

Dietary advice after surgery to treat acid reflux

Dietetic & Nutrition Service

Information for Patients

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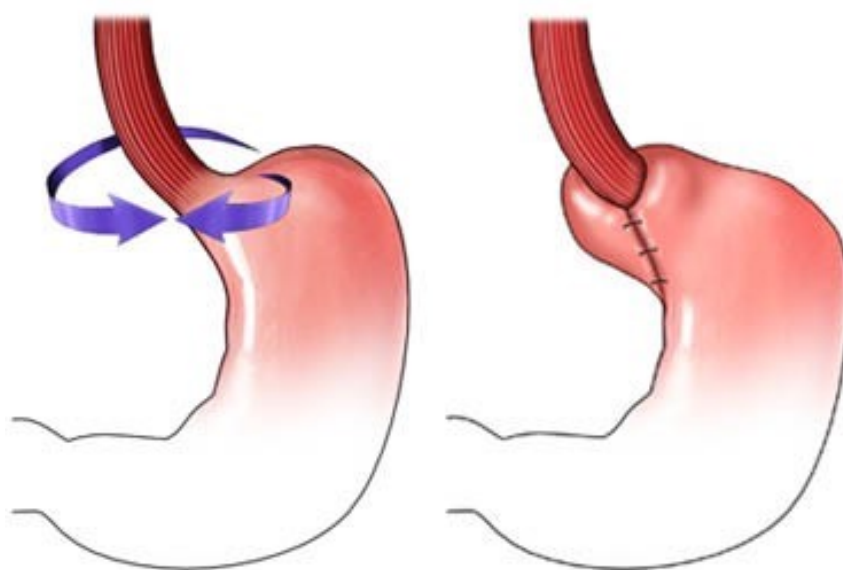
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Introduction

Reflux is a condition in which acidic contents of the stomach are brought back into the pipe which goes from your mouth to your stomach (oesophagus). This causes a burning sensation, known as heartburn. This occurs because the sphincter muscle between your oesophagus and stomach is not working properly. This muscle should contract to close the oesophagus from the stomach.

Anti-reflux surgery aims to stop further reflux by helping the sphincter work better. During your operation your surgeon will wrap the top part of your stomach around the lower part of your oesophagus to form a collar. This collar tightens the sphincter at the lower part of your oesophagus to create a 1-way valve, preventing stomach acid moving back into your oesophagus. The exact type of surgery will be discussed with your surgeon.



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After your operation your oesophagus will be swollen which makes it difficult to swallow. This occurs in all patients and usually improves with time. 4 stages of altered diet are advised after surgery. In each stage, when swallowing feels normal, you can move on to the next stage. The exact time for moving through the stages varies from person to person. Do not move onto the next stage before you are ready. This will also allow your oesophagus time to heal.

After your surgery

Step 1 – Free fluids (usually followed for 1 to 2 days after surgery)

Step 2 – Puree diet (usually followed for 2 weeks after surgery)

Step 3 – Softer, mashed diet (usually followed for 2 weeks after your puree diet)

Step 4 – Normal diet

Your surgical team will talk to you about when you can begin to progress your diet. You will be advised to start with fluids only and then once managing fluids, you will be advised to begin by eating a pureed diet.

Some surgeons may be happy for you to move directly to a softer mashed diet following the fluid stage but this varies from person to person. They will advise you on the ward if this is the case.

Free fluids:

- Water
- Black tea or coffee
- Fruit squash
- Milk and milkshakes
- Fruit juice and smoothies (without lumps)
- Hot chocolate
- Over the counter oral nutritional supplements e.g. Complan
- Prescribable oral nutritional supplements e.g. Fortisip, Fortijuce, Scandishake

Try to avoid very hot or very cold fluids and carbonated/ fizzy drinks as these may cause discomfort after your surgery.

It is important to ensure that the fluids you take are smooth and without lumps. Try to include nourishing fluids such as milk to help with your dietary intake during this period. Your dietitian will be able to prescribe oral nutritional supplements at this time in order to support your dietary intake.

Puree diet

A puree diet consists of foods that have been blended in a liquidiser/processor and passed through a sieve to remove lumps or “bits”, leaving a smooth texture. Some foods are naturally a pureed consistency, e.g. smooth yoghurts (without bits) or custard.

Key points:

1. Your food needs to be smooth
2. You may need to liquidise and / or sieve your food
3. You should try to have lots of different foods in your diet to make sure you get all of the vitamins and minerals your body needs to stay healthy
4. Some foods/textures should be avoided (see page 5)

Most foods can be made into a pureed consistency using one of the following pieces of kitchen equipment:

- A liquidiser
- A food processor
- A hand-held blender
- A sieve

How to puree your own food:

- Remove skins, seeds, pith, bones or other parts you cannot eat
- Prepare your food as normal, then cut into small pieces and put in the liquidiser/blender/processor
- Add fluids such as milk, cream, juice, stock or gravy to form a smooth consistency (by adding more or less liquid you can change the thickness of the puree)
- If you are using a sieve, push the pureed mixture through the sieve using the back of a spoon to remove any remaining pips, lumps or skins
- You may need to reheat the meal when you have finished preparing it as your food may have cooled down during the blending process

Practical tips:

- Try to puree each food separately so it keeps its own flavour and colour, this will make the food look more appealing. E.g. foods that are light in colour such as chicken or fish are better served with brightly coloured pureed vegetables such as carrots or broccoli
- You may find it easier to prepare food in bulk and store in your freezer. Make sure that food is defrosted thoroughly at room temperature before reheating
 - Cool the food after cooking
 - Portion into clean, plastic containers
 - Label and date the container pots
 - Freeze immediately
- Eat in a quiet, relaxed atmosphere and take your time. Ensure you are sitting upright during your meal
- Make sure you swallow each mouthful before you take the next one. If you feel that some food is still at the back of your throat, swallow again before continuing to eat

Meal ideas for a pureed diet

Breakfast

- Sieved or blended porridge or Ready Brek with pureed fruit, honey or syrup
- Weetabix soaked in plenty of hot or cold milk
- Smooth yoghurt – try Greek yoghurt, thick and creamy yoghurt or fromage frais
- Scrambled or poached eggs pureed with milk and cheese
- Milkshakes

Lunch and dinner

- Soup

Any soup can be liquidised or strained

Try liquidised thick soups like lentil or leek and potato and push through a sieve to make smooth

Add cream, cheese, potato or meat before liquidising

Make up condensed and packet soups with fortified milk (full fat milk mixed with dried skimmed milk powder) or cream and sieve to remove any bits

Thicken with bread (no crusts) or mashed potato before liquidising

- Pureed cottage pie with vegetables
- Pureed dahl with pureed white rice
- Pureed pasta with pureed bolognese sauce
- Pureed fish poached in milk with mashed potato and pureed vegetables

Puddings and snacks

Choose full fat milk and dairy products as these contain the most calories

- Rice pudding, put through a blender until smooth or make with ground rice
- Yoghurt, fromage frais, instant whip desserts, mousse, crème caramel, panacotta, tiramisu (puree to smooth texture)
- Ice cream, sorbet
- Cheesecake with biscuit base removed
- Jelly with pureed fruit added. Try making the jelly with milk instead of water to increase calories
- Egg custard
- Home-made, tinned or packet puddings such as custard and semolina
- Hot sponge puddings blended with custard, cream or ice cream
- Well mashed banana until smooth with cream and honey

Food textures to avoid on a puree diet

Food textures to avoid	Examples of food to avoid
Mixed thin & thick textures	Soup with pieces of food, cereal with milk
Hard or dry food	Nuts, raw vegetables, dry cakes, bread, dry cereal
Tough or fibrous food	Steak, pineapple, celery
Chewy food	Lollies, sweets, cheese chunks, marshmallows, chewing gum, sticky mashed potato, dried fruits,
Crispy food	Crackling, crisp bacon, cornflakes
Crunchy food	Raw carrot, raw apple, popcorn
Sharp or spiky food	Corn chips, crisps
Crumbly bits	Dry cake, dry biscuits
Pips, seeds	Apple seeds, pumpkin seeds, white of an orange
Foods with skins or outer shell	Peas, grapes, sausage skin, chicken skin, salmon skin
Food with husks	Corn, shredded wheat, bran
Bone or gristle	Chicken bones, fish bones, meat with gristle
Round, long shaped food	Sausages, grapes
Sticky or gummy food	Nut butters, overcooked oatmeal/porridge, edible gelatine, sticky rice cakes
Stringy food	Beans, rhubarb
'Floppy' food	Lettuce, cucumber, uncooked baby spinach leaves
'Juicy' food	Where juice separates from the piece of food in the mouth e.g. watermelon
Visible lumps	Lumps in puree food or yoghurt

Softer, mashed diet

If you feel no pain or discomfort with a puree diet, after about 2 weeks, you can move on to a softer mashed diet. A softer, mashed diet consists of foods that are very soft, tender and moist. These foods do not have to have a completely smooth texture but are easily mashed with a fork on your plate before eating.

The table below is a guide to help you identify which foods are best managed when following a softer mashed diet. You can add more liquid to get a looser texture if needed and you can mash each food down to a level that suits your needs. If you are finding this consistency too challenging, you may need to go back to a puree diet and you should highlight this to your Doctor if this continues.

Foods	Suitable	Best avoided
Cereals	Ready Brek or porridge Cornflakes/rice crispies/shreddies etc. softened with milk	Granolas (crunchy) Shredded Wheat (stringy) Cereals containing nuts, seeds and dried fruit
Bread	Remove crusts and soften e.g. broken into soup, soaked with tinned tomatoes or spaghetti hoops then mashed well Chapattis in small pieces and mashed with a sauce or dipped in tea	Crusty breads or rolls Sandwiches
Pasta/Rice	Well cooked pasta either in small shapes or mashed and mixed with a sauce Well cooked rice mixed with a sauce Tinned spaghetti Tinned ravioli	Plain pasta Al dente pasta Plain rice
Potatoes	Mashed or baked potatoes with plenty of butter and milk / cream / cheese. Soft thick cut chips without a crust mashed with a sauce e.g. gravy Waffles or hash browns (not crispy) mashed with a sauce	Potato skins Dry or crispy potatoes or chips

Foods	Suitable	Best avoided
Meat and Meat alternatives	<p>Soft, well cooked meat that is easily mashed with a sauce.</p> <p>e.g.</p> <p>Tinned sausages in spaghetti</p> <p>Corned beef</p> <p>Hot dog sausages</p> <p>Slow cooked chicken or beef</p> <p>Tinned ham</p> <p>Tinned chicken or beef</p> <p>Quorn mince</p> <p>Pate</p> <p>Potted meats</p> <p>Faggots</p> <p>Haggis</p>	<p>Dry, tough meat</p> <p>e.g.</p> <p>Chicken breast,</p> <p>Steak,</p> <p>Pork chop</p> <p>Sausages with skins</p> <p>Bacon</p>
Fish	<p>Most fish can be easily mashed with a sauce</p> <p>Fresh fish e.g. white fish/salmon</p> <p>Tinned fish (without bones)</p> <p>Tinned crab</p> <p>Fish pate</p>	<p>Fish with bones or crispy skin</p> <p>Shellfish</p>
Beans and Pulses	<p>Well cooked lentils</p> <p>Hummus</p>	<p>Beans – most skins won't mash well</p> <p>Dry crispy lentil snacks</p>
Eggs	<p>Moist scrambled eggs</p> <p>Egg mayonnaise</p> <p>Poached eggs</p>	<p>Crispy, fried eggs</p> <p>Dry boiled eggs without mayonnaise</p>
Nuts and Seeds	<p>Best avoided unless ground e.g. in cakes</p>	<p>All hard nuts and seeds</p>
Vegetables and Salad	<p>Boiled and mashed root vegetables e.g. carrots, swede, parsnips, butternut squash</p> <p>Cooked spinach</p> <p>Well cooked broccoli florets</p> <p>Mushy peas</p> <p>Cooked mushrooms</p> <p>Roasted courgettes</p>	<p>Raw vegetables</p> <p>Lettuce</p> <p>Crunchy or roasted vegetables</p> <p>Peas</p> <p>Sweetcorn</p>

Foods	Suitable	Best avoided
Fruits	Tinned fruit Stewed fruit Mashed banana, strawberry or raspberries Cooked tomatoes Roasted, jarred peppers Mashed avocados or guacamole	Raw, hard fruits e.g. apples and pears Fruits with skins e.g. cherries
Dairy products	Milk Yogurts Soft cheese Grated cheese mixed into other foods Ice cream Cream Fromage frais Rice puddings Custard Trifle and mousses	Yogurts with nuts, seeds, granola or dried fruit Dry, crumbly cheese
Biscuits and cakes	Soft cakes mashed with custard, ice cream or cream Biscuits softened in hot drinks	Cake on its own Hard, dry biscuits Dry crackers
Other snacks	Wotsits or skips that 'melt in the mouth' Chocolate (without fruit or nuts)	Crunchy crisps Twiglets Nuts Dried fruit Hard or chewy sweets

Suggested meal plan for a softer, mashed diet

Breakfast

- Weetabix or porridge made with full fat milk and sugar
- Scrambled egg and tinned tomatoes
- Stewed fruit or mashed banana with full fat yogurt
- Milky coffee or tea with bread dipped into it

Mid morning

- 2 biscuits dunked in tea or milky coffee
- Complan milkshake made with full cream milk
- Small pot of full fat yogurt or custard

Lunch

- Soup with buttered bread soaked into it
- Jacket potato with plenty of butter and cheese (remove the skin)
- Spaghetti hoops or ravioli on buttered, lightly toasted bread (crust removed and soaked in the sauce)
- Dhal or vegetable curry with chapattis broken up and soaked in the sauce

Mid afternoon

- Small trifle or rice pudding
- Cake or sponge pudding softened with custard

Main meal

- Fish mashed with a white sauce, mashed potatoes and mushy peas
- Slow cooked or tinned beef stew (meat cut and mashed with the gravy) with jacket potato and mashed swede and carrots
- Chicken or vegetable curry (well mashed) with chapattis soaked in the sauce
- Well cooked pasta with a cheese or tomato sauce (mashed)
- Fish pie with mashed broccoli

Evening

- Full fat ice cream
- Sponge pudding and custard
- Rice pudding / Crème caramel / trifle
- Stewed fruit and custard or cream

If you feel no pain or discomfort on the softer, mashed diet at the end of the 2 weeks you can start to reintroduce your normal diet. Slowly begin to reintroduce a healthy, balanced diet as tolerated.

- Continue to have small bites and chew foods carefully
- If foods gets stuck, sip water to help it pass. Avoid this food for 2 to 3 days before trying again
- Aim for 2 litres of fluids daily to prevent dehydration
- As your appetite and intake improve you can begin to return to a regular meal pattern e.g. 3 meals a day

Poor appetite / weight loss:

It is not uncommon for people to lose weight before anti-reflux surgery. After the surgery, if you continue to have a small appetite or find that you are still losing weight you should make your foods more nourishing. Below are some ideas on how to do this.

- Try to eat “little and often”, e.g. 6 to 8 small meals / snacks daily
- Choose foods which are high in calories such as full fat foods rather than diet and / or low fat alternatives
- Use full fat dairy products e.g. blue top milk, thick and creamy yogurts
- Fortify your foods by adding butter or cream to vegetables and soups before you mash them
- Have full fat ice cream, custard or cream with cakes or stewed fruit
- Have easy to eat snacks readily available, e.g. pots of yogurt or custard, trifles or biscuits softened in a hot drink
- If you are not able to manage a full meal try to have nourishing fluids (e.g. full fat milk, hot chocolate, Complan)
- If you are struggling to cook or shop on a regular basis, make use of convenience foods which require very little preparation
- Take only sips of drinks with a meal, as these can be quite filling. Remember to have more drinks between meals / snacks
- Try adding extra energy and protein to your regular foods and drinks by using some of the following ideas

If you are concerned that you are struggling to move through these stages, you continue to have a poor appetite or are having ongoing weight loss, please contact your Dietitian or Surgical team

Food Type	Quantity for Serving	Calories per Serving
Double cream	2 tablespoons	140 calories
Grated cheese	40g	165 calories
Skimmed milk powder	25g	125 calories
Butter or margarine	1 heaped teaspoon	75 calories
Oil	1 tablespoon	100 calories
Full cream milk	200mls	135 calories
Jam, honey, marmalade	1 heaped teaspoon	50 calories
Sugar	1 heaped teaspoon	25 calories

Weight Chart:

You may find it useful to keep an eye on your weight, this can be a useful indicator as to whether or not you are eating enough to meet your nutritional needs.

- Weigh yourself no more than once a week
- Try to weigh yourself at the same time of the day
- Wear similar clothes each time you weigh yourself
- Ensure your scales are on a hard floor

Date	Weight	Comments

Contact details

UHL Nutrition and Dietetic Service Contact: 0116 258 5400 Mon to Fri 8am to 4pm

Outside office hours:

Contact your GP, if your surgery is closed there will be a number to contact on the answer machine of the surgery.

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