Eating after a Gastrectomy

There are two types of gastrectomy:

Partial gastrectomy in which only part of the stomach is removed (refer to diagram 1)
Total gastrectomy in which the whole of the stomach is removed (refer to diagram 2)

The gullet (oesophagus) is connected to the top of the stomach and the Duodenum (small intestine) is connected to the bottom of the stomach. During the operation, the surgeon connects the oesophagus or remaining section of the stomach to the small intestine. This means that you will still have a working digestive system, although it will not function as well as it did before.

Diagram 1: Partial Gastrectomy

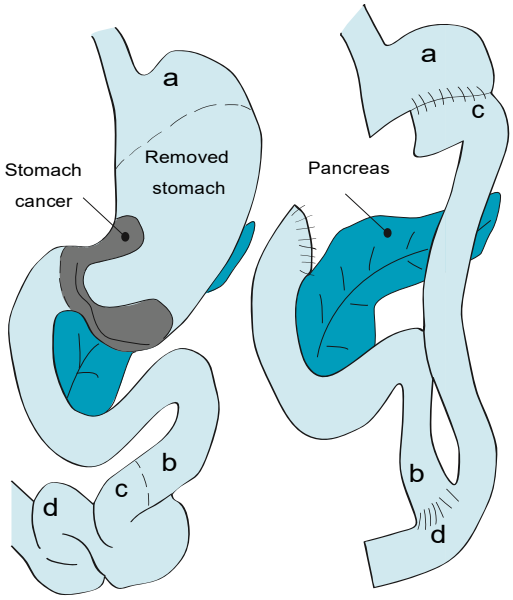
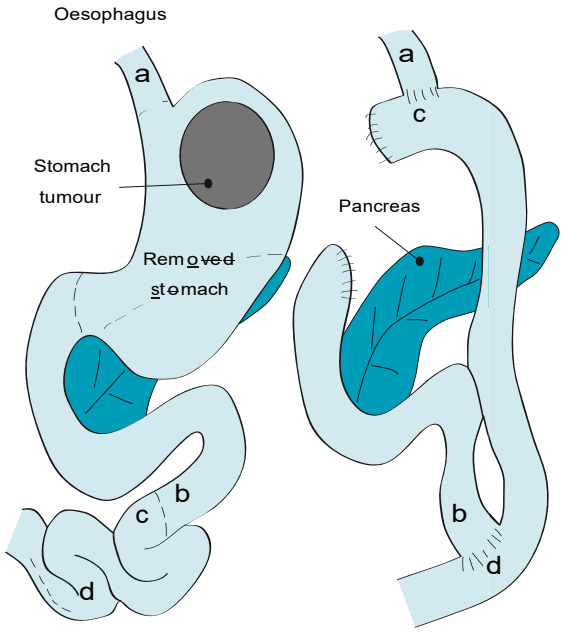


Diagram 2: Total Gastrectomy



The stomach acts as a reservoir (storage place) for food. When part or all of the stomach is removed it reduces the space available for food. You may have a poor appetite, feel full quickly and have difficulty regaining or maintaining your weight. The most important advice following a gastrectomy is to eat small, frequent meals. This will help you to consume enough nutrients to prevent weight loss.

It usually takes a few months to adapt to the changes after surgery but it is very important that you receive adequate nutrition to ensure your wounds heal and to help with your recovery. The following information will educate you how to modify your diet, step by step, as you progress through your recovery.

Enteral (tube) feeding

As part of your operation you **may** have had a small feeding tube placed into your small bowel or through your nose into your small bowel; this is called a jejunostomy or a naso-jejunal tube (NJ). A liquid feed will be used via this tube to ensure you receive all the nutrition you need whilst your oral intake is re-established. You may be taking a combination of both enteral (tube) feeding and oral intake when you are ready to go home, this will be decided by the Dietitian.

Enteral feeding begins soon after your operation and continues after you are discharged from hospital. You will be taught how to use the pump and care for the tube before you go home. The amount of time you will need the enteral feed for varies from person to person.

You need to continue taking enteral feeds until you are able to meet all your nutritional needs by mouth. Your dietitian will review this and advise accordingly. See the separate instructions on your feed regimen and care instructions.

Will I be able to drink or eat after surgery?

You will not be able to eat or drink anything by mouth for approximately five days after your operation. During this time, you may be given food through a feeding tube called a jejunostomy tube, or if this is not possible intravenously (through a vein) via a central venous line. Before being allowed to eat and drink by mouth, your swallowing may be assessed by a simple test.
Initially, you may only be able to manage a fluid / puree diet (depending on your progress after surgery). The Dietitian may recommend supplement drinks such as; Fortisip, Compact Protein, Fortijuice, Meritene Energis milkshakes / soups.

Gradually you should be able to introduce more solid foods. When introducing solid foods you should follow the guidance below:

- When you are able to start eating solids, you should choose soft and easy to eat foods, examples are listed later in the leaflet (be careful to avoid foods that may be harder to digest such as doughy bread, large chunks of meat e.g. steak, pastries, skins, husks, raw and undercooked vegetables including salads).
- Introduce small amounts of well cooked vegetables and fruits without the skins.
- Soups as a main meal are best eaten occasionally. This is because they are not as nourishing as the main meal options. If you have a soup before your main meal, it may fill you up. If you prefer soup, try to fortify it with foods such as lentils, meat, fish, egg, pasta or rice, cream, grated cheese, butter, milk or milk powder
- It is essential that you do not over-eat. Eating small portions is now a life-long change.

What can I do if I feel too full after eating?

Because the stomach can no longer hold large quantities of food, you may feel full very quickly and uncomfortable. For example, you may feel bloated or feel sick after eating and drinking. The guidance below can help to manage these uncomfortable feelings.

- Aim for 6–7 small, frequent meals or snacks throughout the day. The amount you can eat at one time may increase over time
- Avoid spending more than 2–3 hours without eating or drinking during the day
- Make sure you are in an upright position when you eat and try not to lie down too soon after eating
- Make sure you eat slowly and chew your food thoroughly
- Relax before, during and after meals

What can I do if I have a poor appetite?

- Avoid drinking at meal times. Try not to drink for half an hour before or after a meal
- Keep to foods and drinks that you enjoy
- It may be that you are too tired to eat, or you do not feel like preparing or cooking food. Try to find other ways to help with your shopping and cooking. For example, you may find it helpful to prepare food in advance, when you feel like cooking, rather than leave it to meal times
- Eat little and often (every 2–3 hours). Be positive about what you do eat and remember that every mouthful counts
- Try to keep to a regular meal pattern with snacks in between your meals
- Make use of snacks that do not require much preparation or effort to eat. For example, biscuits, fruit or yogurt
- If you are having problems eating, drinking or still losing weight, please contact your Dietitian or Clinical Nurse Specialist for further advice on high energy, high protein supplements. The Dietitian can also check if your vitamin and mineral intake is adequate
- An initial loss of weight after surgery often happens but it should be possible to maintain weight. Re-gaining your previous weight can be more difficult. You may wish to contact your Dietitian for advice about your weight loss.

Fortifying (enriching) your food

Meals and snacks can be made more nutritious without increasing the amount you need to eat, by fortifying them or enriching them. This is done by adding foods high in calories and/or protein. Every mouthful

should be as nourishing as possible. The following are examples of ways you can fortify your food.

Milk

You should choose full-fat milk rather than low-fat varieties
• Aim for 1 pint (568 ml) per day
Fortify milk by whisking in skimmed milk powder (such as Marvel or the supermarket own brand) to increase its protein and calorie content. Whisk in 4 heaped teaspoons of skimmed milk powder to ½ litre, (500 ml), or 1 pint of full-fat milk. This milk can be used to make milky drinks, savoury sauces and added to cereals etc.

Margarine, butter and oil

- You should avoid low-fat, reduced and light spreads
- Spread butter or margarine thickly on bread, toast, crackers, scones, crumpets or chapatti
- Mash plenty of butter, margarine, or oil into potatoes, or melt onto boiled and jacket potatoes
- Melt butter or margarine onto hot vegetables
- Stir butter, margarine, or oil into hot pasta or rice (e.g. Congee)
- Add butter, margarine, or oil to scrambled eggs
- Roast potatoes and chips are high in calories, you may like other fried foods such as fish, eggs, and bacon

Cream

- All types of cream are suitable
- Add to porridge, soups, sauces, and puddings
- Use as a topping for cereal and fruit
- Add to yoghurt (choose full-fat milk, or thick and creamy varieties)
- Cream can be added to hot and cold drinks as a topping

Cheese

- Use grated hard cheese, or a spoonful of cream cheese
- Mix into scrambled eggs in addition to butter or margarine
- Mash into potatoes in addition to butter or margarine
- Use to make sauces for fish, pasta, or vegetables
- Sprinkle grated cheese on top of soup, pasta and vegetables

Sugar

- Jam, honey, and syrup add useful calories. However, it is important to note these can induce dumping syndrome and may not be advised in all patients (i.e. diabetic patients). If you have diabetes, please discuss with your dietitian
- Add to stewed fruit, smoothies, milky puddings or yoghurt
- Add to porridge or breakfast cereals

Beans and lentils

To make soups or casseroles more nutritious, try adding tinned (ready to eat) beans such as butter beans or red kidney beans. These are especially useful if you are a vegetarian or vegan.

Main meal and snack ideas

Here are some ideas for meals which are quick and easy to do, or can be bought ready-made and are still nutritious:

Main meals	Snacks
Cauliflower cheese, Shepards pie, corn beef hash, fisherman's pie, cheese and potato pie.	Chocolate, ice cream, jelly, mousse, yoghurt, angel delight, tapioca, fruit fool.
Pasta dishes e.g. pasta bake, spaghetti bolognese, lasagne, macaroni cheese, cannelloni	Toast (if able to tolerate) with toppings of beans, scrambled egg, cheese, spaghetti, ravioli, sardines, or tomatoes
Jacket potato with butter and filling (e.g. tuna or egg mayonnaise, or beans with grated cheese)	Creamy soup with melt in the mouth cheese Crackers ie Tuc and butter.
Tender soft chicken or lamb stew or curry made with plenty of vegetables and soft dumplings	Breakfast cereals ie porridge, ready-brek or overnight oats with whole or fortified milk, sugar, honey or jam
Tender meats or fish in sauce with the batter removed and no bones, with vegetables and mash/roast potatoes.	Sponge cake with custard, fruit cake, soft flapjack, cream cakes, biscuits or cookies dunked in a warm drink.
Chilli con carne or soya mince with rice topped with plain yoghurt and full-fat grated cheese, moussaka.	Square of cheese / cheese triangles / babybel cheese.

Plain, cheese, or mushroom omelette with beans and hash browns	Tinned, stewed or soft fresh fruit with custard, cream, evaporated milk or ice-cream.
Skinless sausages with mashed potatoes, vegetables and gravy	Crisps such as Quavers, Skips or Wotsits
Idli with lentil soup, Upma (savoury thick porridge cooked with semolina and well mashed vegetables), Congee with fish and eggs, Grated cocoyam pottage (ekpang nkukwo) Aloo gobi Rissotto	Custard, rice pudding, panna cotta, trifle, payasam (made with vermicelli)

What problems may I experience following my gastrectomy?

A gastrectomy significantly changes your gastro-intestinal tract and can subsequently cause some short and long term changes. If you are experiencing any symptoms like pain, diarrhoea, reflux or swallowing difficulties or anything else you are concerned about, please discuss these with your Clinical Nurse Specialist or GP.

Dumping syndrome

The altered digestive system affects the rate that food passes through i.e. it may pass through more quickly (dumping syndrome). This may cause a number of possible symptoms including; bloating, nausea, palpitations, flushing, sweating, faintness, tiredness, loose stools or diarrhoea. This can be unpleasant and distressing, but it is not serious and generally the frequency of ‘attacks’ becomes less. If you experience these symptoms contact your Dietitian for further advice.

There are two types of dumping syndrome;

- Early (15–30 minutes after eating)
- Late (1.5–3 hours after eating)

Management of dumping syndrome can be discussed further with your Dietitian but if you feel you are experiencing dumping try to follow the guidance below:

1. Limit high sugar foods and drinks such as cakes, biscuits, chocolate, fruit juice, smoothies and lucozade
2. Try to include foods higher in fat and protein at meal times such as cheese, butter, pies and cream - this can slow down stomach emptying
3. Eat small, frequent meals regularly throughout the day
4. Take time to relax at mealtimes, eat slowly
5. Chew your food well
6. Try to avoid drinking within 30 minutes either side of a meal

Changes in bowel functions

It is very common to have changes to your bowel function following this surgery. Patients often report episodes of diarrhoea, often in the morning which can be severe at times. You can experience normal stools for a few days or weeks and then have 1 -2 days when you get episodes of diarrhoea. It usually clears up within 1 -3 months of surgery.

Diarrhoea may have other causes, such as infection, so it is important that you consult your

Doctor or Clinical Nurse Specialist as you may need medication to control this. You should increase your fluid intake to replace these losses.

What do I need to know about vitamin B12?

If all or a large portion of your stomach was removed, you are likely to develop a type of anaemia resulting from a deficiency in vitamin B12. This is because the stomach produces a protein 'intrinsic factor' that is required for the body to be able to absorb vitamin B12 from food.

This type of anaemia does not present immediately, as your body may have a store of the vitamins, and may take 6 months or more to become apparent. If you have had a gastrectomy then you will require injections of vitamin B12 every 3 months. Your GP will arrange this.
Please use the space below to write down any questions you may have and bring this with you to your next appointment.

Sustainability

Some of our patients ask questions about sustainability.
The dietitian can provide you with further information if needed.
A quick and easy tip is to try to choose seasonal/local foods, look for foods with minimal packaging.

Try to minimise your food waste by planning meals, cooking in bulk/batches and only buying what you need.

Contact details

For patients being followed up at
Heartlands Hospital Good Hope Hospital
or Solihull Hospital, you can contact the Macmillan dietitian on 0121 **424 2673**

Queen Elizabeth Hospital
Dietitians 0121 371 3485
Upper GI CNS at QEHB: 0121-3716650 (voicemail available)

Therapy Services University Hospital Birmingham NHS Foundation Trust

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