

# **Patients Guide to Lap-Band® Surgery**



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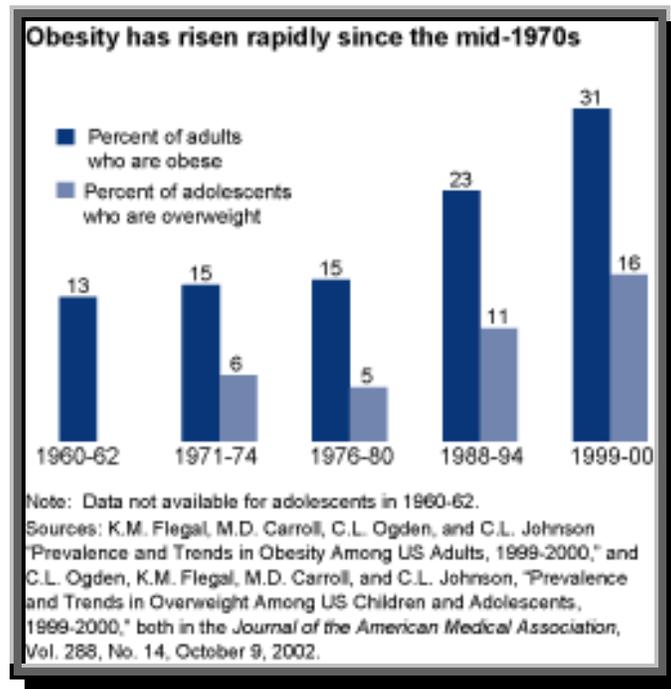
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## The Facts about Obesity

As one of the most prevalent disorders in the United States, more than two thirds of adults in the United States suffer from the disorder. Since the 1960s, the obesity rate in America has doubled and is the leading cause of preventable death among adults. Obesity that eventually results in death, morbid obesity, is defined by a high body mass index. The majority of adults thirty pounds overweight are likely to meet the standards associated with obesity. To be labeled morbidly obese, an individual must be at least one hundred pounds over their ideal weight.



Obesity may not be the chief complaint, but is the symptom of many other illnesses. From high blood pressure to high cholesterol, these disorders are referred to as *comorbidities*. The majority of patients, as many as sixty five percent suffer from these comorbidities when the body mass index is over twenty-seven. Diabetes and high triglyceride blood levels are common comorbidities, as well as sleep apnea and Gastroesophageal reflux disease (GERD).

Losing weight and dealing with the problem of obesity may lead to the treatment and or resolution of leg and joint swelling, bronchitis, gallbladder disease, depression, asthma, stress and degenerative diseases of the spine.

Obesity is considered to be one of the highest killers in many developed countries. Since it leads to so many other conditions, it is essential that we continue to research methods that ensure safe and healthy weight loss. The Lap-Band® procedure is considered one of the safest surgeries that can result in the safe and healthy weight loss required to combat the problem of obesity. Read on to find out valuable information about the Lap-Band® procedure, including:

- How the Lap-Band® is inserted into place and adjusted?
- What specific diet and exercise requirements exist after the Lap-Band® has been put into place?
- What precautions should be taken for those patients considering the Lap-Band® surgery?
- The risks that come with the Lap-Band® procedure and how to avoid them.
- The recovery time this is expected for the average Lap-Band® patient.
- How the Lap-Band® works, when it was created and how it can help you lose weight.
- The [diet plan](#) which the patient should follow after the Lap-Band® has been put into place.
- How can you [pay](#) for your Lap-Band® surgery?

## **Bariatric Surgery as a Cure for Weight Loss**

There is an area of medicine/surgery devoted totally to weight loss. These methods allow surgeons to complete procedures to assist in weight loss and the maintenance of a healthy lifestyle. For people suffering from direct comorbidities because of excess weight, these surgeries use techniques which operate on the stomach, small bowel and intestines, which restrict the amount that can be eaten by the individual. Smaller portions of food will result in weight loss, thereby decreasing obesity.

Bariatric surgery is derived from the Greek word "baros" which means weight.

When other weight loss methods have not been successful, these surgical methods for obesity are usually employed. There are many types of bariatric surgeries, including; Lap-Band® surgery, Realize Gastric Band®, vertical banded gastroscopy and Gastric Bypass. With some of these procedures there are high risks and more side effects than others. Lap-Band® surgery is one of the least invasive procedures and comes without the risk of developing "dumping syndrome" in which undigested food enters the intestine and can cause shock like symptoms such as cold sweats, shaking and diarrhea. As one of the least invasive procedures, the Lap-Band® process uses no intestinal or stomach cutting, no stapling and no reattaching of the stomach pouch to cut off parts of the small intestine. Make sure you understand the fundamental differences in these surgeries before you make your decision on which surgery to have.

Many patients turn to bariatric surgery when they have tried other weight loss methods to no avail. Some of these methods include diet and exercise combined with a healthy lifestyle and restricted eating plans, self help groups and weight loss drugs. When these methods fail and weight loss goals have not been met, patients are referred to bariatric surgeons to discuss their options in weight loss surgery.

The motivation for bariatric surgery usually comes from many other failed attempts at weight loss combined with the unwillingness to partake in a lifestyle change. Bariatric surgery comes with risks and side effects that should by no means be taken lightly. If the patient is unwilling to partake in nutrition counseling, support groups, diet and exercise changes as well as post operative counseling from the bariatric surgeon and dietician, then the patient may not be ready to make the changes which are required to see [successful results](#) from the surgery.

## The Patient Selection Process

Before any patients are selected for the Lap-Band® procedure or weight loss surgery, the options are usually discussed with a bariatric surgeon. Each patient selected to receive a [surgical consultation](#) may have to go through a selection processes to determine eligibility for the procedure.

What types of patients are usually accepted for weight loss surgery?

- The patient should be an adult at least eighteen years of age to be eligible for the surgery
- The patient should be at least one-hundred pounds overweight or have a [body mass index](#) of at least thirty-five to be suitable for the surgery. If comorbidities are not present, than the patient should have a body mass index of at least forty.
- The patient will likely have failed at previous weight loss attempts through a variety of methods.
- Comorbidities such as high blood pressure, high cholesterol and diabetes can be present, as well as any other illnesses which have become associated with obesity.
- The patient should not suffer from a personality disorder or bipolar disorder.
- The patient would likely have been obese for at least five years and tried weight control solutions for multiple years.
- Short term success may have been seen, but not long term success from the weight loss methods that have been tried in the past.
- The patient should not consume an excessive amount of alcohol.
- The patient should be willing to agree to an intensive follow up program that includes a variety of [lifestyle changes](#) including healthy food choices and regular exercise.
- The patient should not be suffering from any other disease which could cause the patient to become overweight. The lap-band procedure will not be effective in treating the disease, which should be treated accordingly.

There are many factors that should be considered, as they can affect the outcome of the program. The Lap-Band® procedure is not for patients that may have the following conditions:

- Patients should not be suffering from any gastrointestinal tract disorder or inflammatory diseases. These disorders include; ulcers, esophigitis, or Crohn's disease.
- Patients should not be suffering from severe heart and lung disease.

- Other diseases which may cause an adverse affect to the patient should be considered before the surgical consultation is completed.
- Patients suffering from a disorder which could cause bleeding in the esophagus or the stomach should avoid weight loss procedures, as it is seen as an elective surgery. There are many disorders and conditions which could cause these types of bleeds, including; gastric varices and dilation of the small blood vessels.
- Patients should avoid the surgery if they suffer from portal hypertension.
- Patients suffering from congenital disorders within the stomach should avoid weight loss surgeries. Or, those suffering from a narrow opening to the stomach. It is important to have the stomach in full working condition as the capacity is going to become decreased as a result of the surgery.
- Patients who are pregnant, or who are planning to become pregnant should avoid weight loss surgery. In the case of pregnancy, where the band has been inflated, it may have to be deflated until the pregnancy comes to term.
- Patients are not eligible for surgery if they are addicted to alcohol or drugs.
- Patients will not likely be considered for the Lap-Band® procedure if they are under the age of eighteen years old.
- Patient suffering from cirrhosis are not usually eligible for the weight loss surgery.
- Patients that require additional nutrition, which the gastric band cannot accomplish, should avoid the weight loss surgery. The Lap-Band® may have to be deflated.
- Patients that may be allergic to the materials used in the device should avoid weight loss surgery
- Patients suffering from chronic illnesses which require steroid treatment should avoid weight loss surgery and will not likely be eligible for the Lap-Band® procedure.

Patients suffering from these conditions or disorders may be poor candidates for surgery as other weight loss techniques should be examined prior to the surgical consultation. So long as these factors are ruled out and motivation is present for the patient to experience a high degree of weight loss associated with a lifestyle change are eligible for the weight loss procedure.

## What is Body Mass Index?

Body Mass index is calculated using the weight in kilograms divided by the body height in meters. This number yields the body mass index. There are many websites equipped with [special calculators](#) to calculate the body mass index or through the use of specialized body mass index chart provided below:

To use the table, find the appropriate height in the left-hand column and then move across to a given weight. The number at the top of the column is the BMI at that height and weight. Pounds have been rounded off.

BMI	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Height (inches)	Body Weight (pounds)																					
58	91	96	100	105	110	115	119	124	129	134	138	143	148	153	158	162	167	172	177	181	186	191
59	94	99	104	109	114	119	124	128	133	138	143	148	153	158	163	168	173	178	183	188	193	198
60	97	102	107	112	118	123	128	133	138	143	148	153	158	163	168	174	179	184	189	194	199	204
61	100	106	111	116	122	127	132	137	143	148	153	158	164	169	174	180	185	190	195	201	206	211
62	104	109	115	120	126	131	136	142	147	153	158	164	169	175	180	186	191	196	202	207	213	218
63	107	113	118	124	130	135	141	146	152	158	163	169	175	180	186	191	197	203	208	214	220	225
64	110	116	122	128	134	140	145	151	157	163	169	174	180	186	192	197	204	209	215	221	227	232
65	114	120	126	132	138	144	150	156	162	168	174	180	186	192	198	204	210	216	222	228	234	240
66	118	124	130	136	142	148	155	161	167	173	179	186	192	198	204	210	216	223	229	235	241	247
67	121	127	134	140	146	153	159	166	172	178	185	191	198	204	211	217	223	230	236	242	249	255
68	125	131	138	144	151	158	164	171	177	184	190	197	204	210	216	223	230	236	243	249	256	262
69	128	135	142	149	155	162	169	176	182	189	196	203	210	216	223	230	236	243	250	257	263	270
70	132	139	146	153	160	167	174	181	188	195	202	209	216	222	229	236	243	250	257	264	271	278
71	136	143	150	157	165	172	179	186	193	200	208	215	222	229	236	243	250	257	265	272	279	286
72	140	147	154	162	169	177	184	191	199	206	213	221	228	235	242	250	258	265	272	279	287	294
73	144	151	159	166	174	182	189	197	204	212	219	227	235	242	250	257	265	272	280	288	295	302
74	148	155	163	171	179	186	194	202	210	218	225	233	241	249	256	264	272	280	287	295	303	311
75	152	160	168	176	184	192	200	208	216	224	232	240	248	256	264	272	279	287	295	303	311	319
76	156	164	172	180	189	197	205	213	221	230	238	246	254	263	271	279	287	295	304	312	320	328

Ideal body mass was developed by an insurance company in the 1980s and continues to be used to measure the level of health when associated with height and the ideal weight. As little as thirty pounds on your frame could classify you as obese, therefore it is important to take measures to attain and maintain your ideal body weight through diet, exercise and other necessary measures such as the Lap-Band® procedure. At the ideal body weight, the body may function in its prime and be at the lowest risk for developing conditions associated with high body mass index and obesity.

### **What you should expect at your first consultation with a Lap-Band® Surgeon**

Upon the first visit to a Lap-Band® certified bariatric surgeon a session will be attended referred to as a patient [information session or a seminar](#). There are many topics which can be covered in this session, including;

- The anatomy of the weight loss surgery
- The lifestyle changes which must be accommodated in order to have a successful Lap-Band® surgery experience
- Short term and long term patient goals, results of typical surgeries and statistics and risks associated with the Lap-Band® procedure
- The risks and expectations of the surgery
- The weight loss expectations that are seen with various patients. This often ranges from one to two pounds per week
- Pre-operative care requirements that are necessary to be completed before the weight loss procedure is even attempted. This can include nutrition requirements and supplements which should be taken before the surgery is completed
- The things the patient will need to do before completing the surgery and the timeline to complete them.
- The insurance coverage programs and costs which are associated with the surgery

Usually during the initial visit, a nurse at the clinic measures the client and calculates the body mass index with the height and weight information of the clients. Usually the nurse will calculate all of the [eligibility requirements](#) to discuss the eligibility for the Lap-Band® surgery. If the patient is deemed a suitable candidate then the surgery can continue and a time can be scheduled with the physician.

During the initial visit you will probably also discuss recovery times including the length of the recovery period and measures that should be taken to ensure optimal health before, during and after the weight loss surgery.

There will probably be many emotional and mental aspects that are discussed at this point in the visit. Emotional disorders that may contribute to eating disorders and depression, as well as anxiety can all contribute to obesity. These disorders are often triggered by many psychological aspects, and should be dealt with before the weight loss surgery is undertaken. Patients will usually be asked to attend these counseling sessions before the surgery to decrease the anxiety which is associated with the weight loss surgery. In rare cases, the symptoms of these emotional disorders are often heightened after the surgery has been completed. In these cases, further counseling measures are required throughout the duration of the recovery period to ensure that weight loss success is achieved.

When the ideal body weight is calculated for the patient, the nurse and/or bariatric surgeon will create a plan that will ensure success for the weight loss surgery candidate. Before the surgery, the patient may be asked to lose some percentage of their weight on their own. This will ensure that the patient has the initiative to lose the excess weight, while reducing the risks that come with the Lap-Band® surgery.

There are many benefits to losing weight before the surgery. Losing weight before the surgery reduces the amount of inner abdominal fat and reducing the anesthesia that the patient will require to undergo the surgery. Losing weight before the surgery allows the left lobe of the liver to become decreased, meaning the surgery will be easier to complete. It is likely your doctor will recommend that all patients lose a percentage of your excess weight prior to surgery as it reduces the overall surgery time while decreasing the risks associated with putting the Lap-Band® in place. If the patient fails in losing the weight, they may not be a suitable candidate for the Lap-Band® to be put into place.

Regular exercise should be introduced into the lifestyle of the patient prior to the weight loss surgery to ensure success. Small changes have large effects in the transition into a healthy lifestyle and begin before the patient is lying on the surgical table.

## What does the Preoperative Seminar Entail?

The preoperative seminar is usually taught by the doctor, a nurse, registered dietician or others who are familiar with the procedure. There are many ways that the patient can help to prepare for this course, such as; bringing a friend or family member to the session as a support through the entire session. Next, information should be taken seriously which is learned at the seminar to ensure that the patient has a successful surgery and recovery time. Some doctors may have you participate in an [online seminar](#) as well as the one they perform in their office.

The preoperative [seminar](#) for patients going forward with the weight loss surgery is usually mandatory and scheduled a minimum of three to four weeks before the patient is scheduled to have surgery. There are various aspects of the surgery which are discussed at this time:

- The anatomy and other technical aspects of the weight loss surgery
- The entrance procedure into the hospital or surgery center for the surgery
- What to expect the day of the surgery
- What to shop for the prepare your post-surgical diet
- The care that is required for the incisions needed for the Lap-Band® procedure
- What to look for in case of an emergency or which situations which require medical attention immediately and other medical cases that can be simply ignored
- Any problems that may appear post operative and how to deal with those problems
- Exercises that can be completed through the recovery period and when normal exercises can be resumed

This seminar may last several hours and will be full of information. To get the most from it, it is important to note any questions and concerns so they can be answered to your satisfaction and so that you are fully informed.

## **The Preoperative Visit Diagnostic Testing**

There are various diagnostic tests that are usually needed before the surgery to determine the eligibility for the candidate for the Lap-Band® procedure. Psychological testing may be needed to ensure that patients are indeed ready to take on the responsibilities that come with the weight loss surgery.

This will likely be accompanied by a physical exam completed by the surgeon and nurses within the office. These tests will include lab work, and you will likely be asked to go on a liquid diet which will assist in cleansing the bowels and shrink the liver prior to the surgery.

## **Preparing for the Lap-Band® Surgery**

Preparing for the Lap-Band® surgery will likely consist of a [pre-op diet](#) of as many as two weeks or a few as two days that will allow the patient to continue on their weight loss journey as well as cleanse the bowels and shrink the liver in preparation for the insertion of the Lap-Band®. The day before the procedure, a liquid may be prescribed to the patient that will assist in the bowel cleansing process. Working and traveling should be avoided on this day as the bowel cleansing process begins.

At some point you will be asked to sign consent forms for the surgery and any concerns that the patient has will be discussed with the bariatric surgeon. These consent forms should address the risks that are associated with the Lap-Band® procedure and are required before the surgery can begin.

You should follow the diet to the letter to prepare for the surgery. Food cannot be present in the stomach at the time of the surgery and it is essential that these instructions be followed.

At this point, it is important to prepare for accommodations after the surgery. If you are coming from out of town to your bariatric surgeon, information can be requested about hotel accommodations. Alternatively, some patients decide to rely on the help of friends or family members in the area. Hospitality houses are available in many areas for those patients that are unable to afford the hotel costs throughout the process. If coming from out of town, it is important to make accommodations for the night before the surgery, as well as the days following the Lap-Band® procedure.

## The Lap-Band® Insertion

Inamed Health created the Lap-Band® which was approved by the FDA in 2001. The Gastric Band is the only form of weight loss surgery that is completely adjustable. It is used as a treatment measure for those suffering from morbid obesity, with a [body mass index](#) that usually indicates a weight of over one-hundred pounds above the ideal body weight. The pouch of the stomach is lessened with the use of a band placed around the upper portion of the stomach. The band is adjusted by injecting, or removing saline to or from the band.

Laparoscopic techniques are used throughout the procedure which allows the surgeon to use small incisions and long shafted instruments, compared to large incisions. These techniques ensure that a band is placed around the upper portion of the stomach to create a smaller stomach pouch. There are many benefits of the smaller stomach pouch, these include; an increase in weight loss, the ability to consume less calories and the ability to consume less food in one sitting.

The placement of a Lap-Band® also creates a small outlet which allows slowing of the food through the stomach and through the intestines. With this technology, patients feel full faster allowing the patient to feel satisfied while losing weight.

When the patient undergoes Lap-Band® surgery, there is less recovery time because of the laparoscopic method used throughout the procedure. The smaller incisions also account for less discomfort during and after the surgery.

The Lap-Band® is the only weight loss surgery that can be adjusted when necessary. Saline solution is necessary to inflate the Lap-Band® and decrease the size of the opening to the larger stomach pouch. The solution is injected through a port under the skin which is attached to the Lap-Band® through the use of a tube. Once the saline solution reaches the band, the opening to the pouch becomes decreased slowing the movement of food.. This port is easily locatable and can be reached through a relatively painless injection. Patients have likened the pain felt through the injection to that of a pinch or a sting of a bee. A fine needle goes through the skin to the Lap-Band® port in order to make the adjustment. A usual adjustment consists of adding about 1cc or less of saline solution to the Lap-Band®

Prior to the surgery being completed your doctor may ask you to partake in an exercise program including cardio and aerobic exercise as well as walking. At this time, a low fat diet should be adhered to which will reduce the amount of calories that the patient is used to eating. The patient will also be asked to stop other unhealthy habits and behaviors such as smoking. At your doctor's office,

coordinators and psychologists should be available for counseling and other service to introduce the healthy lifestyle and the cessation of habits such as smoking.

### **The Hospital Stay**

An overnight hospital stay may be required for patients undergoing the Lap-Band® weight loss procedure. The Lap-Band® is also now available at Ambulatory Surgery centers sometimes called “Same Day Surgery”

### **Same Day Discharge**

Patients that are eligible for same day discharge are often admitted to the hospital or surgery center the morning of the procedure. At this time, the patient will be assessed by members of the surgery staff to determine the anesthetic needs and pre-operative measures. Also at this time, IV medication will likely be administered to the patient to prevent nausea, dizziness, vomiting and any other uneasiness that may come with surgery. These intravenous medications will likely be administered throughout the procedure and into the post operative period.

The Lap-Band® procedure may take as little as thirty to sixty minutes to complete. After the procedure is done, an update should be given to the members of the family including the prognosis, recovery time and success of the surgery. The patient may remain in post anesthesia care for up to two hours or more after the surgery has been completed. After this, patients may be referred back to the ambulatory care section of recovery for several hours until the patient can be released.

Most often, oral pain medication is given to the patients who have been discharged from the hospital. Patients remaining in the hospital will likely receive pain medication through the use of an IV. At the time of surgery, the patient may have a catheter or nasogastric tube. Depending on the situation, the bariatric surgeon will determine the best time for the tube to be removed through the surgical recovery phase. When the patient is discharged they may be taking blood thinners and antibiotics which are used to ensure that the patient avoids infection and blood clots post operatively.

Although most patients are often discharged from the hospital in the following four to six hours after the surgery has been completed and the Lap-Band® put into place, some patients with outstanding conditions may require an overnight stay for follow up treatments for complications or observations for any conditions that may have developed prior to, or after the Lap-Band® was put into place.

## **Overnight Hospital Stay**

Immediately after the surgery the patient may be placed on blood thinners and antibiotics to avoid infections and blood clots that may occur as a post surgical risk. Specialized stockings may be used on the legs of post operative patients to avoid blood clots. Blood clots and pneumonia are two of the largest risks that occur with post operative Lap-Band® patients. Walking is encouraged as soon as the patient feels ready and is a crucial part of the recovery from the surgery. A nurse will assess the capability of the patient to walk and a walker may be provided to ensure stability.

An overnight hospital stay may be required for patients that have existing medical problems. These problems may include; sleep apnea, oxygen requirements, heart disease and diabetes. Monitoring may take place in the ICU for these patients to ensure that no further complications develop from the Lap-Band® procedure.

If the patient is tolerating pain well and taking liquids than the doctor may schedule the patient for discharge the next day. Monitoring will likely take place in a follow up visit to the bariatric surgeon a few days to a week after the Lap-Band® has been put into place.

After the surgery has been completed, oxygen may be provided to the patient through a nasal cannula.. Deep breathing and coughing are two techniques that will likely be encouraged on an hourly basis to ensure the patient has proper lung capacity post operatively.

The patient may be taken to the radiology department where the patient is asked to swallow a cup of fluid that will be recognizable on an x-ray. At this time, an x-ray of the patient is taken to view how easily the liquid is able to flow through the newly created stomach pouch. This will determine if any immediate adjustments are required to the Lap-Band®. This test will determine the likelihood of the patient being released.

It is important to remember that the Lap-Band® procedure is a surgery, although it is not a very invasive surgery as there is no cutting and stapling of the stomach. With any surgery, it is important to prepare adequately for the risks that may occur.

Complications that may occur from the surgery include; infection, fever, chills, vomiting and improper care of the incision. When the patient is discharged from the hospital after the surgery they will likely be given detailed instructions including care for the incisions, medication and diet to be undertaken in the

crucial hours and days after the Lap-Band® surgery has been completed. Information should be available to the patient to determine practices that can be used when showering, bathing and cleaning the area in which the surgery has been completed. Contact information for the bariatric surgeon as well as any other clinical practitioners should be given to patients upon discharge so the patient is able to get the answers to any questions and concerns that they may have.

Patients that have been diagnosed with diabetes prior to the surgery will probably have to undergo glucose testing every six hours through the use of a tiny finger prick. At the time when the patient is being discharged a treatment plan will likely be created which will outline how diabetic medications should be continued and administered throughout the recovery.

### **The First Follow-up Appointment**

The first follow up appointment occurs when the patient is approximately a week into the recovery period from the Lap-Band® procedure. It is important to attend this appointment, although no adjustments will likely be made to the Lap-Band® at this time. This appointment will probably outline techniques which should be used to decrease the recovery period, as well as to determine how the recovery of the patient is going.

### **The Post Operative Plan**

Creating the post operative plan will likely include a plan for exercise from the moment that the patient arrives home. The doctor will likely ask the patient to remain active; walking around constantly after the procedure, not remaining in one position or in one area for more than thirty minutes at a time to avoid any complications.

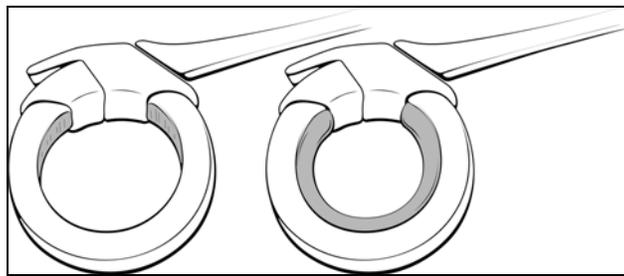
While seated, it is important to keep the legs elevated above the body. This is essential in preventing blood clots from forming in the body. When the legs are elevated, the body increases the flow of circulation. Legs should not dangle over a bed or a chair for more than a few minutes at a time. Any more than this could mean the development of blood clots in the body.

A device may be issued to the patient to allow them to complete breathing exercises. These exercises should be completed each waking hour or per your doctor's instructions. These breathing exercises should be done for as long as your doctor recommends. These breathing exercises will assist in increasing the circulation within the body and promoting a healthy system.

## Adjusting the Lap-Band®

The Lap-Band® is adjusted through a port under the skin in which a syringe is used to inject saline into the Lap-Band®. Adjustments to the Lap-Band® take merely a few minutes and can be completed with a simple visit to the office.

There are usually no adjustments made to the Lap-Band® until at least six weeks after surgery. This allows the Lap-Band® time to adjust and settle within the body before an adjustment is made. Of course, the band is going to cause a different sensation within the body, and therefore it is important for the patient to be aware of the sensations.



Lap-Band® unfilled and filled

A guided fluoroscopy may be used to help inject saline into the Lap-Band®, decreasing the size of the opening to the stomach pouch. The procedure is relatively painless and can be completed in minutes.

To prepare for a Lap-Band® adjustment, the patient must only drink liquids for up to four hours before the procedure. For the remainder of the day, only liquids can be consumed as well to ensure that the adjustments are not affected by the intake of food. The next day, the patient is usually able to go back to their normal diet and routine.

After the first year of surgery, the patient will often receive adjustments to the Lap-Band®. In the second year after the surgery the average patient will require only a few adjustments and in the third year after the surgery there are often one or no adjustments required.

After the Lap-Band® has been in place, the patient can expect to lose an average of one to two pounds per week. At this rate, a healthy weight loss will ensue along with the lifestyle changes which the patient should have now become accustomed to.

## **Long Term Adjustments and Treatment Plans**

Long term patients Lap-Band® patients will need injections of saline over extended periods of time. The reason for this is the normal rejection of saline from the band. Over time, the saline will often disintegrate and require an injection to maintain the size of the band.

### **How do you know when An Adjustment is required?**

There are many indications that a patient can look for when it is time for a Lap-Band® adjustment. When the Lap-Band® is too loose, the patient will be able to consume larger amounts of food and experience increased hunger.

Alternatively, there are indications which can be telltale signs that the Lap-Band® is too tight. Regurgitation, the inability to consume solid food and an excess of saliva are all indications that the band is too tight.

It is important to adjust the band accordingly to expedite the weight loss process. Failing to adjust the Lap-Band® will cease and slow the weight loss progress. Patients that have waited too long to adjust the Lap-Band® will experience lesser results than patients that have had the band adjusted in a timely manner.

When the patient is unable to eat solid food and maintain digestion, the Lap-Band® has probably been overfilled.

### **Resuming Your Normal Activities after the Lap-Band® Surgery**

Many patients wonder about when they are able to return to their activities after they have had weight loss surgery. After two weeks, the patient is usually able to return to normal sexual activities, so long as they feel able to. The patient is usually able to complete light housework days after the surgery..

It is important to refrain from driving a vehicle until the pain medication has been discontinued from the treatment plan. While taking pain medication, the patient is unable to focus one hundred percent on their driving.

For at least a month after the surgery, the patient should refrain from lifting loads heavier than twenty pounds. It is important to avoid strenuous activities to maintain the recovery period. In the second month after the surgery, the patient should be able to double the amount of weight that can be lifted – up to forty pounds of weight through weight training and light housekeeping can be completed in the second month of surgery.

## **The Benefits of Lap-Band® Surgery**

There are many benefits to the Lap-Band® procedure. It is a valuable tool that can help patients to lose the weight that they require to get to their ultimate weight goal and ideal body mass index. There are two main benefits to gastric banding surgery, these include; curbing the appetite so the patient is unable to eat large amounts of food and feels full after eating smaller meals and second, by making the pouch of the stomach smaller so that less food is able to be eaten at one time.

After the Lap-Band® surgery has been completed many issues that have been caused by the obesity of the patient may be resolved. These includes high cholesterol, diabetes and even high blood pressure. There is less pressure on the bodily systems therefore these issues can often be resolved when the pressure of the excess weight is relieved. Those patients suffering from type II diabetes have shown excellent results through weight loss surgery, with many of the patients being cured completely of the disorder after the individual have reached a healthy weight. It is because of this research that many physicians feel that weight loss surgery is a valid treatment for diabetes.

One of the major benefits of the Lap-Band® procedure is the fact that the patient can feel satisfied quicker. This increases the capability and self esteem of the patient while experiencing an increased sense of self control.

When the patient undergoes the Lap-Band® procedure, it is the beginning of a path towards successful and healthy weight loss. After an initial weight loss, one to two pounds per week can be seen in the first twelve to eighteen months. After this time, the weight that is lost will be decreased – but the initial weight loss and weight loss in the first twelve to eighteen months should be significant enough to warrant the weight loss surgery. Depending on the diet that is adhered to after the Lap-Band® procedure has been complete and the exercise plan the patients' weight loss will depend on the lifestyle changes that the patient has chosen to make.

After two years with proper diet and exercise the average patient can expect to lose up to sixty percent of their excess weight. Although weight loss is not automatic, the Lap-Band® procedures are a great way for the patient to jump start their weight loss and begin a healthier lifestyle.

Those patients that do not see results in months after the surgery should be evaluated to see if the patient has made the necessary diet and lifestyle changes. Lap-Band® surgery allows the patient the means to begin a healthy

medically supervised weight loss program. Patients that choose to maintain their pre-surgery behaviors are at risk of not losing any weight.

Something as simple as drinking fruit juice or snacking on high calorie snacks can negatively impact the weight loss process. Fruit juice is filled with empty calories and therefore weight loss can stop. Unfortunately, there are no methods to test which patients will see the highest levels of weight loss, as there are many reasons that we lose and gain weight ranging from eating habits, psychological issues and even the genetics that we have been blessed with. It is crucial that the patient take all possible measures to promote a healthy weight loss by exercising regularly and maintaining a proper diet.

## Food and Nutrition after Lap-Band® Surgery

Solid food will be gradually introduced into the diet after the Lap-Band® surgery has been completed. Prior to the surgery, there is a liquid diet that is followed by the patient. [After the Lap-Band® surgery](#) has been completed it is important to go back to this liquid diet until your doctor instructs you otherwise.

The diet must be followed exactly to ensure that no vomiting occurs. Vomiting can displace or slip the band that has been put into place as well as cause pain at the location of the incisions. Vomiting can lead to increasing the stomach pouch, which should be avoided as this could affect the weight loss in the future.

Many patients are unaware of the fact that a second surgery may be required if the patient overeats, or suffers from an esophageal tear or starting solid foods too soon. There are many foods that should be avoided after the weight loss surgery.

Here are the rules to eating after a weight loss surgery has been completed:

- Five small meals a day should be eaten by the patient who has undergone weight loss surgery
- Learn to eat slowly and chew food thoroughly before swallowing
- It is important to learn to stop eating the moment that the patient begins to feel full
- Don't drink any liquids with meals and refrain from drinking after meals for at least one and a half hours
- Do not eat between meals
- Avoid foods that are difficult to chew and are made up of fibrous roughage
- Avoid liquids that are high in calories. Drink only low calorie or no calorie drinks
- Exercise for at least thirty minutes per day
- Eat only good quality foods that contain high levels of nutrients and proteins and low calories
- Be sure to drink an adequate amount of liquids throughout the day to maintain a healthy weight loss

## **What is the Full Liquid Diet?**

### **Liquid Diet: Week One and Two**

The full liquid diet will usually last for up to two weeks as solid food places too much stress on the newly lessened stomach pouch. Liquid drinks full of protein will assist the body in the healing process that comes along with the post surgical period. It is important that the patient get between sixty five and seventy five grams of protein per day. The physician will usually provide a prescription for high protein liquid supplements which should be taken through the two week period in which the body is recovering.

Aside from drinking these protein drinks, the body also requires forty-eight ounces of sugar free liquid every single day. This intake is ideally water and other clear fluids but will also include the following liquids; skim milk, fruit juice smoothies, cooked cereals, yogurt and sugar and fat free pudding.

### **Liquid Diet: Week Three and Four**

Week three and four of the full liquid diet will likely introduce pureed foods to the liquid diet. All food needs to be pureed with the use of a food processor or blender. Some patients prefer to introduce baby food into weeks three and four as it provides ease when preparing meals, as well as the nutrition. Pureed meats and other foods such as creamed potatoes and scrambled eggs can be used in week three and four of the post operative diet to promote weight loss while adjusting to the Lap-Band®.

### **Post-Operative Diet Week: Five and Six**

Week five and six of the liquid diet will likely include soft foods being introduced to the liquid food and pureed food diet. All of these foods will be used in conjunction with the five meals per day which are smaller than the regular three meals. It is important to add healthy foods into the mix of meals, as well as maintaining the six glasses of sugar free liquid per day. Water is recommended as the one source of clear liquid and will help the body to promote weight loss.

At this time, it is important to get used to the diet that has become part of the healthy lifestyle. Continuing with exercise is an essential part of continuing the weight loss process. At this time, the patient will be regularly losing one to two pounds per week. Healthy weight loss is expected to continue at this rate for up to eighteen months.

## **Post Operative Diet: Week Seven**

Week seven of the post-operative diet will likely include the introduction of carbohydrates to the diet. It is important to include a high ratio of protein to carbohydrates and raw fruits and vegetables. At this time, it is important to enter the process of chewing food well to ensure it is able to enter the smaller stomach pouch. By taking at least thirty minutes to complete each meal, the patient can feel satisfied with the food that has been consumed, while avoiding any discomfort associated with undigested food or overeating associated with the Lap-Band® being too loose.

It is important to avoid drinking fluids while eating a meal. One to two sips should be adequate. Any drinks that are taken during the meal or within the last hour and a half of eating will cause the food to become washed through the pouch. For this reason, drinks should be kept to a minimum. While eating, make sure that you are relaxed and that food is chewed thoroughly. Combining foods from each of the food groups will ensure that you are maintaining the healthy diet which must come with the Lap-Band® surgery. Stick to a diet of high protein, low fat and low carbohydrates to maintain the highest level of health.

## **Your Post Operative Diet**

Carbonated beverages should be avoided as they can cause the pouch to become stretched. When the pouch becomes stretched it will be essential to tighten the pouch, creating further adjustments which are required. When you feel full, stop eating. There is no reason that the entire portion must be finished, if you are feeling full from less. This can ensure a healthy weight loss and allow you to listen to their body.

It is important to contact the health care professional or bariatric surgeon if there is any excessive nausea, vomiting, diarrhea that lasts more than twenty four hours. At this point, there could be problems with the Lap-Band® which could result in severe side effects.

It is important to avoid foods that are dry, as they can be difficult to digest within the adjusted Lap-Band® pouch. Eating foods that are wet and moist will ease the process of digestion and make the Lap-Band® weight loss program successful.

There are some foods which should be avoided after the Lap-Band® surgery has been completed. These fibrous foods which can be difficult to chew including asparagus and steak should be avoided as they can lead to the Lap-Band® becoming dysfunctional. After the surgery, your bariatric surgeon will likely give you a list of foods that should be avoided because of the procedure. This list is also given to patients during the pre-operative session. There are skins on certain fruits and vegetables which should be avoided as they are not tolerated by the transitioning digestive system. Some patients have difficulty swallowing and digesting types of meat and chicken as well as rice and tortillas. High calorie foods can cause problem in the digestive tracts and should be avoided.

## **Exercise after the Lap-Band® Surgery**

After the patient has completed the recovery period, they should begin to maintain an [exercise program](#) that will be part of their new lifestyle. Exercise should begin after the patient returns home and the doctor says it is ok.

Patients are able to return to work and a regular exercise program usually about seven days after the surgery. At this time, regular activities can be resumed. Exercise is essential in a healthy weight loss program. At least thirty minutes of activities should be completed each and every day. This program often begins with walking and will become a rewarding part of the routine. After time, the patient will begin to look forward to the exercise program as it can promote the newly acquired healthy lifestyle and weight loss experience.

Varying the exercise sessions can cause the patient to look forward to the experience. Partaking in exercises that the patient enjoys means it is more likely to be continued throughout the entire recovery process and continue to become part of an active and healthy lifestyle.

Exercise is a ticket to a healthy lifestyle. Maintaining an active lifestyle can be easier with the help of a health care or fitness professional. Enlisting the help of a personal trainer can assist in the weight loss process. A personal trainer will be able to create an exercise plan that can work on troubled parts of the body

### **Removal of the Lap-Band®**

In case of an emergency, the band can be removed from the patient's body and the stomach will adjust back to its normal size. If the patient develops a condition in which they require nutrients within the diet, such as a chronic illness or cancer, the Lap-Band® can be removed to allow the patient enough room within the stomach pouch to have more of these nutrients absorbed within the body.

Other cases that warrant the removal or deflation of the Lap-Band® include pregnancy. During pregnancy, the body requires increased nutrition – the Lap-Band® does not allow the patient to consume enough nutrients. If the patient wishes the band to not be removed, it can simply be deflated until the pregnancy has come to term and the mother is finished breastfeeding. At this point, the Lap-Band® can be re-inflated to have an impact on a newly found diet and exercise filled lifestyle.

Once the Lap-Band® has been removed, the stomach pouch will return to its normal size. At this point, the patient can use the healthy lifestyle options which they have become accustomed to, to continue with the weight loss process. At first, the patient may have increased hunger and cravings, but willpower can curb this increase in appetite.

### **Risks and Complications of the Lap-Band® Surgery**

Compared to other weight loss surgeries, the Lap-Band® procedure is the least invasive as there is no cutting, stapling, or reattaching of the stomach to the small intestine. As with any surgery, there are risks and complications that come with the procedure. Although a higher risk is associated with morbid obesity than the surgical procedure to place the Lap-Band®, it is essential to realize the risks that come with any elective surgery. The co morbidities that come with being obese are high blood pressure, high cholesterol and the risk of a cardiac event.

The global death rate for the Lap-Band® procedure is a tenth of the death rate for the gastric bypass surgery. There is a risk of gastric tear in the abdomen which could require an additional surgery to repair the tear. The risk of the perforation becomes increased with age and weight.

The Lap-Band® procedure introduces a foreign object into the body. There is always a chance that the patient will become allergic to one of the products which are used. As well, the patient may develop intolerance to the products that are used to create the band.

There are complications that can develop from the surgical procedure. These complications may arise after the surgery has been complete. Infection, fever and gastritis are only a few of the complications that come with the weight loss surgery. In case of these symptoms developing, the Lap-Band® may have to be removed from the abdomen.

Here is a list of the complications that can come with the Lap-Band® procedure:

- Ulcerations within the abdomen
- Gastritis
- Regurgitation of food that has been ingested
- Heartburn
- Gas bloating
- Difficulty swallowing (dysphasia)
- Dehydration
- Constipation

There are many risks to rapid weight loss, these risks including; malnutrition, anemia and other issues associated with the rapid loss of weight.

## **Paying for Your Weight Loss Surgery**

If you are lucky enough to be one of the patients that have coverage which will allow full coverage of the Lap-Band® procedure, than the proper paperwork will be provided from the office of the bariatric surgeon. Many insurance companies agree to pay for the surgery and provide coverage for those patients who are considered to be "morbidly obese".

With a phone call to the [insurance company](#), it can be determined if the procedure is covered. Be sure to have the information available such as weight and body mass index of the individual applying for coverage as well as any co morbidities that may exist. This information should be verified through the use of studies and laboratory tests as well as confirmation from a medical practitioner.

For many insurance companies, proof of necessity is essential in filing the claim to have the procedure covered by the insurance company. It is important to show proof that diet and exercise have been conducted in the past without success, under the supervision of a medical professional. Any disorders that exist because of the obesity will need to be verified by a health care professional, as well as any forms which are required by the insurance company. There may be fees for the physician to fill out these forms and most often these fees are not covered by the insurance companies but must be paid out of pocket.

Unfortunately, many insurance companies within the United States have determined that the majority of weight loss surgeries are experimental and this reduces the amount of claims that are approved significantly.

## **Indemnity Insurance and PPO Plans**

The office of the bariatric surgeon will prepare a letter which will be submitted on behalf of the patient to the insurance company. This submission to the insurance company will determine if the office is able to go ahead and schedule the Lap-Band® procedure. This letter details the information regarding the necessity of the surgery as well as any other details which are provided by the patient. If a denial is received from the insurance company, the office of the bariatric surgeon can assist in developing a plan for appeal.

## **Cash Payment for Lap-Band® Surgery**

In the case of a denial or a patient without adequate health insurance, the patient can choose to use the cash pay method to [pay for the procedure](#). In the instance of cash payment for the Lap-Band® surgery, the patient often pays less than it would cost for the insurance company to cover the procedure.

In some cases, patients that are denied initial coverage for the Lap-Band® procedure choose to pay out of pocket for the procedure and appeal the denial to be reimbursed for the procedure. In most cases, these patients that are diligent and follow through with the appeal process and provide official documents will often win the appeal. Many patients find this route successful when trying to undergo the surgery as quickly as possible.

Providing the insurance company with as much information as possible and evidence from health care professionals will often decrease the likelihood that a claim will be denied by the insurance company. Having evidence in the form of referral letters and laboratory tests can help to increase the instance that an insurance company will indeed approve the claim.

### **The Bariatric Surgeons Role in Obtaining Coverage for the Lap-Band® Procedure**

There are many aspects to assessing the insurance coverage for a potential patient. A questionnaire will be filled out prior to the surgery, often upon the first or second consultation and will include the following details:

- A complete medical history especially as it relates to your weight. This would include an accounting of your weight over as long a period of time as possible, any health issues or mobility problems that would be related to your weight, and any treatment you may have received by doctors and others for weight related problems.
- A list of any specific diets or exercise programs you may have participated in like “Weight Watchers, “Curves” etc and any other alternative treatments such as hypnosis, behavior modification, psychotherapy that you may have also tried over the years.
- A list of medical problems you may be having due to being overweight and how it is affecting your day to day life.
- A list of all the health care providers you have seen over the years in reference to your health in general or your weight. Provide doctors name, address, phone number and fax number if available.
- Proof of money spent on all health related issues, medical problems, diets, organizations related to weight loss etc. Cancelled checks written to health care professionals and weight loss programs. Including prescription drugs, over the counter drugs, any weight loss products like Slim-Fast

- Any documentation you have related to handicaps, disability, or loss of work that may be related to obesity or obesity related problems.
- Letters from physicians who treated you, especially any of those who have treated you for a weight-related problem. In the letter ask your doctor to document that your health problem is related to your weight, and that weight loss is prescribed to resolve it.

## **Managed Care and Health Management Organizations**

Since these types of insurance plans require care from an appointed physician, you may require a referral from your primary physician in order to become eligible for the Lap-Band® procedure. Weight loss surgery should be defined with a letter from the physician outlining the veracity of the health food problems including any co morbidities that may exist from the condition of obesity.

If the primary health care practitioner is not able to make the referral. A letter to get in contact with the health insurance company directly may be necessary to become eligible for the surgery. The carrier is then able to process the claim in favor of the patient.

## **Medicare**

There are certain specifications for those clients that are wishing to obtain coverage from the organization. To determine if you are an eligible patient for the procedure it is important to consult a health care provider to determine which requirements must be met before the procedure is approved.

## **The Keys to Lap-Band® Success**

Surgery is not a magical treatment to ensure success in weight loss. On the contrary, it is essential that the patient be prepared to make the lifestyle changes necessary to make the surgery a success. Exercise programs start as soon as the surgery has been complete with walking and should continue throughout the post operative recovery period and into the weight loss program. A combination of aerobic exercises with strengthening will cause the patient to see the best results. Combined with a proper diet a typical patient should see weight loss of up to two pounds per week in the maintenance phase, with an initial weight loss after the surgery has been complete and the diet has been adjusted.

The Lap-Band® surgery is a tool to create a smaller stomach pouch, allowing the patient to feel full and satisfied with less food. With the consumption of less calories and a careful diet plan that includes smaller meals of high protein and low fat foods the patient should be able to see weight loss success within weeks of the surgery. Small lifestyle changes lead to high levels of weight loss.

The pouch allows you to work towards long term weight loss goals, as it can be adjusted through the course of treatment. The treatment course is different for each patient and will depend on how the patient is reacting to adjustments of the band. Once the patient finds the "sweet spot" where the Lap-Band® allows for the optimal amount of weight loss in which the band is filled to the perfect amount to allow for small meals but still allow the patient to have an adequate level of nutrition from the food that has been consumed.

So now you know, the key to the Lap-Band® surgery is not in the procedure itself, but in the lifestyle changes which must be made to accommodate the new sense of self. One without the other would not contribute to the success that so many patients experience after the Lap-Band® surgery.