

Gastric banding (LAGB)

What is a gastric band?



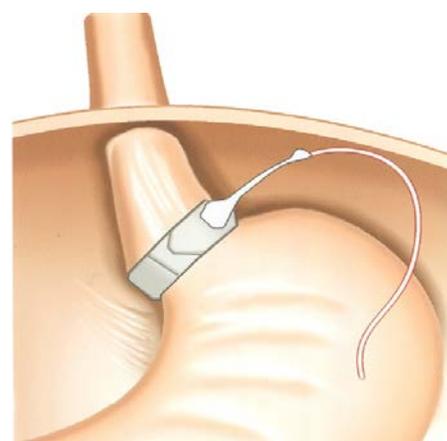
The gastric band is an adjustable device made from silicone which is placed around the upper stomach. A thin tube runs from the band to an access port (sealed opening) which is placed under the skin below the breastbone. The band works by putting pressure on the nerves on the top of the stomach which makes the brain think the stomach is full. Fluid can be injected into the band via the access port to inflate the inner part of the band which then increases or decreases the pressure on

the nerves. The pouch only holds a mouthful of food at a time and it takes approximately one minute for the mouthful to pass through the band. Because the band has reduced the size of the passage through which the food passes and increased the stimulation of the nerves at the top of the stomach, it leads to a feeling of satiety very quickly.

How does it work?

It is the action of the food passing through the banded area that makes the gastric band work. The speed at which the pouch empties is determined by the tightness of the band and when just right, each mouthful should take approximately a minute to pass through the band. This means that you will be able to eat a small meal (the equivalent of the meal of a two year old) and will feel satisfied after it. The band is not inflated at the time of surgery. Your first band fill will be at 6-8 weeks. You will need to have the band adjusted from time to time as your weight loss progresses.

With this procedure the structure of the stomach and intestines are not altered, so digestion and absorption remains normal.



The operation

The operation is usually performed as a day case but sometimes requires an overnight stay in hospital and is performed under general anaesthesia. This means you will be asleep during the operation. The gastric band is usually fitted using keyhole (laparoscopic) surgery. Your operation will usually take about one hour. Your surgeon will make four to

five small cuts on your upper abdomen. He or she will then use small instruments that are guided by a special telescope with a camera to secure the band around the top part of your stomach. The band is locked so that it can't come undone. Afterwards, the cuts are closed with two or three stitches.

You will usually be able to go home later the same day or the day after your operation.

Advantages

- Adjustable gastric banding is the safest surgical weight-loss procedure to date, with very low early complication rates.
- No stomach cutting, stapling or altering of intestinal tract. There is no risk of intestinal leak or 'dumping syndrome' symptoms.
- The gastric band requires less time in the operating room, shorter hospital stays and less time for recovery.
- Does not interfere with the normal absorption of nutrients and vitamins.
- Weight loss is more gradual over time, with steady, healthy weight loss. You can expect to lose roughly 50-60 per cent of your excess weight over 2 years. The band can be adjusted to increase or decrease the pressure on the nerves through the access port. This gives you and your doctor or nurse control to achieve weight loss without creating too many unpleasant symptoms.
- Surgery can be reversed in an emergency or if you experience severe complications (although you will most likely regain weight).

Disadvantages

- Weight loss may not start until after the band is filled or inflated.
- 15% of people fail to lose weight with the band.
- Weight loss is slower than that following gastric bypass surgery.
- Most people require multiple band adjustments (at least 3 or 4).
- Successful weight loss requires dietary changes and self-control.
- The access port may leak or twist, which can require another operation to correct the problem.
- Very rarely, the band may become infected. Erosion into the stomach wall may occur.
- The band may move or slip especially if correct eating techniques and dietary changes are not followed.
- You may have difficulty swallowing large tablets – some medication may have to be in liquid or injection form.

Risks and side effects

A gastric band operation is commonly performed and generally safe. However, in order to make an informed decision and give your consent, you need to be aware of the possible side-effects and the risk of complications of this procedure.

Side effects

These are the unwanted, but mostly temporary effects of a successful treatment, for example feeling sick as a result of the general anaesthetic.

- You are likely to have some bruising, pain and swelling of the skin around the healing wounds.
- You may feel or be sick after eating, especially if you try to eat too much. Your restricted diet may cause some shortage of nutrients so you may need to take multivitamin tablets.

Risks of the operation

This is when problems occur during or after the operation. Most people are not affected. Risks are associated with any type of surgery but are greater for individuals who suffer from obesity. Possible risks include:

- Chest or other infections. You will be given antibiotics during the operation to reduce the chance of getting an infection.
- Blood clots in the legs (DVT) with the risk of a clot passing into the lung. Post-surgery Flowtron boots and blood-thinning injections are used to help prevent DVT.
- Reaction to the anaesthetic or medication.
- Complications with your heart, breathing or blood circulation.
- There is a chance your surgeon may need to convert your keyhole procedure to open surgery. This means making a bigger cut on your abdomen. This is only done if it's impossible to complete the operation safely using the keyhole technique.

The table below summarises the risks specific to having a gastric band placed.

Risk	What does this mean?	How is it treated?
Death	The reported risk of death as a result of a band operation is less than 1 in 2000.	
Band slippage	Some stomach slips up under the band. The risk of this is about 1 in 50.	Usually the band must be replaced by a simple operation. Rarely this is a serious and acute problem.
Band erosion	The band works its way into the stomach. The risk of this is about one in 200.	The band must be removed, but can be replaced at another operation.

Problems with the tubing	The port may become infected or the tubing damaged The risk is about one in 50.	The tubing, but not the band must be replaced.
Bleeding at operation or damage to other organs in your abdomen	Exceptionally rarely there is bleeding during the operation.	The band placement may need to be postponed or converted to an open procedure.
Failure to lose weight	10-20% of patients do not lose the desired amount of weight.	A revisional procedure may be needed.

To contact the obesity team via Centre for Diabetes and Endocrinology, telephone: 0118 322 8109 /8811. Email the Bariatric Specialist Nurse at katharine.hallworth-cook@royalberkshire.nhs.uk

For more information about the Trust, visit our website www.royalberkshire.nhs.uk

This document can be made available in other languages and formats upon request.

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