

# Laparoscopic Adjustable Gastric Banding

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**O**besity rates in the United States continue to rise. It is estimated that approximately 30 percent of Americans are obese and recent data suggests that we may actually be underestimating this number. As body weight rises, so does the incidence of serious medical problems related to the weight, such as diabetes, high blood pressure and sleep apnea.

The good news is that with weight-loss many of these medical problems improve or go away completely. The bad news is that this weight-loss is often difficult to achieve, especially for those who are significantly overweight. For many people, weight-loss surgery provides the best opportunity to achieve meaningful, sustained weight-loss. This article will focus on one of the most commonly selected weight-loss surgeries, the adjustable gastric band.

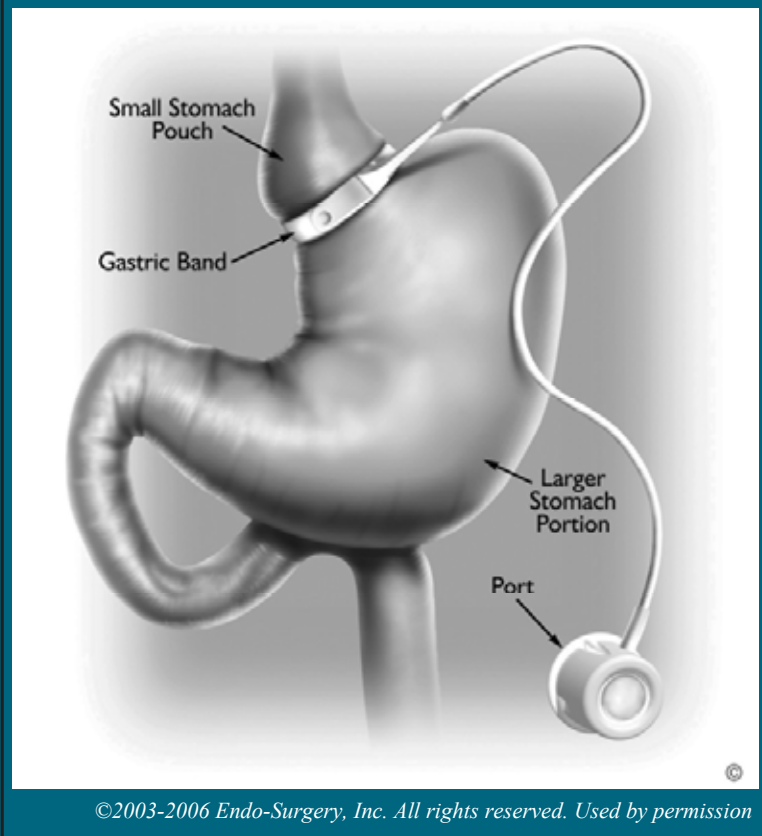
## General Information

Currently, in the U.S., there is only one adjustable gastric band on the market (LAP-BAND<sup>®</sup>) although several different types of bands are available worldwide. The operation is almost exclusively done laparoscopically (minimally invasive). The adjustable gastric band is a purely restrictive weight-loss operation, meaning that it works by limiting the amount of calories (i.e. food) a person can take in. Unlike a diet, however, individuals still feel “full” with this reduced intake.

## How It Works

This operation involves placing a silastic “belt” around the upper part of the stomach. The “belt” essentially separates the stomach into two parts: a tiny upper pouch and a larger lower pouch. The band is connected by tubing to a port or reservoir that sits below the skin of the abdominal wall usually around the belly button (the port site varies widely by surgeon). The port can’t be seen (and often can’t be felt) from the outside. Inside of the “belt” is a balloon that can be

## Gastrointestinal Tract after Laparoscopic Adjustable Gastric Banding



filled by placing fluid through the port. As the balloon is filled, it slows the passage of food from the upper pouch into the lower pouch. As the band is progressively filled, patients will feel “full” with smaller amounts of food. Typically patients will need two band fills before they feel significantly restricted and four to six band fills total in the first year after surgery.

## Weight-loss & Health Benefit

Weight-loss with an adjustable gastric band is typically slow and steady. Band patients generally lose one to two pounds per week during the first year after band placement. Weight-loss can be seen for two to three years after surgery and most patients will eventually lose 50 to 60 percent of their excess weight.

Band patients often see a significant improvement in

their weight related medical problems. Most patients will see a reduction in their need for medications to treat diabetes, high blood pressure, and high cholesterol and in fact many will come off of their medicines completely. Many patients will see resolution of their sleep apnea and will no longer have to sleep with a CPAP machine. Most patients also report a significant improvement in the quality of their life, as they are able to do activities they haven't been able to do for years.

### Advantages

There are several features that make the adjustable gastric band appealing. There is minimal stress to the body at the time of surgery because the band is almost always done laparoscopically and does not involve cutting the stomach or rerouting the intestines. Most patients can go home the same day or the next morning.

Recovery from surgery is usually quick and most people return to work a week or so after surgery. The risk of death from band surgery is 0.1 percent, although many centers report even lower rates.

The adjustability of the band makes it unique among weight-loss operations. This feature makes it possible to make band adjustments based on the individual weight-loss goals and needs of the patient. The stomach and intestines aren't bypassed, so vitamin, mineral and nutrition problems after banding are unusual, but still possible. Many programs still recommend vitamin supplementation after banding.

The adjustable gastric band can be easily removed if necessary. Clearly we are learning more and more about obesity every day and there may come a time when medical management proves to be very effective in controlling weight. Band patients could have their band removed at that point and their gastrointestinal tract returned to normal.

### Considerations Before Choosing A Band

Patients contemplating adjustable gastric banding must be comfortable with the thought of having a "foreign

## LAGB and Weight-Loss

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body" in them for life. Although no problems have been reported to date, it is unknown what the effect of having this foreign body will be in 20 to 30 years. It is also unclear at this point what the long-term (more than 10 years) weight-loss results with this operation will be, although the early data is promising.

After banding, patients need to be available for regular follow-up, especially in the first year after surgery when the band is being "tightened". If you live several hours from your surgery center this can be difficult. Filling the band involves sticking the patient with a needle, so if you "hate shots," a band may not be the right choice.

Band patients do not suffer adverse effects from eating sugars (dumping syndrome) so they need to be more disciplined in their food choices. Things like sodas, ice cream, cakes and cookies slide through the band easily, but obviously these choices will not lead to the desired goal of significant weight-loss.

Although the band has an excellent safety profile, there are complications that can occur with any weight-loss operation, and the band is no different. About 10 percent of patients will require a second operation to address a problem with their band.

### Conclusion

Adjustable gastric banding is a safe, effective weight-loss operation that can lead to meaningful, sustained weight-loss. No matter what weight-loss operation is chosen, however, to ultimately be successful one needs to change their lifestyle and learn to work with the surgery.

**Editor's Note:** *The Cover Story of this issue is designed to inform you of the various weight-loss surgery treatment options available. It is important to note that there are risks involved with bariatric surgery, as well as any other surgical procedure. Before making a treatment decision, it is important to discuss these risks with your physician and/or surgeon. The OAC also encourages patients to discuss these risks with their family members. For more information on the risks of bariatric surgery, please view the January issue of "OAC News" on the OAC Web site at [www.obesityaction.org](http://www.obesityaction.org).*