

Weight Loss Surgery Fundamentals

Required Reading for All Patients Considering Surgery

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Why surgery for weight loss?

There are two main reasons why we consider weight loss surgery (WLS). The first is that other methods for controlling weight have not been effective, and the second is that obesity has serious consequences for health. In general, the more severe the obesity, the more severe the consequences. Obesity has been shown by life insurance company research to correlate with a shorter life-span.

Other methods to lose weight are not effective

Anyone considering WLS should have tried to lose weight without surgery. However, the likelihood that a person will be able to keep off enough weight is slim. Fewer than 3 percent of morbidly obese people who go on a diet, even a medically supervised one, will be able to keep off at least half of their excess weight. In theory any one can lose and keep off all of their excess weight, but in reality, this is rarely seen.

Obesity has serious health problems and risks

Many conditions are known to be associated, worsened, or caused by obesity. For example:

Diabetes, hypertension, sleep apnea, arthritis, depression, gastro-esophageal reflux (GERD), dyslipidemia (high cholesterol and/or triglycerides), edema, urinary incontinence, endometrial cancer, and coronary artery disease.

Even if an obese person does not have any known problems yet, they are at risk for developing all the conditions above, other conditions, and early mortality.

The surgeries: Lap-Band, Gastric Bypass, Sleeve Gastrectomy

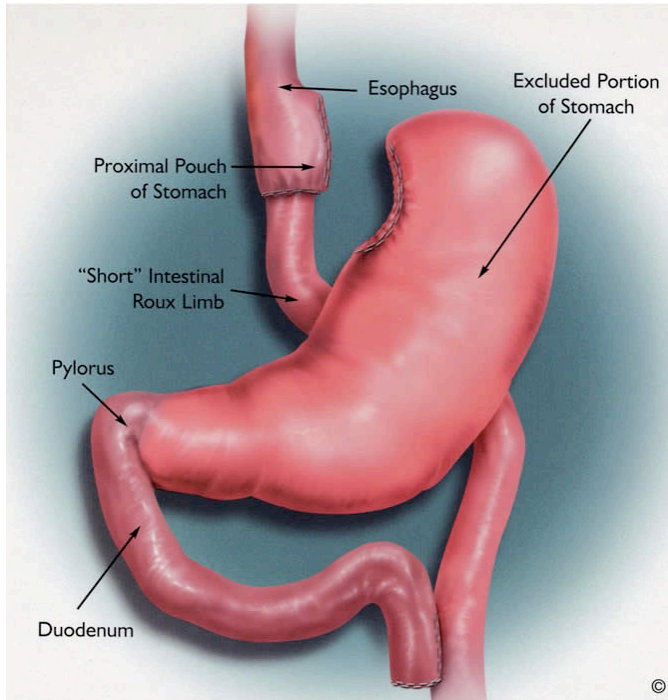
In the United States, gastric bypass and adjustable band (Lap-Band or Realize Band) are the two most common. Gastric bypass is currently the most popular, and has been in use since 1967. The Lap-Band¹, which is the brand name for a laparoscopic adjustable gastric band (LAGB), has been in use in the United States since 2001, and has been used for longer in Europe and Australia. Gastric bypass is also called Roux-en-Y gastric bypass. When performed laparoscopically, it is often called “Lap-RNY” for short.

Lap-Band, gastric bypass and sleeve gastrectomy are surgical procedures designed to help a person lose weight and improve the obesity related health problems. How each surgery accomplishes this is different, and will be discussed in more detail in the sections below.

¹ “Lap-Band” is a registered US trademark of the Inamed Corporation.

Gastric Bypass anatomy - what it looks like

Using surgical stapling and cutting devices, the stomach is divided into two very *unequal* parts. The top part, now called “the pouch,” is only about the size of an egg. The rest of the stomach becomes called “the bypassed stomach,” or “excluded stomach” because no food or drinks will be going into it. The bypassed (excluded) stomach is not removed, and still makes stomach enzymes and juices.



Once the pouch has been created, food comes in at the top, but can't leave the pouch. Of course we can't leave it like this, and that's where the “Roux-en-Y” part of the operation comes in. Using a technique that was developed over fifty years ago by a Swiss surgeon named Dr. Roux, the small intestines are connected to the pouch. The food can now leave the pouch through a small opening called “the stoma,” and travel into the intestines where digestion can take place. The juices from the bypassed stomach travel down a different part of the intestines, and ultimately are mixed with the food. From this point forward, normal digestion can take place. No part of the stomach or intestines is removed.

Gastric Bypass function - how it works

So how does all of this re-arranging help a person lose weight? Gastric bypass causes restriction, dumping, reduced appetite and malabsorption. Every individual undergoing gastric bypass experiences different degrees of each effect. All of these effects work together to help a person drastically reduce the calories coming into his or her body.

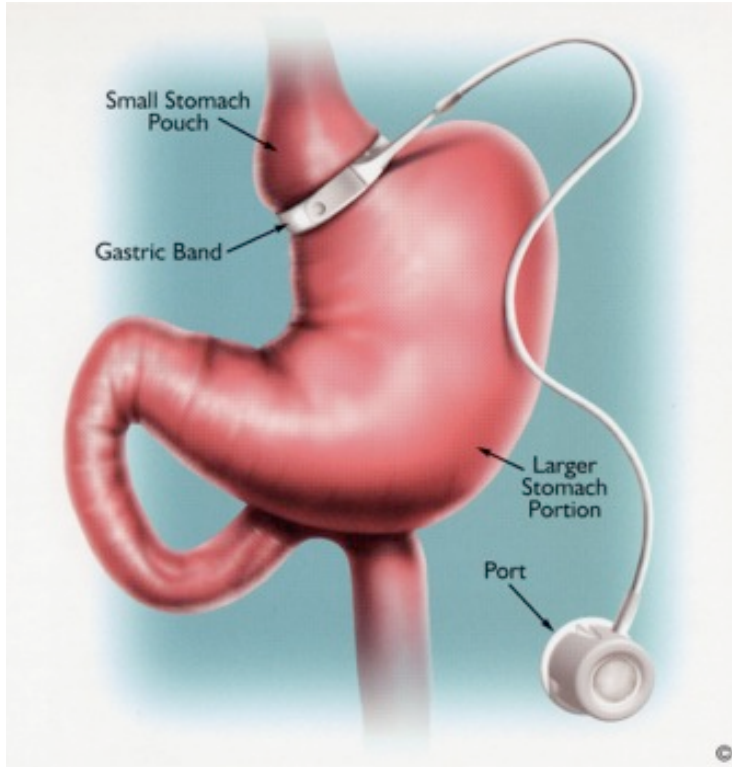
Restriction. The small pouch and stoma mean that a person fills up on much less food. For the first few months after surgery, this may be only about a quarter of a cup. As time goes on, people can usually eat about a cup to a cup and a half of food.

“Dumping.” The intestines are much more sensitive than the stomach, and this can cause unpleasant reactions to certain types of food. Usually, it is high-calorie foods, such as concentrated sugars and fats, that cause problems. Dumping may cause nausea, cramping, diarrhea and low blood sugar.

Reduced appetite. Gastric bypass reduces a hunger hormone called ghrelin. There is usually no hunger at all for the first few weeks to months after gastric bypass. Hunger does come back eventually for most people. When it does, the hunger is usually less than before surgery and can be satisfied by much less food.

Malabsorption. After gastric bypass, a person may not digest all of the calories in the food they eat. The exact amount of calories that pass through is unknown, and varies from individual to individual.

Adjustable gastric band (Lap-Band²) anatomy - what it looks like



An adjustable gastric band consists of a plastic band that goes around the upper part of the stomach and a system for tightening and loosening the band. The system involves an inner lining to the band that is inflatable with saline (salt water), tubing, and an access port. The access port is implanted under the skin. When the band needs to be adjusted, a needle is stuck into the port, allowing the physician to add or remove saline.

Everything a person eats or drinks still passes into the rest of the stomach and then on into the intestines. Digestion then takes place exactly as it did before surgery.

Adjustable gastric band (Lap-Band) function - how it works

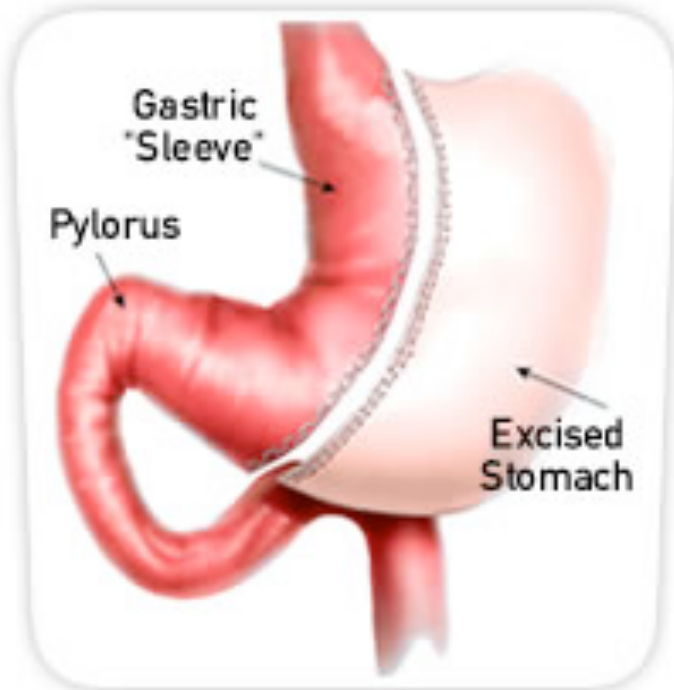
Restriction. Having the band in place makes it easier to fill up on a small amount of food. The band needs to be adjusted over time to achieve just the right amount of restriction.

Since restriction is the only effect, a person with a band has to “cooperate” with the band in order to get good weight loss results. The type of food a person eats will have a big effect on how much restriction is experienced. Liquid, slippery foods, like milkshakes and refried beans will pass easily through the banded area.

² “Lap-Band” is a registered US trademark of the Allergan Corporation.

Sleeve Gastrectomy - what it looks like

The stomach is reduced to a “sleeve” or tube of stomach that is similar in size and shape to a banana. About two-thirds of the stomach is **permanently** removed.



As with adjustable banding, everything a person eats or drinks still passes out of the stomach through a natural valve called the pylorus. Food then passes through all of the duodenum and intestines without anything being bypassed.

Sleeve Gastrectomy function - how it works

Restriction. Having a much smaller stomach makes it easier to fill up on a small amount of food. Healthy, solid foods will be more filling than liquids and junk food.

“Dumping.” This is not as dramatic as in gastric bypass, but people can experience adverse reactions to certain foods. Soft, liquid foods that are high in calories may make a person have nausea, cramping, diarrhea or low blood sugar.

Reduced appetite. Like gastric bypass (but not banding), sleeve gastrectomy reduces a hunger hormone called ghrelin.

Laparoscopic surgery

All three surgeries, gastric bypass and adjustable gastric band, and sleeve gastrectomy are usually performed laparoscopically. Laparoscopic surgery means making several small incisions, each about half an inch to an inch and a half long. The surgeon and assistant pass long instruments through these small incisions while watching on video monitors.

The alternative to laparoscopic surgery is called “open surgery.” This means using one long incision. An open incision for weight loss surgery is usually about eight to ten inches long.

Laparoscopic surgery, with its smaller incisions, leads to less pain, quicker recovery, and fewer wound problems. Some patients are not candidates for laparoscopic surgery, and will have to have the open incision. The most common reason for this is when someone has had a gastroplasty (stomach-stapling) in the past. This will be discussed with you by the surgeon prior to surgery.

It is important to remember that any laparoscopic surgery may have to be converted to open during surgery. There are many reasons why this could happen. If the surgeon encounters any problem that keeps him from being able to complete the surgery safely, such as scar tissue from previous surgery, unusual anatomy, or bleeding, he will make an open incision.

Removing the gallbladder (cholecystectomy)

The gallbladder is a pear shaped organ sitting just below the liver, on the right side of your abdomen. It acts as a temporary holding tank for bile - that is its only known function. The gallbladder can form stones, called gallstones. Gallstones sometimes form when people lose a great deal of weight. Gallstones are also associated with obesity, so many people undergoing weight loss surgery already have gallstones.

Gallstones can cause problems, and the treatment for gallstones causing problems is to surgically remove the gallbladder. Whether or not to remove the gallbladder at the time of weight loss surgery is a matter of some debate. If gallstones are present, and the person undergoing surgery has been having problems with the gallbladder, then the gallbladder should be removed.

If gallstones are not present, then it becomes a judgement call as to whether to take the gallbladder out or not. On one hand, its good to get the gallbladder removed and not worry about problems later, especially since the risks from taking out the gallbladder are low. On the other hand everything has risks, and not everyone is going to have problems with their gallbladder. The decision becomes: “deal with it now” versus “don’t mess with something that didn’t need to be messed with.”

The decision will be made by you and the surgeon, and is affected by factors such as patient size, family history of gallstones, and the type of weight loss operation planned.

If you do not have the gallbladder removed at the time of surgery, we recommend taking a medication after the surgery called ursodiol. It has to be taken twice per day for six months, but taking ursodiol significantly reduces the chance of forming gallstones after weight loss surgery.

Recovering from surgery

Surgery is performed in the hospital, under general anesthesia. When you wake up, you will be observed in the recovery room, and then transferred to a regular hospital room. Patients very rarely are observed in the intensive care unit (ICU) after surgery.

The most common problems after surgery are pain and nausea. To help prevent this, you will be given pain and nausea medications even before you awake from anesthesia. Everyone is different when it comes to how much pain they experience after surgery. A variety of pain medications are made available, and we use a system called patient controlled analgesia (PCA). The PCA lets you give yourself pain medication by pressing a button. It is computer controlled so that a person can't give himself too much.

While in the hospital, you will gradually advance to a clear liquid diet. Your vital signs, urine output and sometimes blood work or other tests will be monitored. When your pain is controlled and you are tolerating clear liquids, and the surgeon is satisfied that there are no signs of complications, you will be discharged.

Time spent in the hospital

This depends on the operation, and on the individual. Some people take longer to recover than others. After laparoscopic adjustable banding (Lap-Band), most people can go home the same day. After laparoscopic gastric bypass or sleeve gastrectomy, most people spend two nights in the hospital. If the surgery had to be done open, it is usually three or more nights.

Time spent off of work

Most people are back to work by about one to three weeks, but it depends on several things. Time away can be as little as a week, or up to six weeks. It depends on the type of operation, how quickly a person recovers, whether or not they have complications, and what type of work they do. For any job, three weeks is justifiable. For jobs requiring lifting over 40 pounds or with other physical demands such as extensive bending, lifting or climbing, four weeks may be needed unless the employee can be put on "light-duty."

The shortest time off is usually for laparoscopic surgery, and is shorter for banding patients (1 week usually) than bypass or sleeve patients (one to two weeks). Be prepared to miss more work if complications occur.

Living with the surgery

General instructions

The instructions and rules are the same for sleeve gastrectomy, gastric bypass and gastric banding. In general, you will be going through an initial healing period, lasting about four to six weeks, where you are being very gentle on your new stomach. People usually are not hungry at all during this time, and will be consuming mostly liquids meals at first. It is important to carefully follow all the instructions and guidelines, and to call the bariatric office with questions or problems

Exercise

A regular exercise program is essential to any weight loss program, with or without surgery. Exercise burns calories while you're doing it, but it also builds up muscle. Muscle burns more calories even while you are not exercising, so you get rewarded twice for your efforts. Regular exercise also helps lower blood pressure and cholesterol and has many other health benefits. Regular exercise benefits mental health too; stress, depression and anxiety have all been shown to improve.

You can begin walking immediately after surgery. You may begin low-impact exercises such as swimming, jogging, aerobics, or cycling as soon as these activities do not cause any discomfort to your incisions. With laparoscopic surgery, people usually reach this point within a few weeks. Exercise with straining, such as weight lifting and abdominal crunches, should be avoided for six weeks.

Lifelong commitment

Obesity is a lifelong problem, and managing it takes a lifetime of effort. This is true whether you have weight loss surgery or not. Weight loss surgery makes changes in the way your body reacts to food, but you have to work with these changes to achieve good weight loss.

Lap-Band postoperative instructions and followup

The details are provided in a separate guide. In general, you will be on a liquid only diet for two weeks. After two weeks, you can start some soft foods. Once you are tolerating liquids and soft foods, you will gradually advance to more types of normal foods.

In addition to dietary guidelines, there are guidelines for band adjustment. The band is usually deflated completely (empty) at the time of surgery. The first tightening, or "fill" is usually done at six weeks after surgery. Then band is then tightened or loosened as needed. It usually takes about 5 or 6 adjustments in the first year. Adjustment can then be done less frequently.

Gastric Bypass and Sleeve Gastrectomy postoperative instructions and followup

The details are provided in a separate guide. For the first two days, you are on a clear liquid diet (water, broth, Jell-O, popsicles, etc.). Then, you are on full liquids for two weeks. Then, you gradually introduce solid foods - soft at first, then advancing to normal foods as you can tolerate. Remember that "normal foods" means low fat, low sugar healthy foods. Every person reacts a little differently to the surgery and has to learn by trial and error sometimes, just how much food, and which types of food they can tolerate.

Risks and Complications

Any surgery has risks. Weight loss surgery is no different. There are complications that can happen with either gastric bypass or gastric banding, and there are complications unique to each operation. It is impossible to predict every possible complication of surgery, but listed below are some of the more common or more severe risks. Fortunately, the severe complications are far less common than the mild ones.

Complications that can occur from gastric bypass, sleeve gastrectomy or gastric banding

- Death.
- Bleeding, infection, stroke, heart attack.
- Anesthesia complications, allergic reaction, arrhythmia.
- Blood clots: deep venous thrombosis (DVT), pulmonary embolism (PE).
- Excessive weight loss.
- Excessive vomiting.
- Nutrient deficiencies.
- Failure of weight loss.
- Wound problems: hernia, infection, pain.
- Flatulence, diarrhea, constipation.
- Temporary hair loss.
- Loose skin after weight loss.
- Need for revisional or corrective surgery in the future.

Gastric bypass specific complications

- Leaks: from a staple line or anastomosis.
- Stricture or stenosis of the stoma (outlet of the pouch).
- Bowel obstruction, internal hernia.
- Nutrient deficiencies: Iron, Calcium, vitamin B12.
- Ulcers, hypoglycemia.

Sleeve Gastrectomy specific complications

- Leaks from the staple line.
- Stricture or stenosis narrowed stomach.
- Nutrient deficiencies: Iron, Calcium, vitamin B12.
- Ulcers.

Lap-Band Specific complications

- Slippage of band.
- Erosion of band into stomach.
- Device problems: breakage or leakage of tubing, access port problems.
- Infection of the port or other parts.
- Esophageal dilatation.

Individuals at increased risk

Certain patient factors do make surgery riskier for others. These include age over fifty-five, body mass index (BMI) over fifty, previous gastric or weight loss surgery (banding, stapling, Nissen fundoplication), and males with a BMI over fifty.

Results: Effect of surgery on the weight itself

Weight loss surgery is much more effective than any other approach to weight loss. In theory, anyone can lose weight without surgery. In reality, the chance of a severely overweight person achieving successful weight loss without surgery is less than three percent. With surgery, the chances of successful weight loss are about sixty to eighty-five percent.

Remember that weight loss alone is not the goal; the real goal of weight loss surgery is to improve health and well-being.

Weight loss results are usually described in terms of excess weight lost. Excess weight is defined as your current weight minus your ideal body weight. For example, if you weigh 300 pounds and your ideal body weight is 140 pounds, then your excess weight is 160 pounds.

It is impossible to predict for any given person how much weight they will lose, how long weight loss will take, and for how long they will keep weight off.

Weight Loss Trends - Every Person is Different!

Gastric Bypass

Most people lose weight very rapidly after gastric bypass. Weight loss is fastest in the first 6 months and then gradually slows. A person usually stops losing weight from ten to twenty months after surgery. The more weight someone has to lose, usually the longer they keep losing weight, and the more rapidly they lose weight at first.

The average initial weight loss for gastric bypass is about 70%-75% of the excess weight. After the initial weight loss, there is a tendency to regain some, but not all, of the weight lost. Long term weight loss, defined as 10 years or more after surgery, averages 55% to 65% of excess weight.

Lap-Band

Most people lose weight more slowly after adjustable gastric banding (Lap-Band) than after gastric bypass. Weight loss tends to continue for two to three years, for an initial weight loss of about 45% to 55% of excess. Less is known about results more than five or ten years after surgery.

Sleeve Gastrectomy

In the first five years, weight loss is very similar to gastric bypass, possibly the same. Because it is a newer operation, less is known about what happens more than 5 years after surgery.

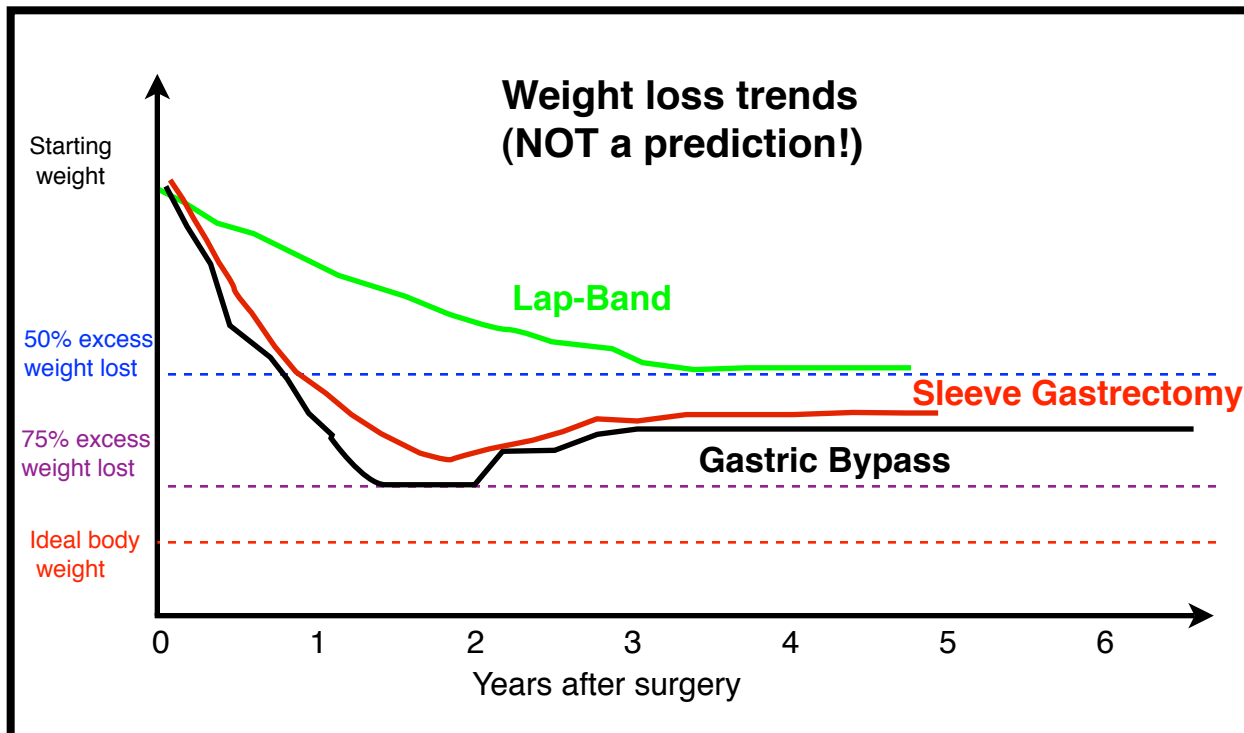
Weight loss results depend on the person

Weight loss surgery is a tool, and like any tool, it has to be used properly. Proper use of weight loss surgery means following diet and exercise guidelines, and paying attention to the signals that your altered stomach is sending you. If you get a dumping reaction, or feel bad after eating something, your body is trying to tell you that you ate something too rich in calories. Pay attention! Don't try to see how much you can "get away with" when it comes to eating high calorie foods. If you repeatedly eat to the limit of feeling bad, you will end up eating more, and training your stomach to tolerate more food, and more of the wrong kinds of food.

Weight Loss Graph

Individuals vary, and there is no way to predict exactly how much weight a person will lose. Research and experience have shown some trends, shown in the graph below. Lap-Band and sleeve gastrectomy are newer than gastric bypass and most of the knowledge comes from results no more than 5 years after surgery. Gastric bypass has been in use since 1967, but there still is not a great deal of research on results more than 10 or 15 years beyond surgery.

Bottom line: weight loss from all operations depends on how well you eat right and exercise (follow the rules). All operations have significantly better weight loss than no surgery (diet and exercise alone). Gastric Bypass is usually more weight loss at first and in the long run than Lap-Band. Less is known about sleeve gastrectomy, but it appears that weight loss in the first five years is almost as good, or as good as for gastric bypass.



“Excess weight” (amount over normal weight) lost after each procedure:

Procedure	1 year	3-5 years	5-15 years
Gastric Bypass	65%-70%	55%-65%	55%-65%
Lap-Band	30%-35%	40%-50%	40%-50%
Sleeve Gastrectomy	60%-70%	55%-65%	Unknown

Results: Effects of surgery on the health problems

Weight loss surgery dramatically improves most, if not all of the obesity-related health problems a severely obese person suffers from. As with weight loss itself, there is no way to predict how effective surgery will be, but for many conditions, we have seen impressive results.

For some conditions, the improvement is caused by the weight loss alone. For some, such as diabetes and acid reflux (GERD), improvement is often seen before any weight loss occurs. Even a small amount of weight loss reduces the risk of diabetes and premature death substantially.

Examples of health problems resolved after weight loss surgery

- Diabetes 50% to 85%
- Hypertension 50% to 75%
- Sleep apnea 95%
- Acid reflux (GERD) 75% to 95%
- Dyslipidemia 95%

Making the decision to have surgery

If you are considering surgery, you must meet certain criteria to be an appropriate candidate. Most surgeons in the United States use the National Institutes of Health (NIH) guidelines. These guidelines are as follows:

Weight Loss Surgery Criteria

Previous attempts at weight loss have not been successful.

AND

No medical or psychological conditions that would make surgery too risky.

AND

Weight alone: BMI (body mass index) 40 or above.

OR

Weight with associated conditions: BMI 35 or above *with* the presence of diabetes, high blood pressure, sleep apnea, or other serious complications of obesity.

Calculating Body mass Index (BMI)

$$\text{BMI} = \frac{\text{Weight in pounds}}{(\text{height in inches}) \times (\text{height in inches})} \times 703$$

Many BMI calculators are online, including at our website: www.tylerbariatrics.com

If you do meet criteria, the next question is, are you comfortable with the trade-offs? In choosing to having surgery, you are trading some up front costs and risk for the ongoing costs and risks of the obesity. Furthermore, you must feel convinced that you are not going to have effective weight loss without surgery.

Making the decision to have weight loss surgery is complicated and best made by a person who is well informed. The decision should include significant others, family members, or whomever is closest to you. A thorough discussion with the surgeon is of course necessary, and we encourage you to discuss the surgery with your medical doctors and other health care providers.

Choosing which type of weight loss surgery

Laparoscopic adjustable gastric banding (Lap-Band), laparoscopic gastric bypass and laparoscopic sleeve gastrectomy are currently the three surgeries offered by Dr. Babineau. Each procedure has pros and cons. Adjustable gastric banding is less invasive surgery, and in some ways is less risky than gastric bypass or sleeve gastrectomy. Gastric bypass and sleeve gastrectomy have a higher likelihood of major complications early after surgery, whereas adjustable banding has a higher likelihood of minor problems in the first year. Gastric banding usually does not result in as dramatic and rapid weight loss as gastric bypass, and seems to have a higher percentage of people who do not have a satisfactory weight loss at all. A need for a repeat surgery on a band for a problem such as slip, dilated pouch, a tubing or port problem, while not more than 5% to 10%, is higher than the chance of re-operating on a sleeve gastrectomy or gastric bypass.

There is no such thing as a perfect weight loss operation

The fundamental problem is that in doing surgery to encourage weight loss, we have to leave the stomach and digestive system still functioning well enough for a person to get enough nutrition to stay healthy. All weight loss operations must therefore find a balance between effectiveness and safety. Gastric bypass is currently the most common operation performed in the United States. Sleeve gastrectomy is a newer operation so less is known about it.

All three operations are considered to be acceptable weight loss options by the American Society for Metabolic and Bariatric Surgery (ASMBS). Neither operation is risk-free or guaranteed to have satisfactory results.

Overview of the three procedures

	Risks	Weight loss	Laparo-scopic	Device	Reversible	Long term results
Lap-Band	medium	good	yes	yes	yes	unknown
Gastric By-pass	medium high	very good	yes	no	sort of	good
Sleeve Gas-trectomy	medium high	very good	yes	no	no	unknown

Conclusion

Weight loss surgery is a serious approach to a serious problem

Appendix A: Weight loss without surgery

Anyone considering weight loss surgery should have tried to lose weight without surgery. For most people who are severely overweight, this is a given. Some people, however, really do need to make more attempts at weight loss before they consider surgery.

Research into non-surgical weight loss has consistently shown very low rates of success. The type of program, or diet, doesn't seem to make a difference, but there are some things that improve the chances for success. For example, whether the diet is low-fat or low-carbohydrate doesn't really matter, as long as the amount of calories being consumed is reduced. Something else that seems to help is weighing daily, so that if weight starts going up, you can increase your efforts before the weight gain spirals out of control. Recent research shows that once a person gains back more than five pounds of what they lost, the weight loss is almost certainly over.

What is a good non-surgical weight loss program?

These are some basic principles that should be part of any weight loss program:

- Aerobic exercise for 30 minutes, three to five times per week.

- Calorie and portion size restriction.

- Avoid high fat foods and liquids calories.

- Avoid in between meal snacks.

- Eat three meals per day.

 - (When you skip a meal, you tend to overeat at the next meal).

- Set realistic goals: 1 to 2 pounds per week

Appendix B: Resources

Internet

www.tylerbariatrics.com

Our web-site

www.asmbs.org

American Society for Bariatric Surgery

www.obesityhelp.com

Peers and information

Support groups

These are currently held monthly at East Texas Medical Center in Tyler as well as other locations in East Texas. Contact our office for details.

Books

Weight Loss Surgery, by Barbara Thompson.

Gut Feelings, by Carnie Wilson.

I'm Still Hungry, by Carnie Wilson.

Organizations

American Society for Metabolic and Bariatric Surgery

100 SW 75th Street, Suite 201

Gainesville, FL 32607

(352) 331-4900

www.asmbs.org

Surgical Review Corporation (“Centers of Excellence”)

www.surgicalreview.org

Appendix C: Frequently Asked Questions

How long is the hospital stay?

It is our protocol to discharge patients two nights after surgery for laparoscopic gastric bypass or sleeve gastrectomy. After laparoscopic banding, most patients go home the same day.

What vitamins should I take after surgery?

For Gastric Bypass and Sleeve Gastrectomy: two multivitamins, Iron, B12 and two Calcium citrate. For Lap-Band: one multivitamin with iron and calcium. We recommend Bariatric Advantage at www.bariatricadvantage.com.

Should I drink protein shakes?

Usually people do not need these if they are getting protein 2 to 3 times per day from sources such as meat, fish, soy products, eggs and dairy products. If you do have protein drinks, make sure they are very low in fat and sugar (less than about 4 grams per serving).

What is the age limit for surgery?

Dr. Babineau's policy is to consider individuals ages 15 to 75.

What determines whether or not a patient can have laparoscopic surgery?

Most people are candidates for laparoscopic, but this is determined on an individual basis. The most common reason to not be able to do laparoscopic surgery is previous weight loss operations. Other common operations, such as gallbladder, appendectomy, hysterectomy and Caesarian section are usually not a problem.

What can I do prior to surgery to reduce the risk of complications?

We suggest getting into a regular exercise program, even just taking a daily walk for 20 minutes. Exercise may reduce the risk of blood clots and helps get a person in better condition to tolerate surgery. Start taking vitamins with iron now, to build up reserves that can last years. And if you smoke, quit! The sooner the better! Also, watch your diet and don't go on a series of "last suppers." If you can lose even 5 or 10 pounds before surgery, this can make the surgery easier, and therefore safer.

How long does it take to do the lap gastric bypass?

Usually about an hour and a half to two hours.

How long does it take to do a Lap-Band®?

Usually about forty-five minutes to an hour.

How long does it take to do a sleeve gastrectomy?

Usually about forty-five minutes to an hour.

How much water should we drink after surgery?

We recommend working up to 64 oz of fluid (water, other sugar free drinks) per day. 32 ounces per day is a minimum.

Is weight loss surgery safe?

"Safe" is a relative term. No surgery is "safe," if that means no complications can occur. weight loss surgery is a major operation and can have major complications. In the hands of an experi-

enced surgeon, major complications are uncommon, about 1% to 2%. Weight loss surgery is about as risky as hip-replacement surgery.

Is weight loss surgery reversible?

It depends. A Lap-Band® is relatively easy to remove, although it does require surgery. Gastric bypass can be reversed but reversing gastric bypass is fairly major surgery, and is rarely done. Sleeve Gastrectomy can not be reversed.

What can I do to help prevent hair loss after weight loss surgery?

Some people do experience partial and temporary hair loss after WLS. Unfortunately, nothing has been proven to prevent or cure hair loss other than time. When it happens, hair loss usually starts 3 or 4 months after surgery, but the hair starts coming back by around seven or eight months.

How soon can you return to work after surgery?

Most jobs one to three weeks. Heavy lifting or other physical jobs could be four to six weeks. It depends a lot on the person. Some people bounce back quicker than others.

Will my insurance cover the surgery?

It depends. Many insurance plans cover the surgery but only if you have documentation of physician supervised weight loss efforts including an exercise program and visits with a physician and dietician or nutritionist. The sooner you begin documenting these things, the better your chances of getting your insurance to cover the surgery. Our staff can help with the process.

What can I do about loose skin?

There is going to be some loose skin when you lose a lot of weight. Most people do not find this to be a major problem. There is nothing that can be done to prevent loose skin, or make the skin shrink, even exercise. That leaves plastic surgery or just living with it. Most insurance policies do not cover surgery to remove the skin.

Is it okay to get pregnant after weight loss surgery?

Yes. Patients are advised not to get pregnant for at least one year after WLS, and not before weight has been stable for at least two months. As long as you are not having a complication from surgery, then the baby is not at any more risk than for a woman who has not had WLS.

Can I take my usual medicines after surgery?

Yes. Early on, people sometimes have problems with large pills. Most, if not all, medicines do seem to be absorbed and work as well as before surgery.

What if my insurance does not cover surgery?

Lap-Band®, gastric bypass and sleeve gastrectomy can be done on a "private-pay" basis. See our website and/or call our office for up-to-date pricing policies.

How and where are adjustments made to the Lap-Band®?

Adjustments (often called "fills") are done in the office. In our practice, we use ultra-sound to help locate the port. A needle is passed into the port, and most people experience minimal discomfort. We do not perform X-Rays with each adjustment.