Cheese.
- ✗ Nuts (unless they are honey roasted).
- ✗ Fats such as oils / butters.
- ✗ Any vegetables.
- ✗ Alcohol.



How do I work out the amount of carbohydrate in my meals?

- Use this guide as a rough estimation for some of your starchy foods and meals. Remember, you will also need to think about how much fruit / milk or yoghurt and added sugar foods you have also included in your meal.



- The grams of carbohydrate is not the same as the weight of the food.
- Look at your food packaging. You will need to look at total carbohydrates rather than just 'of which sugars'. Make sure you have thought about your portion size compared to what the label is giving you. Some labels will give you per 100g or per serving but that may not be the same as the amount you are planning to eat.

Nutrition Facts	
Serving Size	1 oz (28g)
Servings Per Container	32
Amount Per Serving	
Calories	170
Calories from Fat 120	
% Daily Value*	
Total Fat	13g 20%
Saturated Fat	2.5g 13%
Trans Fat	0g
Cholesterol	0mg 0%
Sodium	120mg 5%
Total Carbohydrate	8g 3%
Dietary Fiber	1g 4%
Sugars	1g
Protein	5g 10%

*Percent Daily Values are based on a 2,000 calorie diet.

- Consider buying the Carbs and Cals book or app to help you.



Starchy foods that contain roughly 30g of carbohydrate:

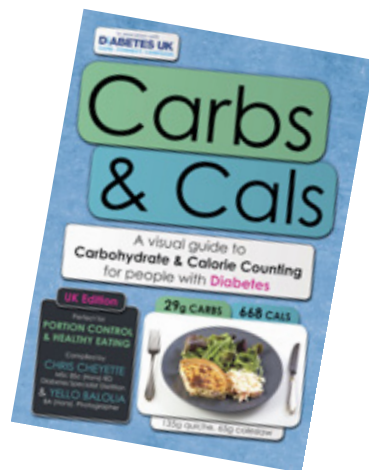
Including one of these options per meal will give you roughly 30 grams of carbohydrate. These suggestions can be swapped around meal to meal to help increase the variety in your diet.

Breakfast:

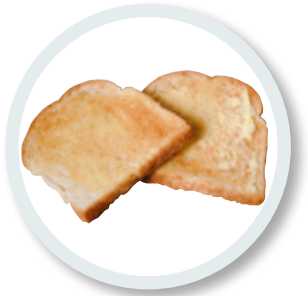
- 2 x medium slices of bread
- 5 x tablespoons cornflakes / bran flakes or fruit n fibre
- 2 x shredded wheat / Weetabix
- 2 x tablespoons muesli
- 4 x tablespoons dried porridge oats

Meals:

- 1 x standard pitta / 2 x small pitta
- 80-100g (4 heaped tablespoons) of any cooked plain pasta / spaghetti / gnocchi
- 195g (3-4 x egg size) new potatoes
- 3-4 egg sized boiled potatoes
- 3 tablespoons of mashed potatoes
- 95g (4 x rounded tablespoons) any cooked rice / cous cous
- 2 x medium (80 grams) Yorkshire puddings



What might this look like as a meal?



Starchy foods that contain roughly 40g – 50g of carbohydrate:

Including one of these options per meal will give you roughly 40-50 grams of carbohydrate. These suggestions can be swapped around meal to meal to help increase the variety in your diet.

Breakfast:

- 2 x crumpets
- 1 x toasted current teacake
- 2 x thick slices of bread
- 1 x plain bagel

Meals:

- 1 x medium chapatti
- ½ large naan
- 200g (medium fist size) jacket potato
- 150g any cooked pasta (5-6 heaped tablespoons)
- 160g any cooked rice (5-6 rounded tablespoons)
- 1 x burger bun
- 20 small chips
- ¼ medium pizza
- 2 x slices of yam
- 1 x small plantain
- 4 inches french stick

What might this look like as a meal?

For some meals you may want to include multiple sources of carbohydrate for example, battered fish **AND** chips, bread **AND** beans or Yorkshire puddings **AND** potatoes. Or you may be having a pudding that contains carbohydrate.

This is fine but remember that you are aiming to keep your carbohydrate portion between 30-50g. This may mean that you need to reduce the portion of each of the carbohydrates you are having based on the portions mentioned on the previous pages.

For example, reducing your portion of chips to account for the breaded coating on your fish or your baked beans.



Tips

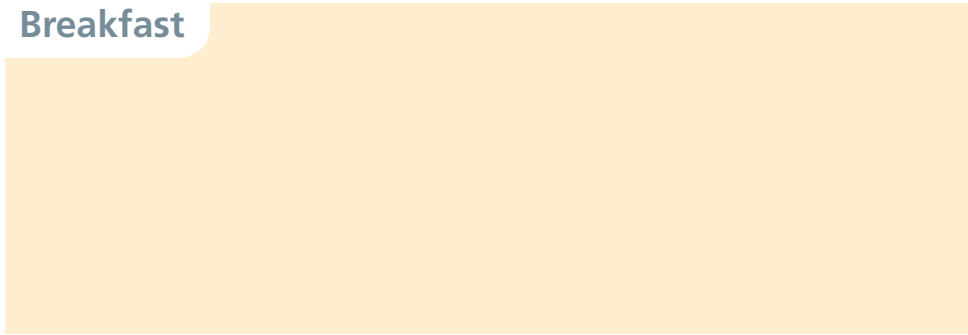
- Weigh out portions of foods like cereal, rice and pasta so that you can see what the actual portion looks like in your bowls / plates.
- Look for fluctuations in your blood glucose levels. If your levels are variable this could suggest that your portion sizes are different. Fluctuation can also be caused by difference in physical activity, alcohol, problems with injection sites if using insulin, illness and a number of other factors. If you are concerned make sure you discuss this with your health care professional.
- Keep a food and blood glucose diary as this may help you to see patterns in the foods that you eat and help you to keep consistent with achieving similar portion sizes.
- Try to swap processed / refined carbohydrates such as white versions of bread / pasta and cakes for whole grain or whole wheat products as these have more fibre in and will help you to feel fuller for longer.

Amount of carbohydrates I am aiming for with each meal:

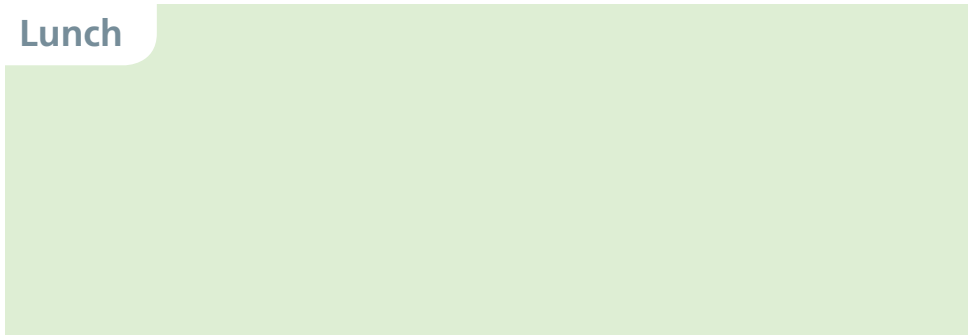
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Meal plan

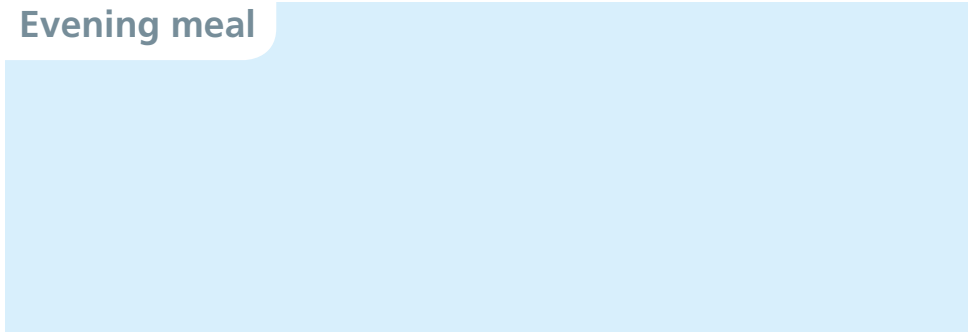
Breakfast

A large orange rectangular area for planning breakfast.

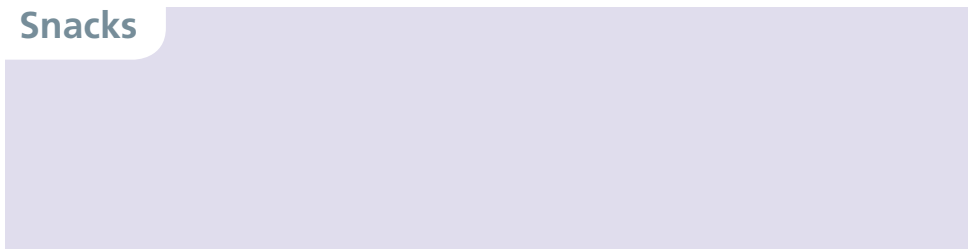
Lunch

A large green rectangular area for planning lunch.

Evening meal

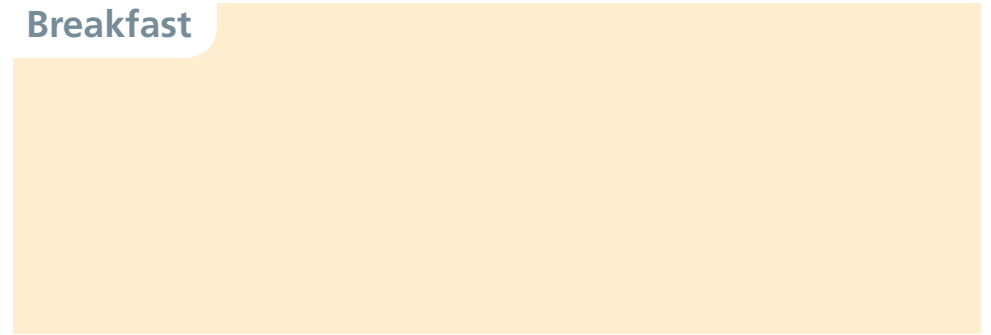
A large light blue rectangular area for planning evening meal.

Snacks

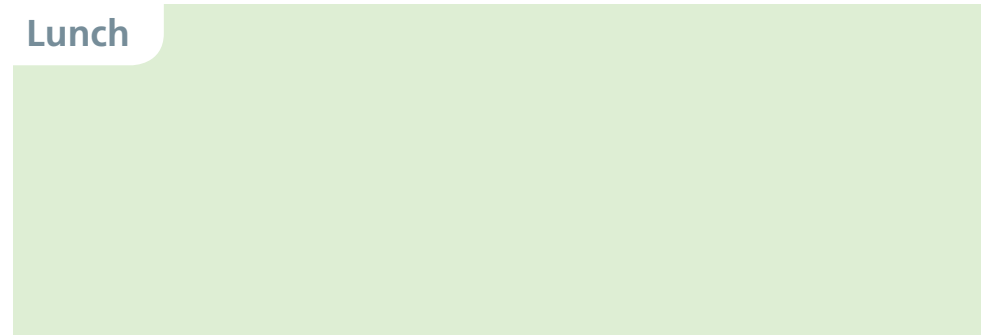
A large purple rectangular area for planning snacks.

Meal plan

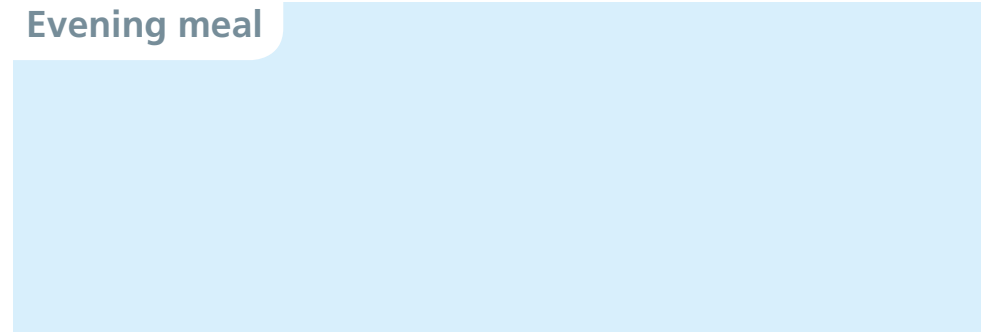
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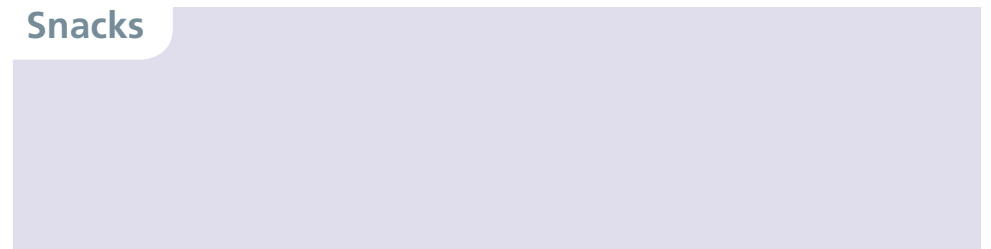
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Evening meal

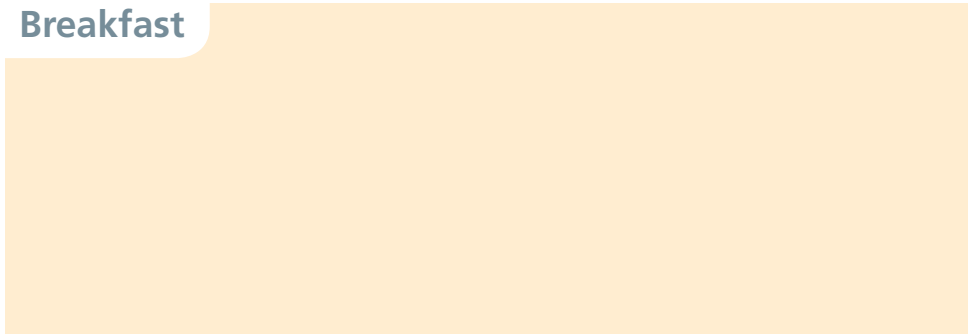
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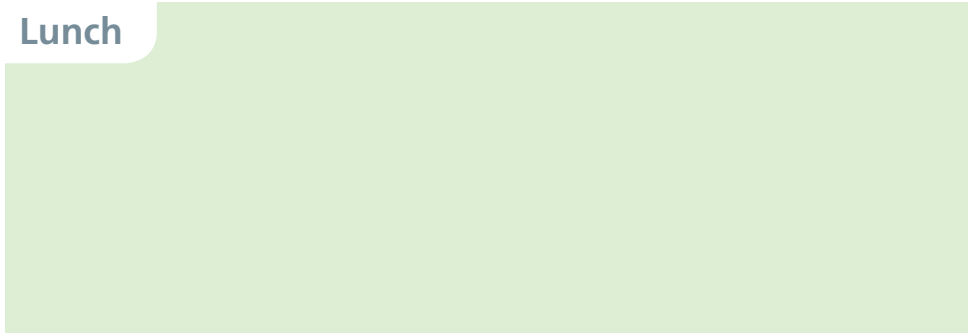
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Meal plan

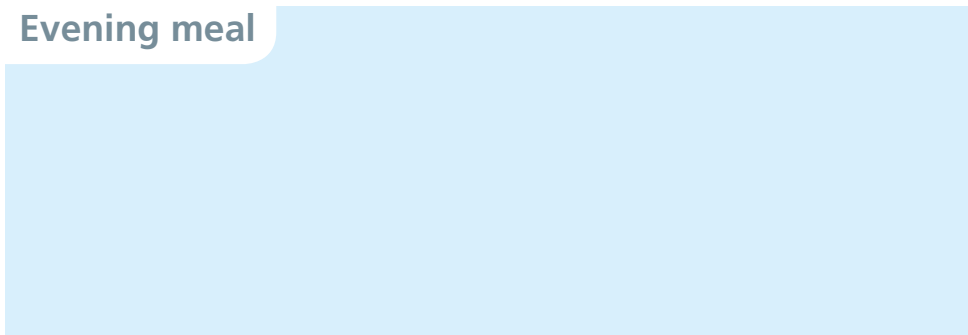
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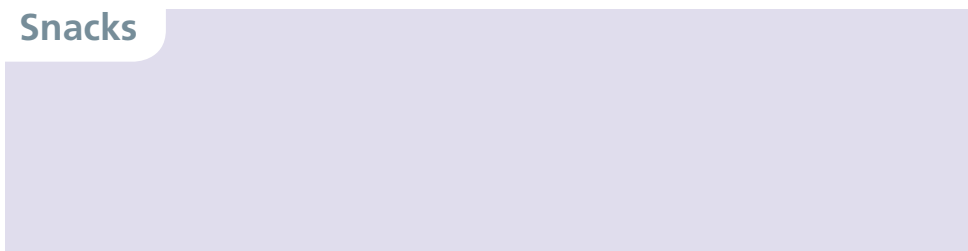
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Evening meal

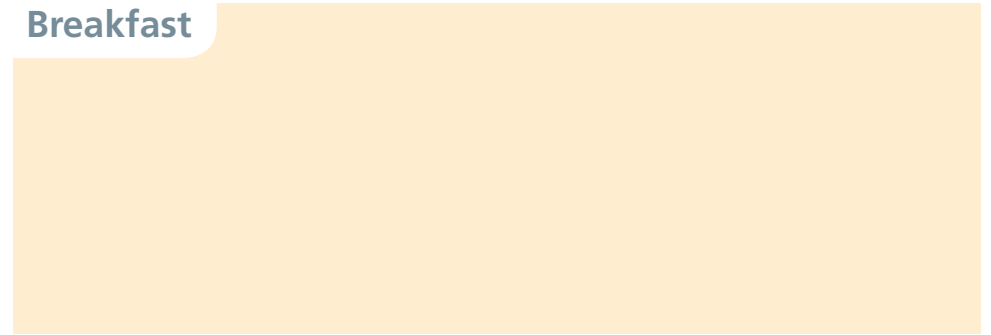
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Snacks

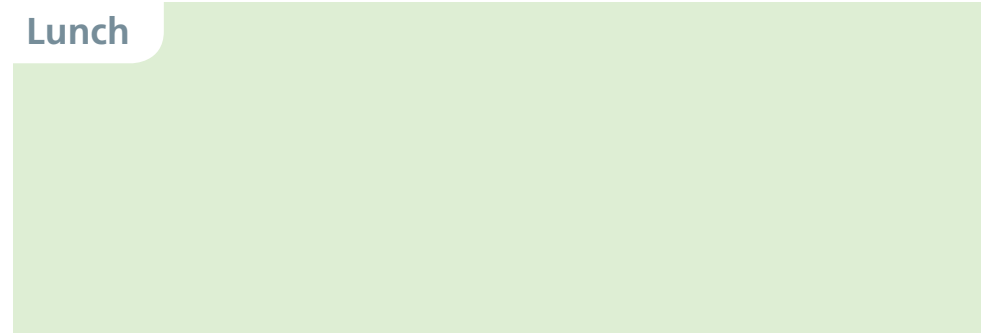
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Meal plan

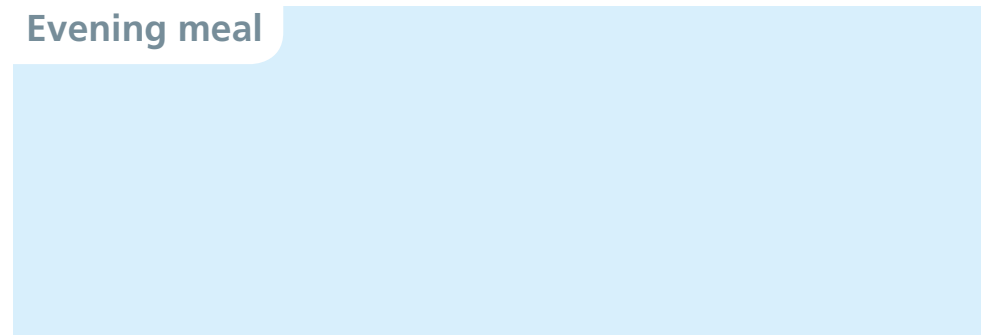
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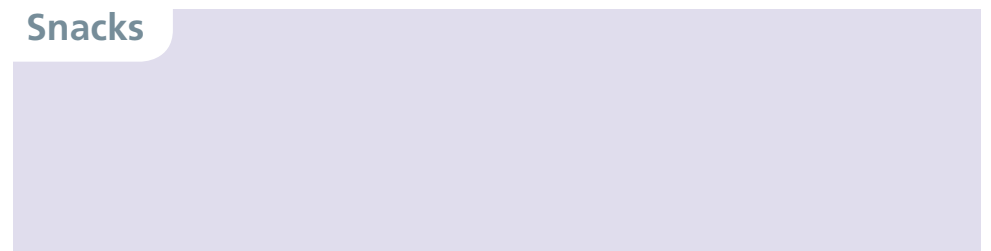
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Evening meal

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Snacks

A large purple rectangular area for planning snacks.

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If you would like to talk to someone outside the service contact the **Patient Experience Team** on **0113 220 8585**, Monday to Friday 9.30am to 4.30pm or email lch.pet@nhs.net

We can provide this information in large print, Braille, audio or other languages on request.

Contact us

Community Diabetes Service

Chapelton Health Centre

Spencer Place

Leeds LS7 4BB

Tel: 0113 843 4200

www.leedscommunityhealthcare.nhs.uk