

*Information for patients*

# Sleeve gastrectomy operation

Weight-loss surgery



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## Introduction

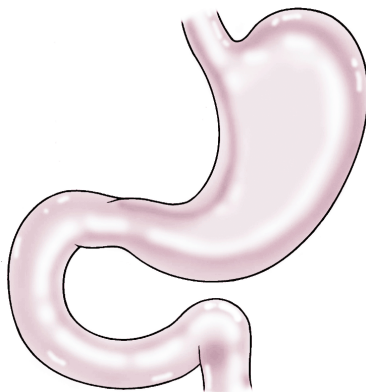
The sleeve gastrectomy operation is a very effective procedure to help overweight patients achieve a substantial and **long term** weight loss. It works by restricting your portion sizes and the types of food that you can eat.

**The sleeve gastrectomy can sometimes be used as a two staged process. This could be the case if the anaesthetic risk of surgery is too great to begin with, and further weight loss is required. Some patients will go onto have further weight loss surgery such as a gastric bypass.**

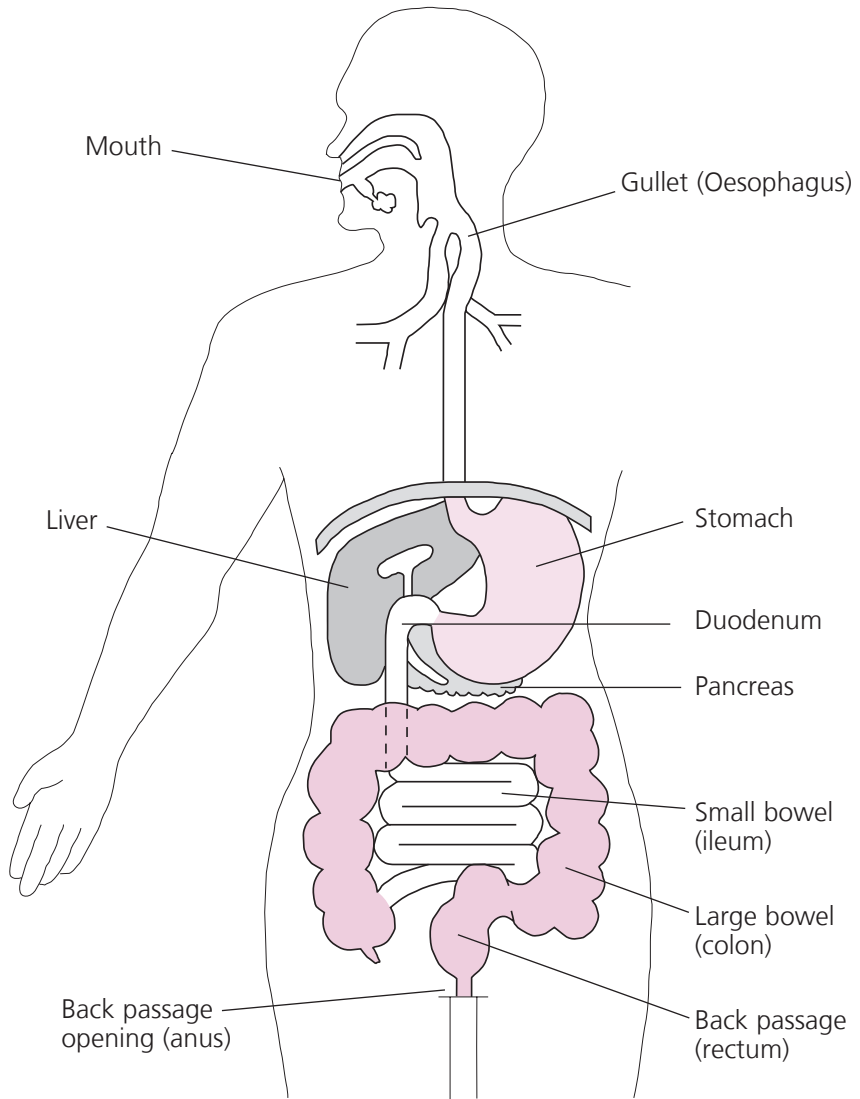
In order to understand your operation, it may help to have some knowledge of the digestive system.

## Understanding digestion

Food is taken in through the mouth and passes through the food pipe (oesophagus) into the stomach, where it is eventually broken down into a semi-solid form. After several hours food continues into the small bowel, which is a long, coiled tube-like organ where further digestion and absorption of nutrients takes place. What remains then continues into the large bowel and eventually will be passed from the body as faeces.



**Normal stomach**

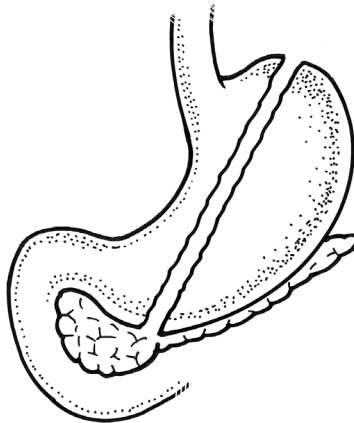


**The normal bowel (Digestive System)**

## What is the sleeve gastrectomy?

The sleeve gastrectomy reduces the stomach by approximately 75% into a banana shape. It is done by stapling down the stomach and removing the remainder of the stomach. The new stomach will hold up to 200ml of fluid at any one time. This means that the amount of food you will be able to eat will be much smaller and you will feel full quicker. The smaller stomach still works in the same way.

To maximise your weight loss it is important that you make life long dietary and lifestyle changes. There is no point considering this procedure unless you are fully committed to following the dietary and lifestyle advice provided.



**Stomach following sleeve gastrectomy**

## What diet will I have to follow once I have had the operation?

After the operation the dietitian will give you a diet sheet and explain to you the dietary changes you will need to make. Remember that the portions will be much smaller and food will have to be pureed in the early stages after your operation.

You will not be able to take food and fluids together as this will overfill your new stomach and make you feel sick. You will need to wait 30 minutes before or after a meal to drink fluids. In addition to the smaller portion size, you won't be able to tolerate foods which have a high fat content. Fat can be difficult to digest after a sleeve gastrectomy. It can delay stomach emptying and lead to heartburn.

*High fat foods to avoid are:*

- Fatty meats and meat products such as sausages, pate, corned beef, bacon and burgers.
- Mayonnaise
- Salad dressings
- Whole milk
- Condensed milk
- Evaporated milk
- Cream
- Butter/margarine/lard/dripping/oil.
- Full fat cheese
- Full fat yogurts
- Biscuits
- Cake
- Crisps
- Nuts
- Pastries.

## **What are the benefits of having the sleeve gastrectomy?**

This operation helps you to achieve effective, long-term weight loss.

It also reduces health related problems:

- Type 2 Diabetes
- Osteoarthritis
- Hypertension (high blood pressure)
- Coronary heart disease
- High cholesterol level

## What are the risks, consequences and alternatives associated with having a sleeve gastrectomy?

Most people get through their operation with few problems, however in some cases there may be difficulties.

As with any operation, there is a risk of serious complications such as heart attack or blood clot. Extremely rarely, there is a risk of not surviving, due to problems related to the operation.

Specific risks associated with the sleeve gastrectomy are;

- Staple line leak
- Wound site hernia.
- Wound infection.

This procedure is less associated with developing nutritional deficiencies than the gastric bypass operation. These risks are small but it is important that you are aware of them and that you have all the information you need before agreeing to have the operation.

The sleeve gastrectomy is a restrictive procedure. There are other types of operation available, which work in a slightly different way, also detailed in this booklet.

There is always the option of not receiving any treatment at all. The consequences of not receiving any treatment are;

- further weight gain
- shortened lifespan
- increase in obesity related diseases (as listed in the benefits above)
- low self-esteem and depression.

If you would like more information please speak to your consultant or the nurse/dietitian looking after you.

If you would like more information on counselling or weight management programmes, please speak to your GP.

## **What happens before I come into hospital?**

You will be sent an appointment to attend a group information session run by the specialist nurse and dietitian. This is a chance for you to receive lots of information about the operation. This includes your stay in hospital, lifestyle changes and what happens afterwards. The dietitian will also give you information about what you should and shouldn't eat after your operation. This session is also a good opportunity to meet other people who are considering weight loss surgery. If you decide that you wish to be considered for surgery, you will be sent an appointment to see the surgeon for medical assessment. You will also be given a sleep study questionnaire to fill in, so that the anaesthetist can assess your risk for the surgery.

## **Pre-operative Assessment Appointment**

You will be asked to attend the hospital for a pre-operative assessment. At this appointment we will ask you about your medical history, medication and any operations you may have had in the past. You may need to undergo some routine tests eg, heart trace (ECG), X-ray, blood test. You will also be weighed.

## **10 Day Milk and Yogurt Diet**

Ten days before your operation date, you will be advised to follow a milk and yogurt diet. This will shrink your liver, which becomes fatty and enlarged in people who are overweight. It is therefore very important that this diet is strictly followed. A smaller liver will make it easier for the surgeon to access your stomach at operation and reduce your anaesthetic risk.

You may also lose weight during this period. If you do not follow this diet there is an increased chance of your surgery not being able to be undertaken.

It is very important that you are as healthy as possible before the operation and that you do your best to lose weight. You should not gain weight as this could prevent you from having the surgery.

You will have had an opportunity to discuss the operation with the doctors in clinic and with the specialist dietitian and specialist nurse at the group session, and hopefully any concerns you may have will have been explained.

## Stop Smoking

**We advise you to stop smoking before your operation. Smoking increases your anaesthetic risk.**

## What happens on admission to hospital?

The ward is separated into bays with 4 beds in each bay. Both male and female patients are admitted to this ward, though there will only be patients of the same sex in individual bays.

The doctors and nurses will answer any questions that you may have. Once you have been given all the appropriate information, you will be asked to sign a consent form, which gives written permission to do the operation.

A nurse will check your temperature, pulse and blood pressure. The nurse will also check that nothing has changed with your health since you were at pre assessment clinic. You will be asked to put on a disposable gown and pants. You will also be given some white/black stockings to wear. These promote blood flow through the deep veins in your legs, and therefore reduce your risk of developing a blood clot. You will be asked to wear these for six weeks following your operation.

Other health professionals may need to see you at some time before the operation, including the anaesthetist, pharmacist and physiotherapist.



You may be asked if medical students can be involved with your care, you do not have to agree to this. If you use a CPAP machine at night, please bring it into hospital with you.

## **How is the operation done?**

In most cases the surgery is performed laparoscopically (keyhole), which means that the procedure is undertaken through 5-6 very small cuts instead of one large cut. Sometimes this is not possible for various reasons and the procedure may have to be undertaken through one large cut (open procedure).

If this happens you may have more discomfort after the operation. You will need to stay in hospital longer and it will be a longer period of time before you can return to normal activities.

## **What sort of anaesthetic will I have?**

Your operation will be carried out under general anaesthetic, which means you will be asleep throughout. The anaesthetist will visit you before your operation and discuss the anaesthetic with you.

## **What happens immediately after the operation?**

After the operation you may be on the High Dependency Unit (HDU). This is a unit which provides more intensive nursing. Patients with sleep apnoea and/or respiratory complications often go to the High Dependency Unit.

You will have your pulse, blood pressure, breathing and wounds checked regularly by a nurse. It is usual to feel sleepy for several hours. You will be given oxygen through a face mask until you are more awake. Anaesthetics can sometimes make people feel sick. It is important to tell the nurse immediately if you feel sick. They may offer you an injection which will help to settle it.

You will have a catheter in your bladder to monitor your urine output. You will have a drip or 'intravenous tube' in your arm/hand, which will give you fluid until you are well enough to drink an adequate amount. For the first 2 days following your operation you will only be allowed sips of fluid. The doctors will advise you when it is safe to increase your fluid intake, and when you are able to tolerate more fluid, the drip will be removed.

If no problems are experienced you will then move on to the next stage. You will be given an information book and advice from the dietitian about how to increase your intake gradually. You will then have a pureed diet which you can choose from a special menu sheet, designed for patients who have had weight loss surgery. This allows any internal swelling to reduce and helps your new stomach to heal more quickly.

Following your operation, the dietitian will help you adjust to your new diet particularly in the first few months. You will be given a detailed diet and information sheet to help with this and your diet and weight will be checked regularly, to make sure it is adequate.

## **Will I have stitches?**

Wounds are usually stapled together with metal clips to keep them together while they heal. Clips will be removed after 10 days. You will have dressings/large plasters covering your wounds.

## **Will I be in pain?**

Most patients having this operation experience some pain. If you have pain, it is important to tell the nurses, who will give you drugs to help. You may have a patient controlled analgesia device (PCA), where you press a button and a machine gives you a small dose of a painkilling drug. This will be explained to you before your operation and is very safe and easy to use.

Or, you may have a small tube in your back, which can be used to give you painkilling drugs.

## **How soon can I get out of bed after my operation?**

You will be encouraged by the nursing staff and physiotherapists to get up and about as soon as possible after your operation. This is important to reduce the risk of blood clots, and also to prevent problems with your chest.

## **When will I be able to go home?**

You will be able to go home 3-5 days after your operation. Everyone is different and some people may need to stay in hospital longer than others.

## **How will I feel when I get home?**

You are likely to feel tired and need to rest during part of the day but this should improve with time.

## **What should I look out for?**

Check your wounds for signs of infection - redness, pain and heat. If any of these occur, see your GP as you may need a course of antibiotics.

Your abdominal area is likely to feel bloated and sore for a few weeks. This is normal. Take either the painkillers you were given from the hospital or a mild painkiller such as paracetamol - (follow the manufacturers instructions and do not exceed the stated dose).

## **When will my stitches be removed?**

These will be removed at 10 days by your district/practice nurse.

## **How long will I need to be off work?**

You will need to take about 3-6 weeks off work depending on the kind of job you do.

## **When can I return to normal activities?**

We would normally expect you to take about 3-4 weeks to get back to normal activities. You should avoid heavy lifting for 2-4 weeks.

## **Can I drive my car?**

Do not drive until you can wear your seat belt comfortably and feel able to perform an emergency stop. Your insurance company may refuse to meet a claim if they feel you have driven too soon.

## **When can I start to do some exercise?**

As you start to feel better, it is important to introduce gentle exercise such as walking. As you start to lose weight you will find that you feel more energetic and are able to undertake more vigorous exercise. This will also help you to lose weight and to tone muscles.

## **Will I need any different medication?**

You will be sent home with a 10 day supply of a blood thinning drug called clexane, which will need to be given through a small injection into the skin on your abdomen.

Initially some tablets are going to be too large for your new stomach. Your GP may already have changed these to chewable, dissolvable or syrup form. If not, the ward pharmacist will do this. In some instances the medication doses may change or you may be advised to stop taking some of your medication.

If you are on medication for diabetes, you may need to have regular checks with your GP or practice nurse in order to monitor your blood sugars and medication.

## **Vitamin and Mineral Supplements**

You will need to take a daily vitamin and mineral supplement for the rest of your life. Initially chewable or dissolvable vitamin and mineral supplements will be required to ensure that they can pass through the new stomach. There is currently no chewable or dissolvable vitamin/mineral supplement available on prescription. You will also need to have vitamin B12 injections every 3 months, lifelong.

## **Will I have to come back to hospital?**

Yes, an outpatient appointment will be made for you four to six weeks after you go home in order that the team can check on your recovery.

You will also be seen by the dietitian in clinic in order that your weight, diet and nutritional status can be carefully monitored. You will then be reviewed by the dietitian/specialist nurse at 3 months, 6 months, 12 months and 2 years.

After 2 years you will be discharged back to your GP for routine annual follow-up.

## **How will this affect my life?**

As you start to lose weight, you will feel much healthier. It is important to remember that these changes will affect your life in terms of eating out, going for a drink with friends, going on holiday and buying new clothes. The support of family and friends is very important, particularly if you have to prepare large meals for other family members.

Some patients have reported taste changes after the surgery and other patients have reported some hair loss. It is important that you are aware of the long term changes that will affect your lifestyle and your relationships with others.

### **Is there any additional support?**

There is a weight management support group meeting, which takes place once a month and is open to all patients who have had this surgery and those who are waiting for surgery. It is a friendly informal meeting when patients can get together to discuss their experiences with other patients as well as with the appropriate health care professionals. The times and dates of these group meetings are available in the outpatient clinic or from the specialist dietitian/nurse specialist.

### **How much weight will I lose?**

It is difficult to predict how much weight you will lose, as everybody is different and weight loss will still be dependent on your food choices and exercise. Weight loss with a sleeve gastrectomy is expected to be between 30 and 50% of your excess body weight at 12-18 months. You will still have to follow a low calorie healthy eating diet, and exercise to achieve a successful long term weight loss.

### **What will happen to the loose skin I will be left with?**

Many patients who have lost a great deal of weight may have loose skin, particularly at the tops of their arms and legs and around the stomach. Referral to a plastic surgeon to remove the skin from these areas can be arranged through your GP if you meet the referral criteria. It is important to remember that this will only happen when enough weight loss has been achieved and is being maintained.

## Will this operation affect any future pregnancies?

We do not advise you to consider becoming pregnant until at least 12 months after your operation. This will allow your body time to adjust to its new condition and for you to be fully established on a varied, healthy diet.

If you are planning to become pregnant it is important that the doctors, dietitian and midwives looking after you are aware that you have had weight reducing surgery. They will be able to monitor both you and the baby accordingly. It is important that your diet is nutritionally balanced, which will keep both you and your baby healthy.

## Who will be looking after me?

<i>Consultant Surgeon:</i>	<b>Mr Roger Ackroyd</b>
<i>Consultant Surgeon:</i>	<b>Mr Kirt Patel</b>
<i>Specialist Dietitian:</i>	<b>Mrs Nerissa Walker</b>
<i>Specialist Nurse:</i>	<b>Miss Liz Govan</b>
<i>Consultant Radiologist:</i>	<b>Dr Fred Lee &amp; Dr Robert Peck</b>
<i>Radiographer:</i>	<b>Chris Pridmore</b>
<i>Anaesthetists:</i>	<b>Dr Paul Murray &amp; Dr Nick Barron</b>

## Useful Contacts

**Della Oldham** (Secretary to Mr Ackroyd and Mr Patel)

Tel: 0114 **305 2411**

**Liz Govan** (Nurse Specialist)

Tel: 0114 **226 9083**

**Nerissa Walker** (Specialist Dietitian)

Tel: 0114 **226 9083**

**Northern General Hospital**

Tel: 0114 **2434343**

### NHS Direct

NHS Direct is a 24 hour nurse-led, confidential service providing general health care advice and information. Tel: **0845 4647** or visit the web site at: **[www.nhsdirect.nhs.uk](http://www.nhsdirect.nhs.uk)**

## Useful websites for further information:

**[www.bospa.org](http://www.bospa.org)** (British Obesity Surgery Patients Association)

**[www.wlsinfo.org.uk](http://www.wlsinfo.org.uk)** (Weight Loss Surgery Information and Support)

**[www.british-obesity-surgery.org](http://www.british-obesity-surgery.org)**  
(British Obesity and Metabolic Surgery Society)

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