



Taking the Next Step

The Preferred Choice for the Surgical
Treatment of Morbid Obesity

FOR MORE INFORMATION ABOUT THE BIOENTERICS® LAP-BAND® SYSTEM,
PLEASE CALL 1-877-LAP-BAND OR VISIT www.lap-band.com.



5540 EKWILL STREET, SANTA BARBARA, CA 93111
TEL: 805-683-6761 FAX: 805-681-5765



BIOENTERICS AND LAP-BAND ARE REGISTERED U.S. TRADEMARKS OF BIOENTERICS CORPORATION. ©2003 INAMED CORPORATION. ALL RIGHTS RESERVED.

M860-02 08/03



I can succeed.

THE OBESITY EPIDEMIC

Obesity is a life-threatening disease afflicting the United States at an alarming rate. A quarter of the population is obese, and another 97 million Americans are overweight or at risk of becoming obese.¹ The prevalence of obesity has increased more than 60% in the past decade. Given this aggressive increase in the rate of obesity, experts predict that this national health crisis will only continue to escalate.

Contributing to 300,000 deaths each year, obesity is considered the second leading cause of preventable death after smoking. In fact, it is more damaging to your health than smoking and alcohol abuse.² In addition, obesity is a major risk factor for serious medical conditions (comorbidities), such as:

- type 2 diabetes
- hypertension
- heart disease
- stroke
- sleep apnea
- respiratory problems
- cancer
- osteoarthritis
- joint problems

The cost of this serious disease is enormous, with an estimated annual treatment cost in excess of \$238 billion, of which roughly \$100 billion is devoted to treating related health problems.³ Additionally, Americans spend \$33 billion each year on weight-loss products and services.⁴

Measuring Obesity

The most common measurement for obesity is the Body Mass Index (BMI). BMI is the body weight in kilograms divided by the square of the height in meters (see the formula for pounds and inches in the Glossary of Terms under “Body Mass Index”). While BMI does not actually measure body fat, it tends to correlate well with the degree of obesity. Thus it should not be used alone for diagnosis, but can be useful as a general guideline.

The BMI calculation cannot distinguish between body fat and muscle. This could cause a very muscular person to be mistakenly classified as obese. For this reason, your physician should always consider your individual case.

The obesity categories adopted in 1998 by the National Institutes of Health (NIH) are:

- BMI 25 to 29.9 kg/m² - Overweight
- BMI 30 to 34.9 kg/m² – Obese

- BMI 35 to 39.9 kg/m² – Severely Obese
- BMI 40 kg/m² and up - Morbidly Obese

To calculate your BMI, please refer to the BMI tables on page 18.

The Threat of Morbid Obesity

The Morbid Obesity category represents individuals who carry the largest and most dangerous amount of excess body weight. In simple terms, it is defined as:

- BMI ≥ 40 or
- Weighing at least twice the ideal weight or at least 100 pounds more than ideal weight

Morbid obesity greatly increases the chance of developing health conditions that can result in significant physical, mental and social disabilities. It can also cause death. Morbidly obese as well as severely obese individuals with a BMI of 35 or more with obesity-related health problems may be considered candidates for obesity surgery.

Obesity Causes

Obesity is not a sign that a person is out of control. Many things can lead to this chronic disease, such as:

- **Energy balance** - Taking too much energy from food that is in excess of

Prevalence Ratio (%) of Medical Conditions by Body Mass Index (BMI)	BMI 18.5-24.9		BMI 25-29.9		BMI 30-34.9		BMI ≥40	
	Men	Women	Men	Women	Men	Women	Men	Women
Type 2 Diabetes	2.03%	2.38%	4.93%	7.12%	10.10%	7.24%	10.65%	19.98%
Heart Disease	8.84%	6.87%	9.60%	11.13%	16.01%	12.56%	13.97%	19.22%
Hypertension	23.47%	23.26%	34.16%	38.77%	48.95%	47.95%	64.53%	63.16%
Osteoarthritis	2.59%	5.22%	4.55%	8.51%	4.66%	9.94%	10.04%	17.19%

SOURCE: NHANES III, 1988-1994

what the body needs can lead to weight gain, depending on individual metabolism and activity level.

- **Heredity** - If others in your family are obese, you have a higher risk for obesity.
- **Metabolic disorders** – Changes in metabolism, or how your body gets energy from food, may affect your energy balance and your weight.
- **Eating and social habits** - Eating an unbalanced diet, snacking between meals, and not getting enough exercise may all contribute to obesity.
- **Psychological factors** - Social or emotional eating is also one of the main causes of gaining excess weight.

Any one or a combination of these factors can lead to obesity. As science continues to search for answers, morbidly obese individuals must understand how to treat their condition in the most effective way.

TREATMENT OPTIONS

Millions of Americans turn to diet, fitness and medication first to treat their obesity. Unfortunately, studies indicate that people will not achieve long-term weight loss through dietary and behavior modification regimens alone.⁵ Morbidly obese people have an even greater challenge when it comes to sustaining weight loss and resolving their health conditions. Surgery may remain the best hope for these individuals to lose weight and keep it off.

Non-Surgical Treatments

The most common weight-loss approach is to eat less, eat sensibly, and exercise more. However, many who lose weight using these tactics quickly regain it when the diet ends, which leads to more

dieting, replacing meals with special drinks, or taking diet pills. The cycle of losing weight and gaining it back is called the “yo-yo effect.” While temporary weight loss can help, the yo-yo effect can also make it harder to lose weight in the future.

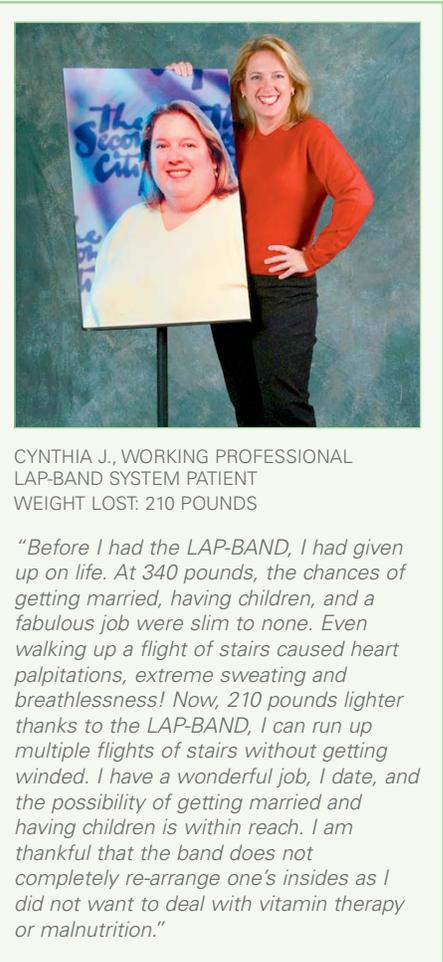
The National Institutes of Health report that 90% of the people who participate in diets and weight-loss programs do not lose significant and sustained weight. Morbidly obese individuals may want to strongly consider weight-loss surgery when other therapies have failed.

Surgical Treatments

If non-surgical methods have not helped you lose weight and keep it off, you still have another option. Studies demonstrate that weight-loss surgery, as compared to non-surgical treatments, yields the longest period of sustained weight loss in patients who have failed other therapies.⁵ But keep in mind that a positive attitude, self-discipline and planning ahead are key to the success of the surgery. Surgery can help you achieve your long-term goal only if you are ready for the commitment to losing weight and keeping it off.

There are several categories of obesity (bariatric) surgery:

- **Restrictive** - reduces the amount of food the stomach can hold but doesn't interfere with normal digestion of food and nutrients.
- **Malabsorptive** - shortens the digestive tract to limit the number of calories and nutrients that can be absorbed.
- **Combination** - restricts the amount of food the stomach can hold and reduces the number of calories absorbed by altering the digestive tract.

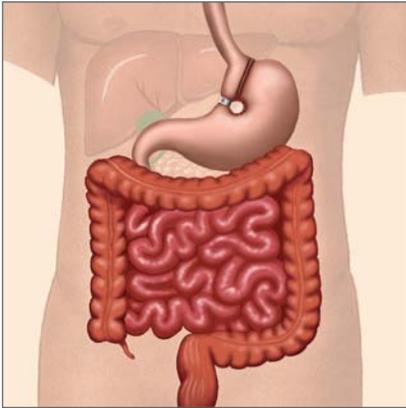


CYNTHIA J., WORKING PROFESSIONAL
LAP-BAND SYSTEM PATIENT
WEIGHT LOST: 210 POUNDS

“Before I had the LAP-BAND, I had given up on life. At 340 pounds, the chances of getting married, having children, and a fabulous job were slim to none. Even walking up a flight of stairs caused heart palpitations, extreme sweating and breathlessness! Now, 210 pounds lighter thanks to the LAP-BAND, I can run up multiple flights of stairs without getting winded. I have a wonderful job, I date, and the possibility of getting married and having children is within reach. I am thankful that the band does not completely re-arrange one's insides as I did not want to deal with vitamin therapy or malnutrition.”

Vertical Banded Gastroplasty

Vertical Banded Gastroplasty (VBG) is a restrictive procedure. The surgeon uses staples to make a small stomach pouch, thereby reducing the amount of food the stomach can hold. When your stomach is able to hold less food, you feel full sooner. At the same time, the stomach digests nutrients and calories in a normal way.



extreme alteration of the digestive process. Roughly three-fourths of the stomach is removed, and the stomach pouch is connected to the final segment of the small intestines. By diverting food through this new "limb," the nutrients are separated from the bile and pancreatic enzymes that would break them down. As a result, BPD greatly reduces nutrient absorption and caloric intake.

Advantages

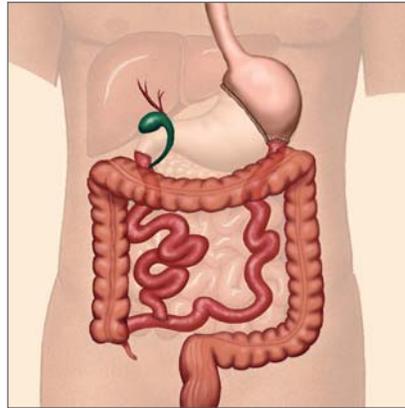
- Nutrients and vitamins are fully absorbed
- Simpler procedure than the Gastric Bypass
- Lower risk of leakage or intestinal obstruction as compared to Gastric Bypass and Biliopancreatic Diversion (BPD)
- Lower mortality rate than Gastric Bypass or BPD

Disadvantages

- Rarely performed through minimally invasive approach
- Requires cutting and stapling of stomach
- Slower initial weight loss than Gastric Bypass and BPD
- Nonadjustable
- Staple line disruption shortly after surgery can result in leakage, infection and even death
- Staple line disruption at a later time results in weight regain
- Extremely difficult to reverse

Biliopancreatic Diversion

Biliopancreatic Diversion (BPD) is a malabsorptive procedure and is a more



Advantages

- Greatest amount of initial weight loss due to the high levels of malabsorption
- Allows larger meals because of larger stomach pouch
- Higher total average weight loss reported than with VBG, Gastric Bypass or LAP-BAND

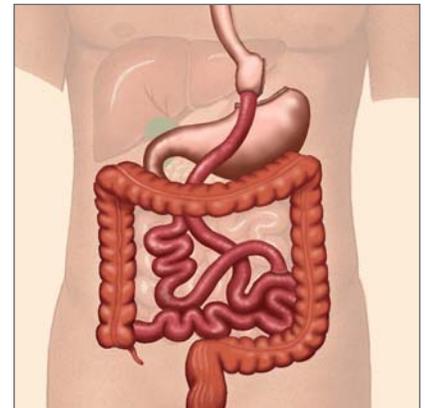
Disadvantages

- Requires cutting and stapling of stomach and bowel
- More operative complications than with LAP-BAND, VBG or Gastric Bypass
- Portion of digestive tract is bypassed, reducing absorption of essential nutrients
- Requires lifelong monitoring for protein malnutrition, anemia and bone disease

- Increased risk of intestinal irritation and ulcers
- Nonadjustable
- Extremely difficult to reverse
- "Dumping syndrome" can occur
- Higher mortality rate than LAP-BAND, VBG and Gastric Bypass procedures

Gastric Bypass

Gastric Bypass (also known as the Roux-en-Y) is a combination procedure using both restrictive and malabsorptive elements. With this surgery, first the stomach is stapled to make a smaller pouch. Then most of the stomach and part of the intestines are bypassed by attaching (usually stapling) a part of the intestines to the small stomach pouch. The result is that you cannot eat as much and you absorb fewer nutrients and calories.



Advantages

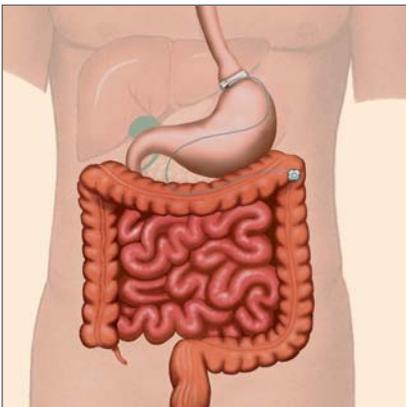
- Rapid initial weight loss
- Minimally invasive approach is possible
- Longer experience in the U.S.
- Higher total average weight loss reported than with LAP-BAND or VBG

Disadvantages

- Cutting and stapling of stomach and bowel are required
- More operative complications than with LAP-BAND
- Portion of digestive tract is bypassed, reducing absorption of essential nutrients
- Medical complications due to nutritional deficiencies
- "Dumping syndrome" can occur
- Nonadjustable
- Extremely difficult to reverse
- Higher mortality rate than LAP-BAND or VBG procedures

LAP-BAND® System Adjustable Gastric Banding

The LAP-BAND System adjustable gastric banding procedure restricts the amount of food the stomach can hold by placing an inflatable silicone band around the upper part of the stomach. The new, small upper stomach pouch limits the amount of food that can be consumed at one time, and a narrowed stomach outlet increases the time it takes for the stomach to empty. The subsequent reduction in food intake results in weight loss.



Advantages

- Lowest mortality rate
- Least invasive surgical approach
- No stomach stapling or cutting, or intestinal re-routing
- Adjustable
- Reversible
- Lowest operative complication rate
- Low malnutrition risk

Disadvantages

- Slower initial weight loss than Gastric Bypass or BPD
- Regular follow-up critical for optimal results
- Requires an implanted medical device
- In some cases, effectiveness can be reduced due to band slippage
- In some cases, the access port may leak and require minor revisional surgery

THE LAP-BAND SYSTEM SOLUTION

The BioEnterics® LAP-BAND System is designed to help you lose excess body weight for resolution of obesity-related health conditions and enhancement of life. In partnership with leading bariatric surgeons around the world, a new surgical approach has been developed that eliminates many of the known associated operative risks and provides unique benefits compared to other obesity surgeries. This effort has resulted in the LAP-BAND System, the only adjustable and reversible obesity surgery that does not require cutting and stapling of the stomach or gastrointestinal re-routing to bypass normal digestion.

Patient benefits include reduced surgical trauma, complications, pain, and scarring, as well as shorter hospitalization and



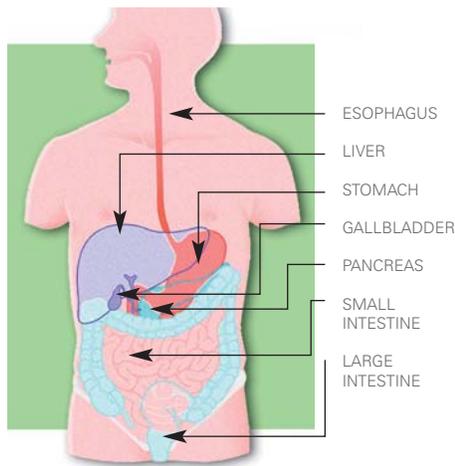
TRISHA C., WORKING PROFESSIONAL
LAP-BAND SYSTEM PATIENT
WEIGHT LOST: 93 POUNDS

"The LAP-BAND provided a way for me to break free from the horrible prison of fat. A world of changes has occurred - others' perceptions, my confidence and self-esteem, higher energy level, the excitement of looking in the mirror and seeing the new me, the joy of knowing that I can become all that I can be... I could go on but above all, the LAP-BAND has given me a healthier lifestyle and a healthier me!"

recovery time compared to other obesity surgeries. The name "LAP-BAND" comes from the surgical technique used (laparoscopic) and the name of the implanted medical device (gastric band).

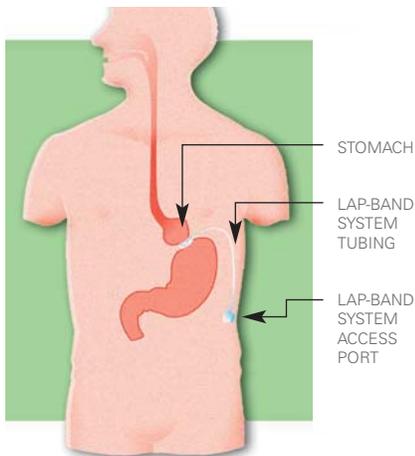
LAP-BAND System Overview

The body gets energy from food while it passes through the alimentary canal, which consists of the mouth, esophagus, stomach, and small and large intestines. Digestion starts in the mouth with chewing and the addition of saliva. After food passes through the esophagus, this process continues in the stomach. The stomach then provides temporary storage for food. Gastric juices, which contain enzymes,

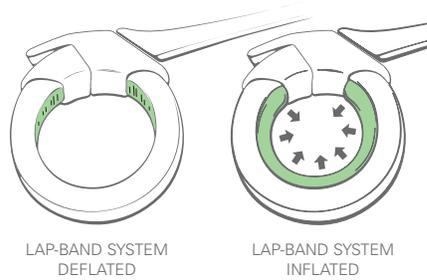


break down the food so that energy can be carried through the body by the blood

The LAP-BAND System is a silicone elastomer ring designed to be placed around the upper part of the stomach and filled with saline on the inner surface. This creates a new small stomach pouch and leaves the larger part of the stomach below the band so the food storage area in the stomach is reduced, and the pouch above the band can hold only a small amount of food. The band also controls the stoma (stomach outlet) between the two



parts of the stomach. The size of the stoma regulates the flow of the food from the upper to the lower part of the stomach. When the stoma is smaller, you feel full sooner and have a feeling of satiety so you are not hungry between meals.



The band is connected by tubing to an access port that is placed beneath the skin during surgery. Later, the surgeon can change the stoma size by adding or subtracting saline inside the inner balloon through the access port. This adjustment process helps drive the rate of weight loss. If the band is too loose and weight loss inadequate, adding more saline can reduce the size of the stoma to further restrict the amount of food that can move through it. If the band is too tight, the surgeon will remove some saline to loosen the band and reduce the amount of restriction.

LAP-BAND System Placement

The LAP-BAND System is usually placed laparoscopically under general anesthesia. First the surgeon makes a few small incisions (or "ports") in the abdominal wall for the insertion of long, thin surgical instruments. A narrow camera is also passed through a port so the surgeon can view the operative site on a nearby video monitor. A small tunnel is made behind the top of the stomach to let the band through and allow it to be wrapped around the upper part of the stomach, almost like a wristwatch. The band is then locked securely in a ring around the

stomach. The LAP-BAND is usually left empty or only partially inflated for the first 4 to 6 weeks after surgery.

LAP-BAND System Weight-Loss Results

The LAP-BAND System is a tool to help you achieve sustained weight loss by limiting how much you can eat, reducing your appetite, and slowing digestion. Remember, though, that the LAP-BAND System by itself will not solve morbid obesity, nor will it ensure that you reach your goal weight or even that you lose weight at all. The amount of weight you lose depends both on the band and on your motivation and commitment to a new lifestyle and eating habits.

Below is a sample of published results from around the world:

A Sample of Published Results From Around The World:	% of Excess Weight Lost	Years of Patient Follow Up	# of Patients Studied
Rubenstein, et al, US ⁶	53.6%	3	63
Dargent, France ⁷	64%	3	500
O'Brien et al, Australia ⁸	68.2%	4	302
Nehoda et al, Austria ⁹	72%	1	250
Forestieri et al, Italy ¹⁰	88.5%	2	62
Fielding et al, Australia ¹¹	68%	3	620

Some people lose more than others, and though you may never reach your ideal weight, chances are good that with weight loss your health and self-image will improve.

LAP-BAND System Removal

If there is a problem with the band, if you can't lose enough weight or can't adjust to the new eating habits, your surgeon may suggest removal of the band. This decision will come after your surgeon consults with you. Generally, after LAP-BAND System removal your stomach will be restored to its original form, and the digestive tract should

function normally. Please keep in mind that when the band is removed, your weight will likely increase.

LAP-BAND System Advantages

Minimal Trauma

- Least invasive surgical option
- No intestinal re-routing
- No cutting or stapling of the stomach wall or bowel
- Small incisions and minimal scarring
- Reduced patient pain, length of hospital stay and recovery period

Fewer Risks and Side Effects

- Significantly lower mortality risk compared to other obesity surgeries¹²
- Low risk of nutritional deficiencies associated with Gastric Bypass
- Reduced risk of hair loss
- No “dumping syndrome” related to dietary intake restrictions

Adjustable

- Allows individualized degree of restriction for ideal, long-term weight-loss rate
- Adjustments performed without additional surgery
- Supports pregnancy by allowing stomach outlet size to be opened to accommodate increased nutritional needs

Reversible

- Removable at any time
- Stomach and other anatomy are generally restored to their original forms and functions

Effective Long-Term Weight Loss

- More than 100,000 LAP-BANDs placed worldwide
- Standard of care for hundreds of surgeons around the world
- Academic publications with up to 7 years of follow-up



FRANK Q., BUSINESS OWNER
LAP-BAND SYSTEM PATIENT
WEIGHT LOST: 135 POUNDS

“My choice was easy: the LAP-BAND surgery was the least invasive option and would enable me to recover very quickly. I was in the hospital for a day and back at work in 10 days. I haven’t been hungry since and I eat whatever I want. The LAP-BAND is such a good tool to remind you when to stop eating and a way to lose weight without sacrificing nutrition. Would I recommend this surgery to someone else? Absolutely! Would I have it again myself? In a heartbeat.”

LAP-BAND System Candidates

You may be eligible for LAP-BAND System surgery if:

1. You are at least 18 years old.
2. Your BMI is ≥ 40 or you weigh at least twice your ideal weight or at least 100 pounds more than your ideal weight.
3. You have been overweight for more than 5 years.
4. Your serious weight-loss attempts have had only short-term success.
5. You are not suffering from any other disease that may have caused your obesity.

6. You are prepared to make substantial changes in your eating habits and lifestyle.
7. You are willing to continue being monitored by the specialist treating you.
8. You do not drink alcohol in excess.

If you do not meet the BMI or weight criteria, you still may be considered for surgery if your BMI is over 35 and you are suffering from serious health problems caused by your weight. Your surgeon may have additional criteria.

LAP-BAND System Contraindications

The LAP-BAND System is not right for you if:

1. You have an inflammatory disease or condition of the gastrointestinal tract, such as ulcers, severe esophagitis, or Crohn’s disease.
2. You have severe heart or lung disease that makes you a poor candidate for surgery.
3. You have some other disease that makes you a poor candidate for surgery.
4. You have a problem that could cause bleeding in the esophagus or stomach. That might include esophageal or gastric varices (a dilated vein). It might also be something such as congenital or acquired intestinal telangiectasia (dilation of a small blood vessel).
5. You have portal hypertension.
6. Your esophagus, stomach, or intestine is not normal (congenital or acquired). For instance you might have a narrowed opening.
7. You have or have experienced an intra-operative gastric injury, such as a gastric perforation at or near the location of the intended band placement.
8. You have cirrhosis.
9. You have chronic pancreatitis.

10. You are pregnant. (If you become pregnant after the LAP-BAND System has been placed, the band may need to be deflated. The same is true if you need more nutrition for any other reason, such as becoming seriously ill. In rare cases, removal may be needed.)
11. You are addicted to alcohol or drugs.
12. You are under 18 years of age.
13. You have an infection anywhere in your body or one that could contaminate the surgical area.
14. You are on chronic, long-term steroid treatment.
15. You cannot or do not want to follow the dietary rules that come with this procedure.
16. You might be allergic to materials in the device.
17. You cannot tolerate pain from an implanted device.
18. You or someone in your family has an autoimmune connective tissue disease. That might be a disease such as systemic lupus erythematosus or scleroderma. The same is true if you have symptoms of one of these diseases.

Your surgeon will not do the operation unless he or she knows you understand the problems your excess weight is causing. Also, your surgeon will make sure you know that you have responsibilities, such as adopting new eating patterns and a new lifestyle. If you are ready to take an active part in reducing your weight, your surgeon will consider the treatment. You should be well-informed about the advantages, disadvantages, and risks involved. Be sure to investigate whether this treatment is right for you.



PAM W., WIFE, MOTHER, ER WORKER
LAP-BAND SYSTEM PATIENT
WEIGHT LOST: 134 POUNDS

"I have 2 small children and a very athletic husband. It was hard for me to keep up with them and their active lifestyles. I had weight-induced asthma, swelling, heartburn, and leg and back pain. I knew I had to do something about the weight when I tried to tie my shoes and couldn't. I had tried every diet and weight-loss plan, but nothing seemed to work. I had given up until I heard of the LAP-BAND procedure. I work in the medical field, so I gathered as much information as I could on the LAP-BAND. To me, the benefits of this surgery, such as its minimal invasiveness, adjustability and reversibility, far outweighed the complications. Above all else, I wanted to be healthier. It has been 16 months since the surgery and all I can say is that I am overjoyed with the results. I no longer suffer with any leg or back pain. The asthma has all but disappeared and I am more athletic and healthier than I was as a teenager. I went from 262 to 128 lbs. This is more weight than I expected to ever lose, and I feel like I lost a whole person and gained a new me!"

LAP-BAND SURGERY

Before your surgery, talk about the procedure in detail with your surgeon. Your doctor may also want you to meet with other experts who can help you understand what will happen during and after the operation. These experts might include:

- a dietitian
- a physiotherapist
- a psychologist
- other specialists

You will also have a number of tests before your surgery to evaluate your health. When it is time for surgery, you will be admitted to the hospital either the day before or on the morning of your surgery.

At the start of the operation, you will be given general anesthesia. If your case is typical, the operation will be performed laparoscopically. During the operation, the band part of the LAP-BAND System will be fastened around the upper part of your stomach to create a small stomach pouch. Part of the lower stomach will then be sutured over the band. The rest of the lower stomach will stay in its normal position. The access port for adjusting the band will be placed under your skin. To do this, the surgeon will slightly enlarge one of the operative incisions.

Once the anesthesia has worn off, you may feel some pain, which can usually be relieved with ordinary painkillers. The hospital staff will help you get out of bed and start moving as soon as possible to help prevent blood clots, respiratory problems, and bedsores.

On the day after the surgery you will likely have an X-ray. This allows your health team to see that the LAP-BAND System is in the

right place and that the new stomach outlet is open. You may be asked to swallow a liquid that can be seen on X-ray.

For LAP-BAND surgery, hospitalization is usually less than 24 hours. The hospital stay may be longer if there are complications or if the surgeon has to convert to an “open” surgical procedure. If there are no complications, you should be able to resume normal activities within a week or two after surgery.

POST-SURGERY DIET AND NUTRITION

After surgery, you will need a new nutrition plan. Discuss this in detail with your surgeon and/or dietitian as they can help you learn about and get used to the changes in lifestyle and eating habits you need to make.

It is very important to follow the eating and drinking instructions starting right after the operation to allow the new stomach structure to heal completely and in the right position. This may take a month or more. It is also important, especially in the early weeks, not to stretch the small stomach pouch above the band. Vomiting can stretch it, so it is important not to vomit. Vomiting can increase the chance of stomach tissue slipping through the band.

The First Few Days Post-Surgery

Right after the operation you can take an occasional sip of water or suck on an ice cube. You shouldn't drink more than this. The day after the operation you can take a little more fluid, but only a small amount at a time. Besides water, you should also choose liquids that have an adequate number of calories. To prevent nausea and vomiting, do not drink too much.



SONDRA A., MOTHER, GRANDMOTHER
LAP-BAND SYSTEM PATIENT
WEIGHT LOST: 100 POUNDS

“After surgery, I ate small, healthy meals and exercised, and I lost almost 100 pounds in less than a year. The LAP-BAND System is a healthy, sensible solution – there is low risk with this technique and the option for band removal. It was the smartest thing I’ve ever done. Actually, I believe that the LAP-BAND saved my life.”

One to Four Weeks Post-Surgery

The following liquids and very soft foods are recommended for the first four weeks after the operation:

- clear broth or soup (with no vegetables or meat and not creamy)
- low-fat yogurt
- milk (preferably skim)
- jello
- fruit juice or pureed soft fruit.

As time goes on you will slowly move to solid food based on your surgeon's and/or dietitian's advice.

In the first few weeks you may be able to eat foods that might not be allowed in your diet later, as these foods may

contain too many calories. It is more important in the first few weeks to let your stomach adjust to the LAP-BAND System than it is to lose weight. In general, you should follow the advice of your dietitian about nutrition.

Four to Six Weeks Post-Surgery

At this time you may start having slightly thicker, creamier soups. This will help you transition to more solid foods later. Some products like bread, red meat, and rice may still cause problems, so it is better to eat softer foods that are easier to digest. These might include foods such as moist white meat (chicken or pork) and fish.

Chew all your food well. If you have dentures, be sure to cut your food into small pieces and chew it thoroughly. If you don't follow these precautions, you may experience vomiting, stomach irritation and swelling. You could also have stoma obstruction.

If solid foods cause nausea and vomiting, go back to the liquid diet you had earlier. Then you can slowly add soft foods and eventually transition to solid foods. Always ask for advice from your doctor or dietitian that is specific to your situation. Vomiting may increase the incidence of band slippage, stomach slippage, or stretching of the small stomach pouch above the band.

Your New Nutrition Plan

When you can eat solid foods without problems you will need to pay close attention to your diet. Liquids will pass through the reduced stomach pouch quickly and will not make you feel full. Avoid high-calorie drinks from this point on. Drink water, broth, tea, and coffee (black, without sugar).

Too much food or big chunks of food can block the stomach pouch outlet. You can avoid this problem by chewing food well

Ten Important Rules

These rules for eating, drinking, and exercise will help you get the best results with the LAP-BAND System:

1. Eat only three small meals a day.
2. Eat slowly and chew thoroughly (approximately 15 to 20 times per bite).
3. Stop eating as soon as you feel full.
4. Do not drink while eating.
5. Do not eat between meals.
6. Eat only good quality food.
7. Avoid fibrous food.
8. Drink enough fluids during the day.
9. Drink only low-calorie liquids.
10. Exercise at least 30 minutes a day.

and eating small bits at a time. Eat only three small meals a day and make sure that these meals contain adequate nutrients. A healthy meal includes vegetables, fruit, meat, bread, and/or dairy products.

The general guide below can help you create good and healthy meals that contain adequate nutrients but little sugar and fat. Also, ask your surgeon and/or dietitian about your food choices.

Good Food Choices

1. Fruits and vegetables

- 1 to 2 servings of fresh fruit daily
- 2 to 3 servings of fresh vegetables daily

2. Breads and cereals

- 1 small portion of corn flakes for breakfast
- 1 to 2 slices of whole wheat or rye bread each day

(If you want, you can spread just a little margarine or butter on the bread)

3. Meat, fish, poultry, eggs

1 oz. to 2 oz. of meat, fish, or poultry or one egg each day (Remove all visible fat from the meat. Remove the skin from poultry. Prepare the meat in ways that need very little fat. Grilling, steaming, microwaving, or boiling are all good ways to do this.)

4. Dairy products

Milk and yogurt are calories in liquid form. However, these types of food have calcium, which makes them an important part of a healthy daily diet, so choose a maximum of 2 cups of skimmed milk or low-fat yogurt and 1 oz. of cheese a day.

5. Fats

Restrict the use of fat to 3 to 4 teaspoons of margarine, butter, or oil per day. You can have low-fat salad dressings and mayonnaise in moderation.



6. Drinks

Drink as many calorie-free liquids per day as you wish (though not with meals). Suitable drinks are:

- tea or coffee (black) with low-calorie sweetener
- water
- non-carbonated beverages containing few or no calories
- clear soup

Some doctors have reported that carbonated beverages may contribute to enlargement of the small pouch and recommend they be avoided.

Foods to Avoid

Some foods have a concentrated supply of calories with little nutritional value and should be avoided as much as possible. They include:

Sugar and foods containing large quantities of sugar, such as:

- high-calorie soft drinks
- syrups
- cakes
- biscuits
- sweets
- jam
- marmalade
- honey

High-fat foods including:

- chocolate
- pies
- chips
- pastries

Alcoholic drinks should also be consumed in moderation, for example a glass of wine per day.

LIVING WITH THE LAP-BAND

Surgery is the first step on the road to successful and sustained weight loss. However, you must adopt a lifelong program that will help you meet your goals. This multi-faceted program will include routine check-ups with your surgeon, ongoing band adjustments if necessary, and regular attendance at support group meetings. Work closely with your surgeon and weight management team, follow their advice and communicate openly with them. Learn to use the LAP-BAND System as a tool to help you lose your excess weight.

Adjusting to a New Life

LAP-BAND adjustments are performed without surgery using a thin needle to inject or withdraw saline from the band via the access port. Being able to adjust the band is a unique feature of the LAP-BAND System and is a normal part of the follow-up. This feature lets your surgeon

find the right level of restriction to meet your individual needs.

Following the LAP-BAND System placement procedure, the band is usually left empty or only partially inflated for a while. Adjustments are not usually performed until 4 to 6 weeks after surgery, although the exact time will vary from patient to patient. You and your surgeon will decide when the time is right for your first band adjustment. To determine this, your surgeon will consider:

- your weight loss so far
- the amount of food you can comfortably eat
- your exercise routine, and
- the amount of fluid already in your band.

The LAP-BAND System offers you a way to obtain steady and safe weight loss. Don't be in a hurry to have an adjustment before you are ready.

Motivation is Key

To work, the band needs your participation. Your success will depend on you and the partnership between you and your medical team. Your surgeon will not perform the operation unless he or she is sure that you understand the problems your excess weight is causing. Your surgeon will also make sure you understand your responsibilities, including adopting and maintaining new eating patterns and a new lifestyle.

If you are ready to take control of your obesity and your life with the LAP-BAND System, talk to your surgeon about the advantages, disadvantages and possible risks of this treatment.

FREQUENTLY ASKED QUESTIONS

Q: Will I be sick a lot after the operation?

A: The LAP-BAND System limits food intake. If you feel nauseated or sick on a regular basis, it may mean that you are not chewing your food well enough or that you are not following the diet rules properly. However, it could also mean that there is a problem with the placement of the band, so contact your doctor if this problem persists. Vomiting should be avoided as much as possible as it can cause the small stomach pouch to stretch. It can also lead to slippage of part of the stomach through the band and reduce the success of the operation. In some cases, it can require another operation.

Q: How long will it take to recover after surgery?

A: If LAP-BAND surgery is performed laparoscopically, patients typically spend less than 24 hours in the hospital. It takes most patients about a week to return to work and a month to six weeks to resume exercising. In the case of open surgery or if there are complications, recovery may take longer.

Q: How much weight will I lose?

A: Weight-loss results vary from patient to patient, and the amount of weight you lose depends on several things. The band needs to be in the right position, and you need to be committed to your new lifestyle and eating habits. Obesity surgery is not a miracle cure, and the pounds won't come off by themselves. It

is very important to set achievable weight-loss goals from the beginning. A weight loss of 2 to 3 pounds a week in the first year after the operation is possible, but one pound a week is more likely. Twelve to eighteen months after the operation, weekly weight loss is usually less. Remember that you should lose weight gradually. Losing weight too quickly creates a health risk and can lead to a number of problems. The main goal is to have weight loss that prevents, improves, or resolves health problems connected with severe obesity.

Q: How do the weight-loss results with the LAP-BAND compare to those with the gastric bypass?

A: Surgeons have reported that gastric bypass patients lose weight faster in the first year. At five years, however, many LAP-BAND patients have achieved weight loss equal to that of gastric bypass patients.¹³ Focus on long-term weight loss and remember that it is important to lose weight gradually while reducing obesity-related risks and improving your health.

Q: Does the LAP-BAND require frequent visits to my doctor after surgery?

A: Check-ups with your doctor are a normal and very important part of the LAP-BAND System follow-up. Many surgeons see their patients weekly or biweekly during the first month and every four to twelve weeks for the first year. Adjustments are performed during some of these visits. It is typical for follow-up visits to be scheduled every three to six months during the second and third year, depending on the individual case.

Q: Does the LAP-BAND limit any physical activity?

A: The LAP-BAND does not hamper physical activity including aerobics, stretching and strenuous exercise.

Q: How is the band adjusted?

A: Adjustments are often carried out in the X-ray department. They are done there so the access port can be clearly seen. When X-rays are used, your reproductive organs should be shielded. Sometimes adjustments can be done in an outpatient clinic or office, and local anesthesia may or may not be needed. A fine needle is passed through the skin into the access port to add or subtract saline. This process most often takes only a few minutes and most patients say it is nearly painless.

Q: Do I have to be careful with the access port just underneath my skin?

A: There are no restrictions based on the access port. It is placed under the skin in the abdominal wall, and once the incisions have healed it should not cause discomfort or limit any physical exercise. The only sensation you may experience from the port occurs when you go in for adjustments. If you feel persistent discomfort in the port area, talk to your doctor.

Q: Can the band be removed?

A: Although the LAP-BAND System is not meant to be removed, it can be, in some cases laparoscopically. Surgeons report that the stomach generally returns to its original shape once the band is removed. After the removal, though, you may soon go back up to your original weight. You may also gain more.

Q: Will I need plastic surgery for the surplus skin when I have lost a lot of weight?

A: That is not always the case. As a rule, plastic surgery will not be considered for at least a year or two after the operation as, sometimes the skin will mold itself around the new body tissue. Give the skin the time it needs to adjust before you decide to have more surgery.

Q: Is it true that the LAP-BAND seems “tighter” in the morning?

A: This is a fairly common feeling, especially for people with bands that are tight or just after an adjustment. During the day the water content in the body changes and this may cause the band to feel “tighter” some of the time. Some women have also noticed that the LAP-BAND feels tighter during menstruation.

Q: Will I feel hungry or deprived with the LAP-BAND?

A: The LAP-BAND makes you eat less and feel full in two ways – first by reducing the capacity of your stomach and second by increasing the time it takes food to get through the digestive system. After a small meal, the amount of which varies from person to person, you should feel full. If you follow the nutrition guidelines when you choose your food and then chew it well, you should not feel hungry or deprived. Remember that the LAP-BAND is a tool to help you change your eating habits.

Q: What will happen if I become ill?

A: One of the major advantages of the LAP-BAND System is that it can be adjusted. If your illness requires you to eat more, the band can be loosened by

removing saline from it. When you have recovered from your illness and want to lose weight again, the band can be tightened by increasing the amount of saline. If the band cannot be loosened enough, it may have to be removed.

Q: What about pregnancy?

A: Becoming pregnant can be easier as you lose weight. Your menstrual cycle may become more regular. If you need to eat more while you are pregnant, the band can be loosened. After pregnancy, the band may be made tighter again and you can resume losing weight.

Q: Will I need to take vitamin supplements?

A: You may. It's possible to not get enough vitamins from three small meals a day. At your regular check-ups, your specialist will evaluate whether you are getting enough vitamin B₁₂, folic acid, and iron. Your surgeon may advise you to take supplements.

Q: What about other medication?

A: You should be able to take prescribed medication, though you may need to use capsules, break big tablets in half or dissolve them in water so they do not get stuck in the stoma and make you sick. Always ask the doctor who prescribes the drugs about this. Your surgeon may tell you to avoid taking aspirin and other non-steroidal anti-inflammatory pain relievers because they may irritate the stomach. The problems these drugs may cause could result in band removal.

Q: What if I go out to eat?

A: Order only a small amount of food, such as an appetizer. Eat slowly. Finish at the same time as your table companions.

You might want to let your host or hostess know in advance that you cannot eat very much.

Q: What about alcohol?

A: Alcohol has a high number of calories and breaks down vitamins. An occasional glass of wine or other alcoholic beverage, though, is not considered harmful to weight loss¹⁴.

Q: Can I eat anything in moderation?

A: After your stomach has healed, you may eat most foods that don't cause you discomfort. However, because you can only eat a little it is important to include foods full of important vitamins and nutrients such as those recommended in the nutrition section of this booklet and as advised by your surgeon and/or dietitian. If you eat foods that contain lots of sugar and fat or drink liquids full of “empty” calories, such as milkshakes, the effect of the LAP-BAND may be greatly reduced or even cancelled.

Q: Will I suffer from constipation?

A: There may be some reduction in the volume of your stools, which is normal after a decrease in food intake because you eat less fiber. This should not cause you severe problems. If difficulties do arise, check with your doctor. He or she may suggest you take a mild laxative and drink plenty of water for a while. Your needs will vary, but you should drink at least 6-8 glasses of water a day.

One final point:

It is important to ask your surgeon all the questions you have about obesity surgery and the LAP-BAND System. It is also essential that you follow his or her advice.

GLOSSARY OF TERMS

Anesthesia

The loss of sensation and feeling. Also refers to the process or drugs used to produce this effect. Anesthesia is commonly employed prior to surgery so that a patient will not feel any pain or discomfort.

Bariatric

Related to the branch of medicine that deals with the prevention and treatment of obesity.

Bariatric Surgeon

A surgeon who specializes in the surgical treatment of obesity.

Bile

A fluid discharged by the liver into the intestines that helps in the digestive process.

Biliopancreatic Diversion (BPD)

A surgical procedure used to treat obesity that removes approximately two-thirds of the stomach and re-arranges the intestines so that digestive enzymes have less contact with the foodstream. This procedure serves to impair nutrient absorption and thus dramatically reduce caloric intake, even when average-sized portions are consumed. While this procedure produces rapid weight loss that is more significant than with other obesity surgeries, it also carries a substantially higher risk of post-operative nutritional problems (including malnutrition). Also called the Scopinaro procedure.

Body Mass Index (BMI)

The most widely used measurement for obesity. The BMI approximates body mass using a mathematical ratio of

weight and height ($[\text{weight in kg}] \div [\text{height in meters}]^2$ or $[\text{weight in pounds}] \div [\text{height in inches}]^2 * 704.5$). A BMI of 30 or more is regarded by most health agencies as the threshold for obesity. A BMI of 40 or more generally qualifies as morbid obesity. However, note that BMI measurements in body-builders and athletes may not be accurate determinants of obesity because the BMI does not distinguish between muscle and fat.

Cancer

An umbrella term for more than 100 life-threatening diseases characterized by the uncontrolled, abnormal growth of malignant cells. These harmful cells may spread locally or through either the bloodstream or lymphatic system. One of the comorbidities associated with morbid obesity.

Comorbidity

A medical condition that exists in addition to and is caused or worsened by obesity or any other primary disease being studied or treated. With sufficient weight loss, obesity-related comorbidities such as type 2 diabetes, hypertension and sleep apnea generally improve or completely resolve.

Contraindication for Surgery

A factor that renders the carrying out of a surgical procedure inadvisable.

Diabetes Type 2

A chronic endocrine disorder characterized by the inability to properly utilize sugar, specifically glucose, a simple carbohydrate. This results in excessively high glucose levels in the blood. Diabetes involves either a relative or absolute shortage of insulin, a hormone that regulates the body's breakdown of

carbohydrates. A higher percentage of obese individuals has type 2 diabetes than does the general population.

Dumping Syndrome

A physiological reaction frequently seen following gastric bypass surgery. This operation is designed to alter the function of the stomach and intestines and interrupt normal digestion. Therefore, whenever patients eat certain foods, such as sugar and sweets, they may experience "dumping," characterized by symptoms of nausea, flushing and sweating, light-headedness and watery diarrhea. This complication has been reported by most gastric bypass patients, while LAP-BAND patients do not suffer from it.

Gastric Bypass

A surgical procedure for the treatment of obesity where a thumb-sized stomach pouch is created using stapling techniques to divide the stomach and then connect the outlet of the pouch directly to the intestine (also known as the bowel), essentially "bypassing" the lower stomach. The flow of digestive juices is preserved, however. This procedure achieves its effect by restricting the volume of food consumed and also the type of food consumed. Sugars and fats may cause discomfort known as the "dumping syndrome." Gastric bypass surgery can be performed via open surgery (one large incision) or less invasively with laparoscopic techniques (several tiny incisions), although laparoscopic gastric bypass is performed infrequently. Produces rapid and significant weight loss but is associated with higher mortality and complication rates. Also known as Roux-en-Y or RNY.

Gastroesophageal Reflux

The backward flow of stomach contents into the esophagus due to a malfunction in the sphincter at the end of esophagus. This can cause heartburn and discomfort. When it occurs repeatedly, it may become gastroesophageal reflux disease (GERD), where stomach acid can eventually cause scarring of the esophagus and other chronic problems.

Heart Disease

Any of a number of diseases related to the heart and blood vessels. Also known as coronary artery disease. When grouped together, these diseases are the leading cause of death in the United States.

Hypertension

The medical term for high blood pressure. Usually, this means that a patient has a blood pressure of 140/90 or higher. In older adults, this number is adjusted upwards slightly. The top number is systolic pressure (pressure in blood vessels when heart is pumping out blood), while the bottom number represents diastolic pressure (when heart is at rest). This condition is also associated with obesity due to the excess weight that the heart has to sustain.

Ideal Weight

Generally, this term refers to what a person of a given height and body frame should weigh. In other words, the desired weight for optimal health and fitness. There are several problems, however, with current calculations of ideal weight: a) body fat percentage or distribution is not accounted for; b) only some of the tables account for different body frames or ages; and c) most importantly, there is no consensus about which formula or table to use. Thus, ideal weight remains subjective. To illustrate the variation, a height of 5'6"

plus a medium body frame for a female has an ideal weight of between 124 and 149 pounds, depending on the source. This booklet uses the 1983 Metropolitan Life Insurance Company tables for ideal body weight basis in BMI calculations.

Laparoscopic Surgery

A minimally invasive surgical approach where the surgeon makes several small incisions to access the interior of the body. A long, slender camera attached to a light source and chopstick-like instruments are used to perform the operation. Compared to the large incision of conventional open surgery, there is typically less pain and scarring following this operation. Usually, hospital stay and overall recovery time are also reduced.

Laparoscopic Gastric Bypass

A minimally invasive method of performing gastric bypass surgery. (See full definition of "Gastric Bypass.") Surgical risks, however, are comparable to that of standard gastric bypass. Used infrequently due to the difficulty and complexity of the procedure.

Morbid Obesity

A disease in which excess weight begins to interfere with basic physiological functions such as breathing and walking. Generally, it can be defined as weighing 100 pounds more than your ideal weight. A more precise indicator, however, is a Body Mass Index (BMI) of 40 or greater. In addition, a BMI of 35-39.9 with significant comorbidities can qualify.

Obesity

A condition where there is excess body weight due to an abnormal accumulation of fat. Defined objectively as a Body Mass Index (BMI) of 30 or more, obesity is associated with markedly increased health risks.

Osteoarthritis

A degenerative joint disease that occurs when joint cartilage wears down and apposing bone surfaces rub against each other. Osteoarthritis does not result from inflammation like rheumatoid arthritis. It is usually accompanied by pain and stiffness. Although the condition tends to occur in the elderly, it is also associated with obesity, which places undue stress on weight-bearing joints.

Overweight

A condition of increased body weight compared to established standards. The weight may result from bone, fat, muscle, and/or water. Defined objectively as a Body Mass Index (BMI) of 25-29.9.

Pancreatic Enzymes

Proteins released by the pancreas that help break down food during the digestive process. This process creates energy that can be carried through the body by the blood.

Saline

A salt solution (sodium chloride) similar to tears, the body's natural liquid. Used to fill the inner surface of the LAP-BAND System to adjust the degree of restriction and the rate of weight loss.

Satiety

A state of being satisfied or gratified to the fullest extent. Satiety is equated with complete fullness, in which the person is unable to eat any more food.

Sleep Apnea

The temporary cessation of breathing during sleep. Typically, the sufferer will awake gasping for breath. Sleep apnea may occur repeatedly, resulting in a poor night's sleep and daytime drowsiness. One of the comorbidities associated with morbid obesity.

Stoma

The outlet to the stomach created by stapling or placing an adjustable band around its upper part, which divides the stomach into two parts – the small upper stomach pouch and the lower stomach – resulting in restriction of the amount of food the stomach can hold and increasing the time it takes to empty. The LAP-BAND allows the stoma to be adjusted by inflating or deflating the inner surface of the band in order to modify the degree of restriction.

Stroke

A sudden loss of brain function due to a blockage or rupture in a blood vessel that supplies oxygen to the brain. Depending on the affected area of the brain, a stroke may lead to muscular coordination problems, slurred speech, blindness, paresis (weakness), unconsciousness, paralysis, coma or death. One of the comorbidities associated with morbid obesity.

Vertical Banded Gastroplasty (VBG)

A surgical procedure for the treatment of morbid obesity that staples the stomach and reduces its size to a thumb-sized

pouch. The outlet to the pouch is reinforced with a synthetic mesh band. The result is a marked restriction in the volume of food that can be consumed, inducing the feeling of satiety after only a few bites. VBG is a technically simple operation but is rarely performed through the minimally invasive approach. Staple line disruption results in weight regain. Also known as “Stomach Stapling” or “Gastric Stapling.”

Most of the content of this glossary is based on the Glossary of Terms provided by www.spotlighthealth.com. Courtesy of Spotlight Health.

REFERENCES

1. Weight-Control Information Network (WIN) of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), a part of NIH. NIDDK statistics represent US adults over the age of 20.
2. RAND Health research brief, 2002. Sturm, R. The Effects of Obesity, Smoking And Problem Drinking On Chronic Medical Problems and Health Care Costs, *Health Affairs*. 2002; 21(2): 245-253. www.rand.org/health
3. del Negro, A. It's Time To Treat Obesity. *Program and abstracts of the 73rd Scientific Sessions of the American Heart Association*. November 12-15, 2000; New Orleans, Louisiana.
4. Colditz GA. Economic costs of obesity. *Am J Clin Nutr*. 1992; 55: 503-507.
5. American Society of Bariatric Surgery. Rationale for the Surgical Treatment of Morbid Obesity. www.asbs.org, 8 April 1998.
6. Rubenstein R. *Obes Surg* 2002; 12: 380-384.
7. Dargent J. Laparoscopic adjustable gastric banding: lessons from the first 500 patients in a single institution. *Obes Surg* Oct 1999; 9: 446-52.
8. O'Brien PE. et al. Prospective study of a laparoscopically placed, adjustable gastric band in the treatment of morbid obesity. *Br J Surg* Jan 1999; 86(1): 113-8.
9. Nehoda H et al. Results and complications after adjustable gastric banding in a series of 250 patients. *Am J Surg* Jan 2001; 181 (1): 12-5.
10. Forestieri P et al. Two years of practice in adjustable silicone gastric banding (LAP-BAND): evaluation of variations of body mass index, percentage ideal body weight and percentage excess body weight. *Obes Surg* Feb 1998; 8: 49-52.
11. Fielding G. LAP-BAND® Experience with 620 Cases over Forty-Five Months. *Obes Surg* 2000; 10: 143.
12. Executive summary: Laparoscopic adjustable gastric banding for the treatment of obesity (Update and Re-appraisal). *The Australian Safety and Efficacy Register of New Interventional Procedures - Surgical (ASERNIPS)* 2002; 1. (Laparoscopic adjustable gastric banding surgery, like the LAP-BAND surgery, is associated with a mean short-term mortality rate of around 0.05% compared to 0.50% for Gastric Bypass and 0.31% for Vertical Banded Gastroplasty.)
13. Clegg A., Colquitt J., Sidhu M.K., et al. The clinical and cost effectiveness of surgery for people with morbid obesity. *Health Technology Assessment* 2002; 6(12): 1-153.
14. Dixon J., Dixon A., O'Brien P. Light to Moderate Alcohol Consumption: Obesity and the Metabolic Syndrome. *Am J Bariatric Medicine* 2002; 17(4): 11-14.

ACKNOWLEDGEMENTS

This booklet was developed with the help of the patients treated with the BioEnterics LAP-BAND System and the patients receiving treatment for severe obesity.

The content is based partly on the patient booklet produced by Professor Paul O'Brien of Melbourne, Australia. Contributions were also made by Dr. W. Tuinebreijer of Beverwijk, the Netherlands; R. Hörchner of Beverwijk, the Netherlands; Dr. W.L.E.M. Hesp of Dordrecht, the Netherlands; Dr. R. Weiner of Frankfurt, Germany; Gabrielle Rabner of New York, United States; and several dietitians and psychotherapists.

We would like to thank all those involved for their cooperation in the development of this booklet.

BMI CHART (LBS/IN)

BMI = lbs./inches² x 704.5

WEIGHT (LBS)	HEIGHT (FT)										
	4'9"	4'11"	5'1"	5'3"	5'5"	5'7"	5'9"	5'11"	6'1"	6'3"	
154	33	31	29	27	26	24	23	22	20	19	
165	36	33	31	29	28	26	24	23	22	21	
176	38	36	33	31	29	28	26	25	23	22	
187	40	38	35	33	31	29	28	26	25	24	
198	43	40	37	35	33	31	29	28	26	25	
209	45	42	40	37	35	33	31	29	28	26	
220	48	44	42	39	37	35	33	31	29	28	
231	50	47	44	41	39	36	34	32	31	29	
243	52	49	46	43	40	38	36	34	32	30	
254	55	51	48	45	42	40	38	35	34	32	
265	57	53	50	47	44	42	39	37	35	33	
276	59	56	52	49	46	43	41	39	37	35	
287	62	58	54	51	48	45	42	40	38	36	
298	64	60	56	53	50	47	44	42	39	37	
309	67	62	58	55	51	48	46	43	41	39	
320	69	64	60	57	53	50	47	45	42	40	
331	71	67	62	59	55	52	49	46	44	42	
342	74	69	65	61	57	54	51	48	45	43	
353	76	71	67	63	59	55	52	49	47	44	
364	78	73	69	64	61	57	54	51	48	46	
375	81	76	71	66	62	59	56	52	50	47	
386	83	78	73	68	64	61	57	54	51	48	
397	86	80	75	70	66	62	59	56	53	50	
408	88	82	77	72	68	64	60	57	54	51	
419	90	84	79	74	70	66	62	59	56	53	
430	93	87	81	76	72	67	64	60	57	54	
441	95	89	83	78	73	69	65	62	58	55	
452	98	91	85	80	75	71	67	63	60	57	
463	100	93	87	82	77	73	69	65	61	58	

BMI CHART (KG/M)

BMI = kg/m²

WEIGHT (KG)	HEIGHT (M)										
	1.45	1.5	1.55	1.6	1.65	1.7	1.75	1.8	1.85	1.9	
70	33	31	29	27	26	24	23	22	20	19	
75	36	33	31	29	28	26	24	23	22	21	
80	38	36	33	31	29	28	26	25	23	22	
85	40	38	35	33	31	29	28	26	25	24	
90	43	40	37	35	33	31	29	28	26	25	
95	45	42	40	37	35	33	31	29	28	26	
100	48	44	42	39	37	35	33	31	29	28	
105	50	47	44	41	39	36	34	32	31	29	
110	52	49	46	43	40	38	36	34	32	30	
115	55	51	48	45	42	40	38	35	34	32	
120	57	53	50	47	44	42	39	37	35	33	
125	59	56	52	49	46	43	41	39	37	35	
130	62	58	54	51	48	45	42	40	38	36	
135	64	60	56	53	50	47	44	42	39	37	
140	67	62	58	55	51	48	46	43	41	39	
145	69	64	60	57	53	50	47	45	42	40	
150	71	67	62	59	55	52	49	46	44	42	
155	74	69	65	61	57	54	51	48	45	43	
160	76	71	67	63	59	55	52	49	47	44	
165	78	73	69	64	61	57	54	51	48	46	
170	81	76	71	66	62	59	56	52	50	47	
175	83	78	73	68	64	61	57	54	51	48	
180	86	80	75	70	66	62	59	56	53	50	
185	88	82	77	72	68	64	60	57	54	51	
190	90	84	79	74	70	66	62	59	56	53	
195	93	87	81	76	72	67	64	60	57	54	
200	95	89	83	78	73	69	65	62	58	55	
205	98	91	85	80	75	71	67	63	60	57	
210	100	93	87	82	77	73	69	65	61	58	

Body Mass Index Classification

Underweight <19	Ideal BMI 19-25	Overweight 25-30	Obesity >30	Severe Obesity >35	Morbid Obesity >40	Super Obesity >50
--------------------	--------------------	---------------------	----------------	-----------------------	-----------------------	----------------------

PLEASE NOTE THAT THE BMI DOES NOT DISTINGUISH BETWEEN FAT AND MUSCLE.
IT IS POSSIBLE FOR A HEAVILY MUSCLED INDIVIDUAL TO HAVE A BMI IN EXCESS OF 25 WITHOUT INCREASED HEALTH RISKS.

Morbid obesity is a serious disease affecting more than 6 million Americans. It is associated with a number of life-threatening conditions, such as type 2 diabetes, cancer and hypertension, that can be improved with sufficient weight loss. Surgery can help you take control of your weight and your life, and now an internationally established procedure that eliminates many of the risks of other obesity surgeries is available in the United States. The **BioEnterics® LAP-BAND® System** is the only minimally invasive, adjustable and reversible FDA-approved surgical obesity treatment. It is a tool that can help improve your health, reduce your risk of developing associated medical conditions, and enhance the quality of your life.

A BRIEF DESCRIPTION OF RELEVANT INDICATIONS FOR USE, CONTRAINDICATIONS, WARNINGS AND ADVERSE EVENTS OF THE LAP-BAND SYSTEM

Indications: The LAP-BAND System is indicated for use in weight reduction for severely obese patients with a Body Mass Index (BMI) of at least 40 or a BMI of at least 35 with one or more severe co-morbid conditions, or those who are 100 lbs. or more over their estimated ideal weight.

Contraindications: The LAP-BAND System is not recommended for non-adult patients, patients with conditions that may make them poor surgical candidates or increase the risk of poor results, who are unwilling or unable to comply with the required dietary restrictions, or who currently are or may be pregnant.

Warnings: The LAP-BAND System is a long-term implant. Explant and replacement surgery may be required at some time. Patients who become pregnant or severely ill, or who require more extensive nutrition, may require deflation of their bands. Patients should not expect to lose weight as fast as gastric bypass patients, and band inflation should proceed in small increments. Anti-inflammatory agents, such as aspirin, should be used with caution and may contribute to an increased risk of band erosion.

Adverse Events: Placement of the LAP-BAND System is major surgery and, as with any surgery, death can occur. Possible complications include the risks associated with the medications and methods used during surgery, the risks associated with any surgical procedure, and the patient's ability to tolerate a foreign object implanted in the body.

Band slippage, erosion, and deflation, obstruction of the stomach, dilation of the esophagus, infection, or nausea and vomiting may occur. Reoperation may be required. Rapid weight loss may result in complications that can require additional surgery. Deflation of the band may alleviate excessively rapid weight loss or esophageal dilation.

Not all contraindications, warnings or adverse events are included in this brief description. More detailed risk information is available at www.lap-band.com or 1-877-LAP-BAND.

Important: This is a brief introduction. Please contact your physician or surgeon regarding the possible risks and benefits of obesity surgery.

CAUTION: This device is restricted to sale by or on the order of a physician.

The BioEnterics LAP-BAND System contains no latex or natural rubber materials.

CONTENTS

The Obesity Epidemic	1
Treatment Options	2
The LAP-BAND System Solution	4
LAP-BAND Surgery	7
Post-Surgery Diet and Nutrition	8
Living with the LAP-BAND	10
Frequently Asked Questions	11
Glossary of Terms	13
BMI Chart	16