Dietary management of Diabetic Gastroparesis

This leaflet can be made available in alternative languages / formats on request.

Useful websites

- www.nhs.uk/conditions/gastroparesis/
How does the stomach normally function?

The stomach mixes and breaks down food into a liquid mixture, which is then moved down towards a valve called the pyloric sphincter. When this sphincter relaxes, the mixed food passes into the intestine for further digestion.

Try these foods instead;

- Soups, especially if blended
- Smoothies or fruit juices (without pulp)
- Soft, well cooked vegetables
- Ground, minced or pureed meat
- Fish
- Dairy foods (milk, yoghurt, custard etc)
- Eggs
- Peeled fruits without pith, pips or seeds
- Milky drinks
- Low fibre breads and cereals e.g. white bread, cornflakes

What is diabetic gastroparesis?

Gastroparesis is a chronic (long-term) condition in which the stomach cannot empty itself in the normal way. It is a type of neuropathy (nerve damage) affecting the nerves which control the movement of food through the digestive tract. This can lead to a delay of food leaving the stomach.

This condition can be caused by long periods of high blood sugar levels in individuals with Type 1 or Type 2 diabetes. If food passes through the stomach more slowly than usual, this can lead to symptoms which can be mild or severe and tend to come and go.

What happens next?

The extent to which you change your diet will depend on your symptoms. If your symptoms fluctuate then your diet may need to keep changing too. If you have a restricted diet it is a good idea to take a multivitamin and mineral supplement to prevent nutritional deficiencies.

Some people with severe gastroparesis may be advised to have a part or even totally liquid diet. This is because the stomach is often able to empty liquids normally even in people with gastroparesis. It is important that you are advised properly by a dietitian on a liquid diet as it is difficult to get all the nutrients you need. You may need to take nutritional supplements from a healthcare professional to maintain your weight and optimise your nutrition.

Be aware that over the counter fibre/bulking laxatives may exacerbate symptoms-please speak to your GP for more detail.
**Should I avoid any foods?**

Some foods are more difficult to digest e.g. foods which are high in fibre, high in fat, high in protein or not easily chewed. It is a good idea to avoid the following foods as much as possible:

- Nuts and seeds
- Raw vegetables
- Vegetables that are higher in fibre e.g. green leafy vegetables, squash, potato skins
- Higher fibre fruit e.g. berries, citrus fruits and grapes
- Fruit with seeds, skins or pips e.g. figs, passion fruit, raspberries, apples and pears
- Dried fruit
- Carbonated drinks, alcohol, coffee
- Bran/ wholegrain cereals e.g. Weetabix, Shredded Wheat
- Granary and seeded breads
- Beans and pulses
- Tough meat and skin or rind on meat e.g. bacon rind, chicken skin, pork crackling
- Solid meals that are very high in fat or protein e.g. deep-fried items, large portions of meat

**Symptoms include:**

- Feeling full very quickly when eating
- Nausea (feeling sick) and vomiting
- Loss of appetite
- Weight loss
- Bloating
- Erratic blood glucose levels
- Abdominal (tummy) pain or discomfort
- Heartburn

Gastroparesis can make it more difficult to control your blood glucose levels. Food takes longer to digest, and stomach emptying can be more unpredictable. When the food does leave the stomach and enters the small intestine, blood glucose levels start to rise. Due to the unpredictable nature, blood glucose levels may be more erratic.

**How do I treat gastroparesis?**

Gastroparesis cannot usually be cured, but dietary changes and medical treatments can help control the symptoms, achieve/maintain ideal body weight and optimise blood glucose levels. Your GP or consultant will talk to you about which medications or procedures might help. If you smoke, it should help your symptoms if you stop. Please ask if you would like help with this.

If you are taking insulin, you may be advised to take your insulin more often, to take your insulin after eating rather than before, to check blood glucose frequently after you eat and to take insulin when needed, or an insulin pump may be recommended for insulin administration.

There are several medications for the treatment of gastroparesis to help relieve symptoms of nausea and help the process of stomach emptying, and your doctor may try different types or combinations.
Can changing my diet improve my condition?

People may respond differently to dietary changes and a dietitian will be able to provide advice to suit your own individual intolerances or difficulties with specific foods.

By making some changes to your diet, you may be able to reduce your symptoms, as well as improve your blood glucose control. A dietitian may take a diet history to help identify which foods are better tolerated, and to give you an individualised dietary plan.

The goals of dietary treatment are to:

- Reduce symptoms
- Maintain an adequate nutritional intake
- Maintain an optimal weight
- Avoid fluctuations in blood glucose levels

You may find these tips helpful:

- Instead of three meals a day, try more frequent, smaller meals
- Try soft foods, which are easier to digest
- Sit up straight at mealtimes and chew food well before swallowing
- Sip non-fizzy liquids with each meal. Drink most of your fluid between meals rather than with meals.
- Avoid alcohol as it can delay gastric emptying
- Choose foods which are low insoluble fibre* e.g. cornflakes, rice pops, white bread, white pasta, white rice, peeled potatoes.
- Avoid having large portions of fat. Foods which contain 17.5g fat per 100g or more are considered high in fat. Foods containing less than 3g fat per 100g are considered low in fat.
- Foods which are very hot or very cold may aggravate symptoms.
- Aim for good glycaemic control.
- Have milky drinks, smoothies or supplement drinks between meals, rather than other drinks.
- Sit or walk after eating, rather than lying down.

*Insoluble fibres can be found in:

- Wholemeal/wholegrain bread, wholemeal rice/pasta
- Bran/bran-based cereals
- Nuts and seeds (except golden linseeds)
- Popcorn
- Skins and stalks of vegetables
- Skins, pips, stalks and seeds of fruit