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## What is hypoglycaemia?

Hypoglycaemia means an abnormally low level of sugar (glucose) in the blood.

### What is Reactive Hypoglycaemia?

**Reactive Hypoglycaemia** 

following Bariatric

Surgery

Reactive hypoglycaemia is a condition that occurs when too much insulin is produced by the pancreas.

The carbohydrates in the diet are broken down into glucose. The amount and speed of this glucose release will affect the body's response.

Some people experience a greater than needed release of insulin. They may begin to show signs of hypoglycaemia e.g. feeling shaky, sweaty or fatigued. This usually happens between 1 and 3 hours after eating.

## Why does this occur?

Changes in hormones produced by the body after bariatric surgery can lead to excessive insulin production.

## What can you do to improve symptoms?

Dietary modification is key to the treatment of reactive hypoglycaemia. We advise eating small portions of carbohydrates and to choose slow release carbohydrates where possible. Furthermore, you should minimise sugary food and drinks which may trigger these symptoms.

## What if dietary changes don't help?

Medication is not routinely prescribed. Medication can be prescribed in severe cases. Your clinician can discuss the options with you.

## What do I do if I experience an episode of reactive hypoglycaemia?

Try to ensure that you are in a safe environment or take steps to minimise risk within your environment.

An episode of mild reactive hypoglycaemia should be treated with a snack containing slow release carbohydrate e.g. 3 x oat cakes or a slice of granary bread/toast.

The usual treatment of sugary drinks/glucose tablets for diabetes medication related hypoglycaemia is not usually recommended in this case as it may exacerbate symptoms. If your symptoms are severe (faint, shaking, sweating) and you feel very unwell then treatment with a sugary drink or a glucose tablet may be needed initially, followed up by a slow release carbohydrate snack.

## Dietary changes to help manage reactive hypoglycaemia

#### **Slow Release Carbohydrates**

We know that carbohydrate foods release glucose (which gives us energy) at different rates.

**Glycaemic index** (GI) is a ranking of carbohydrate foods based on their effect on blood glucose levels. Choosing low GI foods (slow release) may help control your blood glucose levels.

#### **Glycaemic Index of Common Foods**

Food	High GI	Medium GI	Low GI
Breakfast cereal	Branflakes Cheerios Coco pops Rice Krispies Cornflakes Crunchy nut cornflakes	Weetabix Muesli, unsweetened Shredded wheat	Porridge All Bran Special K
Bread	White/wholemeal bread Bagel	Pitta bread Granary/multigrain bread	Soya and linseed bread Oat bread
Rice	White rice	Basmati Rice Wild rice Brown rice	
Pasta		Gnocci	White pasta Wholemeal pasta
Noodles		Rice noodles	Wheat noodles
Potato	Instant mashed potato Mashed potato Jacket potato	Boiled new potatoes	Sweet potato
Beans and pulses			All beans and pulses including baked beans
Other cereals		Cous cous	Pearl Barley
Snacks	Rice cakes Crispbread Melba Toast Croissants	Ryvita Crumpets	Diet yoghurt Handful of nuts Oat cakes Rich Tea biscuits

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# As with dumping syndrome, remember to limit drinks and snacks high in sugar as these may also cause reactive hypoglycaemia.

#### **Carbohydrate Portion Size**

The amount of carbohydrates consumed at each meal will have an effect on your blood glucose levels.

Limiting the total amount of carbohydrates consumed during the day and also reducing the amount eaten at each occasion can help reduce the frequency of reactive hypoglycaemia. Your dietitian can advise you accordingly.

#### **Meal Frequency**

Some people find eating small portions every few hours (5-6 times a day) can help manage symptoms. It is important though to consider portion sizes and food choices. If you increase the number of snacks consumed but do not modify meal choices or portion sizes, then this may lead to weight gain.

#### Is there anything else I can do?

- Often keeping a food and symptom diary can be helpful. This can help identify particular trigger foods or times of the day when symptoms are more likely to occur.
- Maintaining a good protein intake, not drinking with meals and leaving at least an hour after eating to have a drink may also help.
- You could also plan and be prepared with suitable snacks to prevent long periods between meals.
- Remember to take your time when eating.

#### Other information

If you experience severe hypoglycaemia you must consider the safety of driving a vehicle. Please refer to the DVLA guidance located on the DVLA website.







## If you require a special edition of this leaflet

This leaflet is available in large print, Braille, on audio tape or disk and in other languages on request. Please contact:

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