

# Laparoscopic Adjustable Gastric Band

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The placement of the band creates a small pouch at the top of the stomach which holds approximately 50mls. This pouch 'fills' with food quickly and the passage of food from the top to the bottom of the stomach is slowed. As the upper part of the stomach believes it is 'full', the message to the brain is that the stomach is full and this sensation helps the person to eat smaller portions, eat less and therefore lose weight over time.

The band is inflated /adjusted via a small access port placed just under the skin subcutaneously. Radio opaque isotonic solution or saline is introduced into the band via the port. A specialized needle is used to avoid damage to the port membrane. There are many port designs and they may be placed in varying positions based on the surgeon's preference. The port may be sutured in place. When fluid is introduced the band expands placing pressure around the outside of the stomach. This decreases the size of the passage in the stomach and restricts the movement of food.

Over a period of time, restriction is increased until patients feel they have reached a 'sweet spot' where optimal weight loss can be reached with the minimal fluid required. This is an individual experience and timing cannot be predicted. There are approximately 7 - 8 adjustable bands on the market. The amount of fluid required and total content is varied.

Indications:

In general, gastric banding is indicated for people for whom all of the following apply:

- Body Mass Index above 40, or those who are 100 pounds (45 kg). or more over their estimated ideal weight according to the 1983 Metropolitan Life Insurance Tables or those between 30 to 40 with co-morbidities which may improve with weight loss (high blood pressure, diabetes, sleep apnea, and arthritis).
- Age between 18 and 55 years (although there are doctors who will work outside these ages).
- Failure of dietary or weight-loss drug therapy for more than one year
- History of obesity (generally 5 years or more).
- Comprehension of the risks and benefits of the procedure and willingness to comply with the substantial lifelong dietary restrictions required for long term success.
- Acceptable operative risk.

It is usually contraindicated for people with any of the following:

- If the surgery or treatment represents an unreasonable risk to the patient.
- Untreated glandular diseases such as hypothyroidism.
- Inflammatory diseases of the gastrointestinal tract such as ulcers, esophagitis or Crohn's disease.
- Severe cardiopulmonary diseases or other conditions which may make them poor surgical candidates in general.
- An allergic reaction to materials contained in the band or who have exhibited a pain intolerance to implanted devices.
- Dependency on alcohol or drugs.
- Mentally retarded or emotionally unstable people.

Reference: [http://en.wikipedia.org/wiki/Adjustable\\_gastric\\_band](http://en.wikipedia.org/wiki/Adjustable_gastric_band)

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