



Dietary advice for patients experiencing dumping syndrome after oesophago- gastric surgery

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Dumping syndrome is a group of symptoms which can occur after surgery to the gullet (oesophagus) or stomach. Dumping syndrome can occur following a total gastrectomy or gastric by-pass (roux-en-y), after a partial gastrectomy or oesophagectomy.

Dumping syndrome is often divided in to ‘early’ or ‘late’ depending on when you experience your symptoms.

Early dumping occurs within 30 minutes of eating and symptoms last up to 60 minutes.

Late dumping occurs 1–3 hours after eating and symptoms are related to low blood sugar (hypoglycaemia).

Early dumping symptoms	Late dumping symptoms
Stomach cramps/pain	Sweating
Diarrhoea	Shakiness
Sweating	Loss of concentration/confusion
Palpitations	Hunger
Bloating	Feeling faint
Noisy stomach sounds (borborygmi)	Tiredness
Flushing	Desire to lie down
Nausea/vomiting	Face colour is paler than usual

Dumping syndrome is thought to be caused by the movement of food from the gullet (oesophagus and stomach) into the gut (intestine) being faster than normal.

When food enters the stomach it mixes with stomach juices and digestion starts. Normally, the valve at the lower end of the stomach acts as a break so the food is only allowed through bit by bit. If this valve is removed or does not function after surgery, the mixture gushes through more quickly causing the symptoms listed above.

How are ‘dumping’ symptoms produced?

During digestion starchy foods (carbohydrates) are broken down to sugars. The fast movement of the sugar rich mixture into the intestine acts like an absorbent paper to suck water from the body tissues into the gut. This can be as much as 1.5 litres (3 pints). This then causes a drop in blood pressure

and feelings of faintness. The movement of water into the gut also explains stomach noises, bloating and diarrhoea.

Dietary sugars are absorbed very quickly from food into the blood stream, causing a rise in blood sugar levels after eating. This rise in blood sugars triggers the release of a hormone called insulin which helps the sugar be taken up by tissues where it can be used as energy. If too much insulin is released blood sugar levels start to fall too low (hypoglycaemia) after a meal and this can cause symptoms of late dumping syndrome.

Dumping will be most noticeable soon after your operation and will be made worse by larger meals. As time passes, the symptoms become less, 12 months after the operation fewer than 5% of patients still complain of symptoms. The other 95% may continue to have them slightly but have learnt to live with symptoms they may experience, and how to reduce them.

Diet tips to help reduce dumping syndrome

The following advice may help to reduce your symptoms;

- Eat small and frequent meals - avoid having 3 large meals a day, have smaller portions with snacks in between
- Only drink between meals - avoid drinking 30 minutes before and after a meal
- Avoid temperature extremes (food being too hot or very cold)
- Try to drink a small glass of water 45 minutes prior to eating
- Chew food well and eat slowly, take time to relax after a meal
- If you are underweight seek advice from a dietitian regarding your dietary intake
- It is important not to cut all sugar out of your diet but some people find high sugar foods such as, syrup, sweets and non-diet fizzy drinks cause symptoms.

Please see the table below for alternatives to sugary foods that may help reduce symptoms.

Sugary foods to be avoided	Low sugar alternatives
Sugar, glucose, fructose	Artificial sweetener (Canderel, Hermesetas, Sweetex, Slendasweet, Splenda, supermarket own brands)
Sugar coated cereals	Plain cereals not coated in sugar with no added sugar. Use an artificial sweetener if necessary
Marmalade, jam, honey, syrup	Reduced sugar jams, marmalade and pure fruit spreads
Full sugar cordials or squashes and sweetened fruit juices	Sugar free or no added sugar cordials and unsweetened fruit juices
Fizzy drinks (lemonade, cola, tonic, some flavoured waters)	Diet, slimline, low calorie drinks, soda water, diet cola, lemonade, sugar free tonic, sugar free flavoured water
Boiled sweets, puddings, desserts and ice creams	"no added sugar" / "reduced sugar" instant desserts: Angel Delight, Instant Whip, sugar free jelly, low sugar rice pudding-tinned or made with sweetener, low sugar custard, plain ice cream
Chocolate, sugar, sweets, cakes	Currant loaf, tea cakes, scones, malt loaf, low sugar cakes, cakes made with sweetener

If you are experiencing severe symptoms

If you are one of the few people with severe symptoms that are not adequately controlled by following the above, you should speak to your clinical nurse specialist to request an appointment with your specialist upper gastro intestinal (GI) dietitian and/or surgeon.

If you require this information in another format, such as a different language, large print, braille or audio version please ask a member of staff or email **patientexperience@uhb.nhs.uk**.

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