Banner Health
North Colorado
Medical Center®
Bariatric Surgery

LAP-BAND® Patient Handbook

WELCOME TO THE NORTH COLORADO MEDICAL CENTER BARIATRIC PROGRAM

This Patient Handbook contains an overview of the bariatric surgery program for the LAP-BAND® adjustable gastric banding procedure offered at North Colorado Medical Center. Our multidisciplinary team of surgeons, nurses, dieticians, counselors, and exercise specialists provides a comprehensive program of the highest standard. We believe that educating patients and preparing them for bariatric surgery is the foundation of patient success, and that support after surgery is essential for long-term weight loss.

The Bariatric Surgery Staff

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FACTS ABOUT OBESITY

Obesity is the most prevalent nutritional disorder in the United States. More than two thirds of U.S. adults are overweight or obese, and the rate has steadily climbed since 1960. The obesity rate in America has doubled in less than 20 years. Obesity is a leading cause of preventable death among adults in the United States. Morbid obesity is a dangerous disease.

Obesity is actually defined by a standard weight per height measurement called Body Mass Index, or BMI. Generally, a man or woman would be considered overweight with a BMI of greater than or equal to 25 kg/m^2. Obesity is defined as a BMI greater than or equal to 30 kg/m^2. Any adult who is 30 pounds over their ideal body weight will likely meet obesity BMI. Extreme or "morbid" obesity is a BMI of greater than or equal to 40 kg/m^2. Adults, who are at least 100 pounds over ideal body weight, will likely meet morbid obesity BMI.

Obesity is associated with the development of a number of medical complications and health problems, also known as comorbidities. With obesity, there is an increase in heart disease and cardiovascular mortality, which can be explained by increases in cardiovascular risk factors such as high blood pressure, high blood cholesterol and triglycerides, and diabetes mellitus. In fact, 65% of patients with a BMI greater than 27 have significant comorbidities as a direct consequence of their obesity. Other common comorbidities include obstructive sleep apnea, respiratory insufficiency, heartburn or reflux disease (GERD), asthma, bronchitis, gallbladder disease, stress urinary incontinence, degenerative disease of the spine and weight bearing joints, leg swelling and others.

Quality of life for the obese person is diminished in many ways. Frequently the obese person struggles with depression, hopelessness, and despair. Typically, obese people have tried dozens of weight loss methods including diets and medications, only to realize that no matter how hard they try, they cannot lose the excess weight without taking drastic measures such as liquid diets. When they lose weight, they cannot keep the weight off. In general, people think that obese individuals lack the willpower to stop eating too much, or simply do not care about their weight or their health. Doctors routinely tell their obese patients to lose weight to help reduce their health problems because they believe patients can be successful, but do not try hard enough. Most doctors do not understand (unless they too are obese) that chronic dieting in their obese patients has led to biochemical changes causing permanent resistance to weight loss. The National Institutes of Health (NIH), in their 1991 Consensus Statement, stated the following: "Surgery is the only way to obtain consistent, permanent weight loss for the morbidly obese patient". Scientific studies show that only 5% of morbidly obese people can achieve permanent weight loss using conventional methods such as diet, exercise and behavior modification.

Life in society is a daily challenge for obese people. Society's misunderstanding of and discrimination against obese people remains unchecked. Studies show that most people have about as much respect for the obese person as they do for the alcoholic or drug addict. Discrimination against the obese exists in all aspects of society. One of the most obvious examples is in the travel industry. Modern airliners accommodate patients in wheelchairs but airlines do not make any attempt to provide comfortable seating for obese persons. Large individuals must choose among the options of flying in great discomfort while overlapping

into the seats of others, or not flying at all. Accommodations in public places everywhere disregard the obese.

WHAT IS BARIATRIC SURGERY?

Bariatric Surgery is the area of surgery that is devoted to weight loss. The term "bariatric" comes from the Greek word "baros" for weight. The field of bariatric surgery is a specialty dedicated to the surgical treatment of people who are suffering from health consequences as a direct result of excess weight, when other measures have not been successful. Surgical therapy for morbid obesity most often involves operations on the stomach and small bowel, which restrict one's ability to eat, thus promoting weight loss.

There are a variety of "restrictive" operations for morbid obesity such as the Roux-en-y Gastric Bypass (which also has a malabsorptive component), LAP-BAND®, and Vertical Banded Gastroplasty. An alternative to the restrictive procedures is a malabsorptive operation such as the Biliopancreatic Diversion (BPD) or BPD with Duodenal Switch (DS). The Vertical Banded Gastroplasty has been widely abandoned by U.S. surgeons due to its high failure rate. Approximately 4% of the procedures performed in the U.S. are BPD and/or BPD with DS. These malabsorptive procedures are less common due in part to the side effects of major nutritional complications and frequency of malodorous bowel movements.

For the majority of severely overweight and obese people, dieting, exercise, self-help groups, hypnosis, behavior modification, and weight loss drugs have provided minimal or only temporary results. When the traditional methods of weight loss fail, surgery is the only method that has been shown to successfully produce and maintain lasting weight loss. Each procedure has its own unique benefits and risks, and Dr. Johnell will help you decide which operation best addresses your needs and goals.

If you are considering bariatric surgery, it is important to understand that the operations undertaken for severe obesity are not to be confused with plastic or cosmetic surgery. The decision to undergo bariatric surgery must not be made lightly. As with all surgical procedures, there are real risks that come with weight loss surgery. For this reason, operations are only offered to those patients who meet the criteria of morbid obesity, and when the medical risk of continued obesity outweighs the risk of the surgery itself. Bariatric surgery should be undertaken only after patients have exhausted all other reasonable means of obtaining and maintaining weight loss, and are thoroughly convinced that they have tried everything possible to lose their excess weight.

PATIENT SELECTION

Each patient is evaluated on an individual basis for bariatric surgery. Although we follow patient selection guidelines as established by the American Society for Bariatric Surgery, The Society of American Gastrointestinal Endoscopic Surgeons, and the National Institutes of Health, there is no absolute set of rules that determines which patients are accepted and which patients are not accepted for surgery.

Some of the factors considered in the evaluation process are:

1. You are an adult (at least 18 years old).

2. You are approximately 100 pounds or more above ideal body weight as described in life insurance height/weight charts, and/or have a BMI of 35 or greater with comorbidities (health problems), OR have a BMI of 40 or greater with or without comorbidities.

3. You have failed at previous attempts to achieve lasting weight loss.

4. You have physical problems and/or diseases related to obesity including, but not limited to: high blood pressure, elevated blood fats, heart problems, breathing problems, chronic back pain or degenerative arthritis.

5. You do not have bipolar disorder, schizophrenia, or a severe personality disorder.

6. You have been overweight for more than 5 years.

7. Your serious attempts to lose weight have had only short-term success.

8. You do not have any other disease that may have caused you to be overweight.

9. You are prepared to make major changes in your eating habits and lifestyle.

10. You are willing to continue working with Dr. Johnell on an ongoing basis for follow-up care.

11. You do not drink alcohol in excess.

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 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 BioEnterics® 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 or someone in your family has an autoimmune connective tissue disease. This would include diseases such as systemic lupus erythematosus or scleroderma. The same is true if you have symptoms of one of these diseases.

Motivation is essential to successful weight loss. The bariatric surgery team will make sure you know what your responsibilities are. These include new eating patterns, exercise and a new lifestyle. If you are ready to take an active part in reducing your weight, you will be considered for the treatment.

CALCULATING IDEAL WEIGHT AND BMI

BMI, or Body Mass Index, is a measurement that is calculated from your weight and height. "Ideal" body weight is derived from your height. Ideal body weights were developed by Metropolitan Life insurance in the 1980's and are based on human longevity research. *These weights are usually too low for our patients* and we do not expect our patients to achieve them. We use ideal weight charts because they constitute the only universal standard of body weight measurement.

	Ideal	**Morbidly Obese**
Women		
4'10"	115	215
4'11"	117	217
5'0"	119.5	219.5
5'1"	122	222
5'2"	125	225
5'3"	128	228
5'4"	131	231
5'5"	134	234
5'6"	137	237
5'7"	140	240
5'8"	143	243
5'9"	146	246
5'10"	149	249
5'11"	152	252
6'0"	155	255
Men		
5'2"	136	236
5'3"	138	238
5'4"	140	240
5'5"	142.5	242.5
5'6"	145	245
5'7"	149	249
5'8"	151	251
5'9"	154	254
5'10"	157	257
5'11"	160	260
6'0"	163.5	263.5
6'1"	167	267
6'2"	171	271
6'3"	174.5	274.5
6'4"	179	279

BODY MASS INDEX

Although BMI is body weight in kilograms, divided by body height in meters squared, you may find it can more easily be calculated using the following formula:

$$\text{BMI} = \frac{\text{WEIGHT (pounds)}}{\text{HEIGHT x HEIGHT (inches)}} \times 705$$

Visit Dr. Johnell's website at www.bariatricoperation.com or www.bannerbariatric.com where you can determine your BMI by using the special calculator provided.

LAP-BAND® ADJUSTABLE GASTRIC BANDING: THE SURGICAL PROCEDURE

Approved by the FDA in June 2001, the Inamed Health® LAP-BAND® Adjustable Gastric Banding System is the newest and the only adjustable surgical treatment for morbid obesity in the United States. It induces weight loss by reducing the capacity of the stomach, which restricts the amount of food that can be consumed, and provides a sense of satiety with less food.

During the procedure, Dr. Johnell uses laparoscopic techniques (using small incisions and long-shafted instruments rather than a large incision), to implant an inflatable silicone band into the patient's abdomen. Like a wristwatch, the band is fastened around the upper stomach to create a new, tiny stomach pouch that limits and controls the amount of food you eat. It also creates a small outlet that slows the emptying process into the stomach and the intestines. As a result, patients experience an earlier sensation of fullness and are satisfied with smaller amounts of food. In turn, this results in weight loss. The advantage of laparoscopic surgery is that patients have less discomfort, a shorter recovery time from surgery, and fewer complications.

The LAP-BAND® system is the only adjustable weight loss surgery. The diameter of the band is adjustable to meet individual needs, which can change as patients lose weight. For example, pregnant patients can expand their band to accommodate a growing fetus, while patients who aren't experiencing significant weight loss can have their bands tightened. To modify the size of the band, its inner surface can be inflated or deflated with saline solution. The band is connected by tubing to a reservoir, which is placed well under the skin during surgery. After the operation, the surgeon can control the amount of saline in the band by entering the reservoir ("adjustments") with a fine needle through the skin.

The Adjustable system has been proven successful for long-term weight loss in patients all over the world. Hundreds of thousands of LAP-BAND® have been placed in patients worldwide.

PATIENT INFORMATION SEMINAR & YOUR INITIAL CONSULTATION

When you call the office to make your first appointment, you will be scheduled for back-to-back appointments with a nurse and the surgeon. Prior to your consultation appointments you will be required to attend a *Patient Information Seminar* (also called "Info Session") or watch the DVD we send to you in the mail. The information seminar covers a variety of topics on the program at North Colorado Medical Center. If attending an information seminar would be met with great difficulty because you live too far away, it is possible to waive the seminar. Most of the information provided in the seminars can be obtained from the DVD.

The following topics are covered in seminar:

- The anatomy and physiology of the surgeries for weight loss.
- Short-term and long-term patient results and outcomes, data and statistics.
- Risks and complications.
- Insurance & timelines for how soon patients can expect to have surgery.
- Comparing and contrasting the Lap-Band® with the gastric bypass procedure.
- Pre-operative vitamin, mineral, nutrition and exercise programs to help get your body in the best possible shape for surgery.

Seminars are held frequently during the month in the Greeley/Loveland/Fort Collins/Denver metro area. Go to our website: www.BannerBariatric.com or Dr. Johnell's website at: www.bariatricoperation.com, for a list of upcoming dates and locations. Patients are invited to bring relatives and friends to seminar.

Read all of the materials in this packet carefully so that you will come into the office consultations well informed. ***Take the "patient true/false" in the back of the handbooks and bring them along with the other completed forms to the office for your first appointment with the nurse. We will not be able to see you without the completed packet.***

During your visit with the nurse she will calculate your BMI and ideal body weight. If you do not meet the basic requirements for surgery, **you may or may not go forward with the scheduled visit with the surgeon, and you will not be charged for the visit.** The nurse will review preoperative vitamins, minerals, and exercise. She will also discuss issues such as time off from work and getting back to work, support from family and friends, and the patient support groups and programs available to you. As you read this handbook, write down any questions that come to mind so that your specific concerns can be addressed at the time of this visit.

During this visit, you may tell the nurse if you would like to receive psychological counseling regarding your surgery. Some patients find counseling very helpful in dealing with fears, anxiety, depression, emotional problems, compulsive eating, family conflicts, and any other kinds of problems. Behavior problems such as binge eating, and emotional problems such as depression and anxiety are not cured by surgery. In fact, these kinds of problems can actually worsen after surgery. Occasionally, patients are asked to obtain counseling before they have surgery in order to ensure success after surgery.

We have psychological counselors on our team that are available to help you through your journey. Our psychologist is available for private counseling and medical hypnosis. Several psychology professionals, including a counselor who specializes in eating disorders, are available to assist you in working through issues both before and after your surgery.

Unless you are physically unable, we will ask that you begin a walking or other aerobic exercise activity for all of the weeks prior to your surgery. For the time period before your surgery, you will be required to follow a diet of low calorie and low fat foods, as well as a vitamin and mineral supplementation protocol.

If you smoke cigarettes or use other tobacco products, you will have to discontinue use of these products. Nicotine thwarts wound healing, and smoking reduces lung capacity and stamina. Patients must be tobacco/nicotine-free for a minimum of one month prior to surgery. Pre-op blood work will measure nicotine levels to ensure that you are nicotine-free. *Patients will have their surgery postponed if nicotine levels are positive.* Assistance is available for smoking cessation.

At the time of your consultation with Dr. Johnell, he will make sure that you meet the NIH criteria of a BMI of 40 (or 35-39 with serious health problems). He will then ask that you lose 10% of your "excess" weight before surgery. For example: If you are 100 pounds above your "ideal body weight" you will be asked to lose approximately 10 pounds. This requirement has become a standard practice of bariatric surgeons due to the research that indicates that patients have shorter anesthesia times, and better recovery after losing a small amount of weight before surgery. Preoperative weight loss has been shown to decrease the size of the left lobe of the liver and decreases the amount of intra-abdominal fat. After preoperative weight loss, the surgeon has better "dexterity" and visibility in the abdomen, which in turn shortens operation time and increases patient safety.

Making the healthy lifestyle changes of increasing activity, taking vitamins, and eating a healthy diet before surgery, will put you in the best possible shape for major surgery and general anesthesia. For your own safety, Dr. Johnell will postpone your surgery if you do not lose the requested amount of weight or if you gain weight before your operation.

During your consultation with Dr. Johnell, he will discuss and clarify your medical history, conduct a brief physical examination, and determine from a surgical standpoint if you are a good candidate for weight loss surgery. If you are a candidate, he will discuss the benefits, expected outcomes, risks, complications, and contraindications for the different procedures.

Most patients make the decision to go forward with surgery at this time, and the process of getting insurance approval and of obtaining a psychological screening begins. You may choose to delay your decision, and you may call regarding your decision at a later time. We will prepare and send a request for pre-approval to your insurance company within approximately two weeks of your consultation with the surgeon. We will give you instruction on how to arrange for your psychological screening with our psychology department. If your insurance company requires a psychological evaluation, the cost of the service should be covered. You may have to pay out-of-pocket for the psychological screening. We may

require and/or your insurance company may require that you complete a nutrition evaluation; if this is needed we will assist you with setting up an appointment with our dietician. Some insurance companies deny coverage for The LAP-BAND® procedure labeling it "experimental". These same companies will often approve the gastric bypass procedure. If you are only interested in a LAP-BAND®, be prepared to make a decision to have or not have a gastric bypass in the event that your insurance denies the gastric banding.

MEDICALLY SUPERVISED WEIGHT LOSS PROGRAM

Most insurance companies require patients to complete a "medically supervised weight loss program" for 3, 6, or 12 months before they will even consider payment for weight loss surgery. Most patients are unsuccessful with sustainable weight loss after these programs. If you are required by your insurance company to complete a medically supervised weight loss program, we will give you special assistance with this requirement. Our Bariatric Case Manager will meet with you in the office (or meet with you on the telephone) to discuss and review our "Survivor's Guide" for completing a program. We provide you and your primary care provider with a packet of written materials to get you started. The Bariatric Case Manager will follow your case for the required number of months, and will help you to get your documentation submitted for insurance approval.

SCHEDULING FOR SURGERY & PRE-OP TESTING

Once we obtain approval for surgery from your insurance, our office will contact you with a tentative surgery date, schedule you for preoperative classes, labs, and exams, and will arrange for your preoperative visit in the office. All testing is completed at North Colorado Medical Center and Summit View Medical Commons in Greeley unless special arrangements are made to have testing completed elsewhere *well in advance of surgery*.

If you have gallstones and are experiencing pain associated with your gallbladder, Dr. Johnell will advise you to have your gallbladder removed several weeks or more before your LAP-BAND® procedure. Dr. Johnell will not perform the LAP-BAND® placement at the same time as a gallbladder removal due to the increased risk of infection associated with operating on a diseased gallbladder in conjunction with the insertion of a foreign body.

PREOPERATIVE CLASS

You will be scheduled for, and required to attend a Preoperative Class approximately 1-4 weeks prior to your surgery. Pre-op Class is held on Mondays at North Colorado Medical Center, and is a full day of class. Lunch is provided. You are invited to bring a support person such as a spouse or significant other, a parent, adult child, or other friend or family member with you to the Pre-op Class. Attendance is required for surgery to go forward.

The Preoperative Class is taught by registered nurses, a clinical dietician, and an exercise physiologist. The nursing portion of the class includes all of the information you will need about such topics as:

- Technical aspects of the surgical procedure
- Your hospital experience
- What to expect the day of surgery
- What to do the days before your operation

- Shopping needs for drug store and grocery store
- Prevention of pneumonia and blood clots
- Staying hydrated
- Caring for your incisions
- Medications
- Tracking your progress
- Support groups
- How to recognize a medical problem or emergency after you get home from the hospital
- What to do in the event of a post-op problem
- Review of Lap-Band® adjustment protocol

The exercise physiologist reviews pre and postoperative exercise including:

- Aerobic fitness.
- Resistance training.
- Flexibility.
- Resources for incorporating exercise at home.
- Demonstration of blood clot preventative leg exercises.

The nutrition portion of the class includes:

- Thorough review of the "Lap-Band® Nutrition Handbook"
- In-hospital and home-from-the-hospital diet progression.
- Sample menus.
- Do's and Don'ts.
- Selecting and preparing liquid, pureed, and soft foods.
- Reading food labels.
- Vitamin and mineral supplementation.
- Prevention of vomiting.
- Eating methods for long-term success.
- Support resources and aftercare classes

YOUR PREOPERATIVE VISIT

During your preoperative appointment, you will be given a complete physical exam by the nurse practitioner or the physician's assistant. This visit allows you to ask, and get answers to any additional questions you may have. If Dr. Johnell has not already reviewed the Informed Consent with you during the preoperative class, he will do so at this time. When you feel that you fully understand everything about the surgery, you will be asked to sign your consents. Results from your preoperative lab work and studies will be reviewed during this visit.

You will be provided with written instructions on what to eat and drink for the two days prior to surgery. On the day before surgery, you will be instructed to drink a liquid to "clean out your bowels" and <u>it is advised that you do not plan to work or travel on this day</u>.

Your surgery will be performed at North Colorado Medical Center, which is the hospital complex adjacent to Dr. Johnell's office. If you are from out of town, you may need to make arrangements to stay overnight in Greeley before your surgery. We can give you a list of local motels, or for a nominal fee, you may want to stay at the Hospitality House. The Hospitality House is located on the main campus of the Medical Center. Our office can provide you with more information regarding the Hospitality Program.

Before surgery, one of the nurses from Ambulatory Care (AC), our pre-op area, will contact you to obtain a medical history and to provide additional information on time of arrival to the hospital, where to go, eating/drinking instructions, and to answer any questions you may have. An anesthesiologist will evaluate you for general anesthesia the morning of your surgery.

THE HOSPITAL STAY

SAME-DAY SURGERY

Some patients electing to have LAP-BAND® surgery are eligible for discharge on the same day as surgery. In some cases, a patient who is scheduled to go home the day of surgery may remain in the hospital if there is need for closer observation. Patients who live greater than two hours away from Greeley will be discharged to the Hospitality House or a local motel for the night and will be allowed to go home the next morning if they are feeling fine.

If you are scheduled for same-day discharge, you will be admitted to the hospital on the day of your surgery. Family members (or significant others) may accompany you to Ambulatory Care. There you will be prepared for surgery, an IV will be started, and you will be given medication to reduce the incidence of nausea and vomiting. You may also be given IV medication to relax you. To decrease the chance of developing blood clots, anti-embolism stockings and sequential compression devices (SCD's) will be placed on your legs, and blood-thinning medication will be given subcutaneously (by injection under the skin). Your family may stay with you as you wait to be called into surgery. Most days, the bariatric case manager (that you will have already met in the clinic or in the Preoperative Class), will greet you and your family in Ambulatory Care.

While you are in surgery, your family will be advised to wait in the surgery waiting area near the operating room. Immediately after your surgery is completed, Dr. Johnell will go to the surgery waiting area to give your family a progress report. The surgery itself usually takes 30-60 minutes; however total time from AC to Recovery Room (also known as the Post Anesthesia Care Unit or PACU) can take as long as two hours or more. After surgery, you go to the PACU for approximately one hour. You will then be transferred back to ambulatory care to recover in the post-operative till you are discharged home.

Most patients will not have a urinary catheter or a nasogastric tube (nose to stomach) placed during surgery. Pain control is managed by use of IV and oral pain medication. Your

nurse will make sure that your pain is under control. IV antibiotics and subcutaneous blood thinners are usually given in this postoperative period.

Pressure devices such as antiembolism stockings and SCD's will remain on your legs to prevent blood clots. These function independently, do not cause discomfort, and are effective in reducing the incidence of blood clot formation in the legs. The single most effective way to prevent blood clots and pneumonia (the two most common complications after surgery) at this critical post-op period is to get out of bed and walk. Once you have been evaluated by the nurse, you will be getting out of bed to a chair and will be walking with assistance down the hall.

As a precaution, oxygen may be provided to you via a nasal cannula on a continuous basis after surgery. If oxygen is ordered, an oxygen saturation monitor will be placed on your finger to insure that you are breathing adequately. This monitor is a loose clamp that fits over your finger. If necessary, you will be visited by a respiratory therapist who will conduct a pulmonary evaluation. To prevent lung complications, you will be required to use the "incentive spirometer" (plastic breathing device) every hour while awake. You will be instructed on its use in the Preoperative Class. Intermittent deep breathing and coughing are encouraged every hour while awake for the next several days.

An hour or two after you are transferred to ambulatory care post-operative area; you will be transported to the radiology department for a "Gastrografin swallow". You will be asked to swallow about a half of a cup of a radio-opaque liquid, and an x-ray of the stomach is taken to determine if fluids can flow easily through the band. When it is OK with the radiologist and surgeon you will start taking small portions of clear liquids by mouth. If you are tolerating liquids well, and your pain is controlled with oral pain medication, you will be discharged. A detailed discharge instruction sheet will be given to you before you leave that contains information about wound care, activity, showering, fever, pain, nausea and vomiting, medications and other instructions.

If you have diabetes, your blood sugar will be monitored every six hours while you are in the hospital. Blood sugars are measured with a "Diascan". A tiny pinprick on a fingertip provides the drop of blood necessary for this test. Diabetic patients will receive insulin on a "sliding scale" basis as needed. At the time of discharge, your nurse will advise you on how to resume your diabetic medications once you get home.

Most patients are discharged from ambulatory care within 4-6 hours of their surgery. If you live more than two hours away from Greeley, we require that you stay overnight in the Hospitality House on the Medical Center campus (Courtesy of NCMC) or you may stay in a local motel at a discounted rate.

HOSPITAL STAY - OVERNIGHT

Some patients are required to stay overnight after their LAP-BAND® procedure. Conditions that would require an overnight stay would be health problems such as severe sleep apnea, oxygen requirement, heart disease, Diabetes Type I, history of blood clots, high BMI and others. Occasionally, patients with pre-existing heart and lung problems, patients

with a high BMI, or patients that have an open procedure, may go to the ICU for closer monitoring.

If you are tolerating liquids well and your pain is controlled with oral pain medication, you will be discharged before 12:00 noon the day after surgery. A detailed discharge instruction sheet will be given to you in the hospital that contains information about wound care, activity, showering, fever, pain, nausea and vomiting, medications, and other instructions.

AT HOME

It is important for you to get up and walk many times each day after you are home. It is suggested that you not stay in one place longer than 30 minutes at a time unless you are sleeping. It is recommended that you keep your legs elevated when you are seated. Allowing your legs to dangle over the edge of a chair or the edge of a bed for more than a few minutes will cause your circulation to slow and allow blood clots to form. Do your breathing exercises using the IS device every hour while awake for several days after surgery.

You will have between six and ten appointments for adjustments to the band in the office within the first postoperative year. Your first appointment will be one week after surgery. Your second appointment (unless for any reason you need to come in sooner) will be in the sixth week after surgery, at which time most patients receive their first band adjustment.

LAP-BAND® ADJUSTMENTS

Placement of fluid in the band is purposely delayed until six weeks after surgery in order to allow the band to "settle in" and the patient to get used to the sensation of having the band in place. Despite the fact that no restriction is added to the band initially, patients may lose weight during the first six weeks. Most patients need a "fill" or band adjustment by the sixth week after surgery. In most cases, adjustments are made in the office and take just a few minutes. On a rare occasion, the adjustment port is too deep to feel in the office and patients will need to be adjusted in the radiology department at the hospital under fluoroscopy for the first one or two adjustments.

Band adjustments are made by having the patient lie down on the exam table in the office and "do a sit-up" to enable the practitioner to feel the port under the skin and fat of the abdomen. Some patients will have their adjustments while seated in a chair. The port is located and marked, and the skin is prepared with alcohol. Then, a special non-coring needle attached to a syringe filled with a small amount of sterile saline (salt water) is passed through the skin into the port. Patients tell us that the adjustments are nearly painless even though skin numbing medicine is not used.

Patients must take liquids only for four hours immediately prior to a band adjustment. After band adjustments are made, patients drink liquids for the remainder of the day, pureed food for a day and then back to a soft/regular diet. The average patient loses one to two pounds per week. The first year after surgery, the average patient will get seven band adjustments to maintain weight loss. The second year, an average of one or two adjustments can be expected, and the third year, probably no adjustment will be necessary.

Lifelong, patients will need small adjustments to the band from time to time because there is a small amount of saline that will diffuse out into the band system over time.

As a patient, you will be given clear instructions about what constitutes readiness for the next adjustment including diminishing weight loss, ability to eat more at meals, increased hunger, and difficulty following the eating rules. You will also be given clear instructions on what would occur should the band be too tight. Some of the symptoms of a band that is too tight are salivation, inability to eat solid food, coughing, and regurgitation of food. Patients who wait too long before their next adjustment have slower weight loss over time because the band is too loose. Patients, who have a band that is overfilled, will begin to engage in dysfunctional eating. Dysfunctional eating occurs because patients are unable to eat solid foods therefore eat softer, easier to digest foods that are often high in fat and high in sugar. Patients with bands that are too tight will also have poor weight loss over time.

One of the major advantages of the LAP-BAND® is that it can be adjusted if patients become ill or pregnant. The band can be loosened to allow for better nutrition, and retightened when indicated. In the event of a catastrophic illness, the band can be removed.

WORK, ACTIVITY, AND EXERCISE

Most patients find that they can return to work three to seven days after surgery. The ability to return to work varies from patient to patient, and is a function of the demands of your job, and the speed of your individual recovery.

You will be expected to start back on a modified version of your pre-operative exercise program the day you get home from the hospital. Most patients resume a walking program. Exercise will become easier and easier after your surgery as you lose excess weight, build stamina, and develop cardiovascular fitness. Believe it or not, your exercise will become a regular activity that you actually look forward to! Work up to doing your exercise every day of the week for a minimum of thirty minutes each day.

Exercise is your ticket to life-long health. Make it as common to your daily life as brushing your teeth, eating your dinner, and taking a shower! Whenever possible, exercise with a relative or friend. Vary your exercise by changing the locations, routes, and type of exercise you engage in. Experiment! Find what works for you! If possible join a health club and/or hire a personal trainer for a few sessions. Plan ahead and purchase a stationary bike or treadmill, so that weather cannot become an excuse not to exercise.

After you get home from the hospital, try not to sit or stand in one place for longer than 30 minutes at a time. Blood clots can form in the legs as late as four to six weeks after surgery and are aggravated by inactivity. If you must drive a long distance to get home from the hospital, plan to stop the car every 30 minutes to walk around for awhile. You will need to elevate your legs to the level of your heart for the journey home. Light housekeeping is fine as soon as you feel able. Sexual activity may resume two weeks after surgery or as soon as you feel able. Plan to return to driving a car after you have discontinued taking pain medication. You may lift up to 20 pounds in the first month after surgery, and in the second

month, you may double the allowed weight to lift. Increase strenuous activities slowly, and use pain as an indication of overdoing it.

You are instructed to add weight lifting (resistance training) exercises to your activity starting within the second month after surgery. Follow the guidelines we give you in the Pre-op Class for this activity.

NUTRITION PLAN

When you get home from the hospital, you will start the nutrition plan as outlined in the Pre-op Class prior to surgery. You will slowly advance from a liquid diet to a solid diet. Follow this plan very carefully. Vomiting should be avoided as much as possible. If you do not follow the diet restrictions carefully, you may trigger vomiting episodes which can lead to stretching the new pouch, esophageal tears, or you may cause the band to slip out of place. Patients may have to undergo a second operation *as a direct result of overeating and/or starting solid foods too soon.*

Eating foods that are made of highly concentrated calories of sugar and/or fats will sabotage your weight loss. Unlike the gastric bypass patient, the LAP-BAND® patient does not get the "dumping syndrome" from fats and sweets. LAP-BAND® patients will have no restriction on fluids in the first six weeks after surgery.

THE TEN EATING RULES:

1. Eat only five small meals a day.
2. Eat slowly and chew thoroughly.
3. Stop eating as soon as you feel full.
4. Do not drink while you are eating, and do not drink after meals for 1 ½-2 hours.
5. Do not eat between meals.
6. Eat only good quality foods.
7. Avoid fibrous foods.
8. Drink enough fluids during the day.
9. Drink only low or no calorie liquids.
10. Exercise at least 30 minutes a day.

The following pages contain a brief overview of the diet and nutrition instructions you will be receiving from the bariatric staff:

WEEKS ONE & TWO
FULL LIQUID DIET
(High protein, low calorie liquids)

You will remain on a liquid diet for TWO WEEKS after your discharge from the hospital. Solid foods will put too much stress on your new stomach pouch. The main focus of these first two weeks of liquid diet is PROTEIN intake. Your body is trying its best to heal new wounds and fight off infection. Without adequate protein intake, you will not have the tools with which to heal and protect. To insure that you get enough protein, we will prescribe high

protein liquid supplements, and show you how to count protein grams. Depending on whether you are male or female, you will need to get between 65 and 75 grams of protein per day.

At this time in your recovery, you will need to concentrate on drinking enough fluids to prevent dehydration. You will need to drink a minimum of six cups or 48 ounces of sugar-free fluid every day. Once you have tested your new pouch, and know that fluids will travel through the band easily, fluid intake does not need to be restricted.

In the Preoperative Class, you will receive precise written guidelines for each of the diet progressions discussed here. The Full Liquid Diet includes all of the clear liquids you started with in the hospital, plus "non-clear" liquids such as skim milk, fresh fruit smoothies, protein shakes, cream soups (strained of solids), cooked cereals (soupy, such as Cream of Wheat), mashed potatoes, low fat yogurt (no sugar added, blended), and sugar free/fat free pudding.

WEEKS THREE AND FOUR
(Pureed foods)

This stage of the diet will require that you use a blender to puree all of your solid foods. Some patients prefer to use baby foods or a combination of both. You will be able to add foods such as scrambled eggs, pureed fruits and vegetables, pureed meats, cottage cheese and creamy peanut butter.

WEEKS FIVE AND SIX
(Soft Foods)

This stage of your nutrition plan allows you to advance from pureed food to soft foods that are well cooked. You should eat 5 small meals a day. Continue to drink 6 cups of liquid a day or more. At this time you will be adding the following kinds of foods to the list of foods you have been eating:

Baked fish, chicken, and turkey
Dried, beans, peas, and lentils (cooked)
Lean ground beef and veal
Steamed, boiled, or canned vegetables
Canned fruit, packed in its own juice or soft fresh fruit–no skin
Toasted breads, Melba toast
Baked or mashed potato (no skin)
Lettuce and tomato

WEEK SEVEN
(Regular Foods)

Advance your foods to the healthy, low fat, low carbohydrate, high protein foods you will be eating for life, using your nutritional guidelines. You may add raw fruits and raw vegetables at this time.

General Rules to Follow:

Take small bites, chew well, and pause between bites. Chew each bite at least 20 times before swallowing. Take at least 15-30 minutes for each small meal. By going slowly with your meals, you will learn which foods are tolerated more readily and avoid problems.

Drink liquids between meals only. Drink liquids up to one half hour before meals or one and a half to two hours after a meal. You may take small sips of liquid with your meals, but taking more than a few sips, or drinking fluids within the first hour and a half after eating, will cause the food in your pouch to be "washed through". Since the feeling of satiety is a function of stretch placed on the stomach wall, flushing foods through the pouch too soon after eating will lead to early between meal hunger.

Always include high protein foods at each meal. Also include foods from each of the food groups in your meal plan on a daily basis. The Pre-op Class will provide you with information to help you formulate balanced, high protein, low fat, low carbohydrate meals. You need not eat different meals from the others in your household, as long as you follow the stages of your diet carefully, and avoid high fat, high calorie and high sugar foods.

- Relax and enjoy mealtimes. Wait until you are more relaxed before eating if you are under stress or anxious at mealtime. Highly stressful situations will often cause food intolerances.
- Do not drink liquids that have a lot of sugar such as Snapple, Kool Aid, Gatorade, and Hi C. Do not add sugar to your drinks. These drinks will add too many calories and are not restricted by the band.
- Do not drink carbonated beverages. These can make you feel bloated and stretch the pouch.
- Do not drink alcohol; including hard liquor, beer, wine, or wine coolers until you have had several months to become accustomed to the band. Thereafter, drink no more than an occasional glass of wine with dinner. There is some evidence in the scientific literature to show a possible correlation between alcoholic beverage intake, and band erosion.
- It is best to not chew gum. If you swallow your gum, it can block the outlet of your pouch.
- Stop eating when you feel full. You do not need to finish your entire portion if you are full. Continuing to eat after you are full will cause nausea and vomiting and may cause the band to slip.
- Call your doctor if you are not able to eat due to nausea and vomiting, or if you have severe diarrhea. Vomiting for more than 24 hours should be reported to the office or answering service.
- Make sure your foods are very moist. Dry or tough foods are harder to tolerate.

FOODS TO AVOID

You will receive a list of foods to avoid in the LAP-BAND® Nutrition Handbook during the Pre-op Class. Past experience indicates that with most patients certain foods are not tolerated well in the first six months or more after gastric banding. Some of the foods you might want to avoid are potato skins, onion skins, fruit peelings, and the membrane between orange and grapefruit sections, the stringy portion of celery, asparagus, string beans, un-toasted bread, and high caloric, high fat foods, and beverages. Some patients have

difficulty with chicken, steak and pork. Most patients have some difficulty with rice, pasta, and tortillas.

TAKING MEDICATIONS

Most patients can tolerate taking medium-sized pills and capsules immediately after surgery. Pills should be taken one at a time. Large pills and capsules may not be tolerated well because they obstruct the opening in the band. Check with your pharmacist to determine if your large-sized medication(s) come in liquid form. Another option for large-sized medications is to crush them up and put them in juice or applesauce. Some medications should not be crushed because they are "time released". Check with your pharmacist if you have doubts about any of your pills.

VITAMINS & MINERALS

Before surgery, you must make a lifetime commitment of taking supplemental vitamins and minerals. Since you are taking in lesser amounts of food (and therefore nutrition) after your surgery, you will likely not get the minimum requirement of many nutrients, vitamins and minerals.

When you get home from the hospital, you will continue to take a multivitamin and mineral supplement. You will also be taking calcium. LAP-BAND® patients do not have to worry about the kinds of vitamin and mineral deficiencies seen in gastric bypass patients because there is no "bypassing" of small bowel with gastric banding.

SUPPORT GROUP

Bariatric patient support groups have proven to be an essential part of the recovery process for many patients. Research shows that patients who regularly attend support group meetings have better weight loss. Support groups are held regularly at North Colorado Medical Center. All potential and post-operative patients and their families are invited to attend these meetings. Support groups are offered each month for all patients

Support groups offer a comfortable forum for patients who have already had bariatric surgery, as well as for new patients considering or awaiting surgery. Patients can learn a tremendous amount when sharing individual experiences. Support groups tend to be upbeat, informative, and forward looking! We think that support group attendance is so important to patient education and patient recovery that it is strongly suggested that new patients awaiting surgery attend at least one support group meeting prior to having surgery.

For a list of upcoming support groups, classes and patient information seminars you may visit our website: www.bannerbariatric.com or www.bannerbariatric.com and select the options for these items.

IMPORTANT WEBSITES & SUPPORT SITES

www.lap-band.com
www.obesityhelp.com

OBESITY INFORMATION WEBSITES

A great source of support and information can be gathered by visiting the websites of the obesity related organizations and journals. Here is a partial list of the sites:

1. The American Society for Bariatric Surgery — www.ASBS.org
2. The American Society of Bariatric Physicians — www.asbp.org
3. American Obesity Association — www.obesity.org
4. North American Association for the Study of Obesity — www.naaso.org
5. Obesity Surgery Journal — www.obesitysurgery.com

RISKS AND COMPLICATIONS

The LAP-BAND® adjustable gastric banding procedure is one of the safest weight loss procedures available in the world today. It carries relatively low complication and mortality rates. The global death rate for the LAP-BAND® procedure is 1/10th that of the gastric bypass procedure. Dr. Johnell's mortality rate is zero for LAP-BAND® and for gastric bypass. Morbid obesity itself carries a much higher mortality risk to the patient as it increases the risk of diabetes, heart disease, respiratory problems, liver dysfunction, and many other diseases.

Placement of the LAP-BAND® System includes the same risks that come with all major surgeries. There are also added risks in any operation for patients who are seriously overweight. There is a risk of gastric perforation (a tear in the stomach wall) during or after the procedure that might lead to the need for another surgery. Your age can increase your risk from surgery. Excess weight can increase risk from surgery. Certain diseases, whether caused by obesity or not, can increase your risk from surgery. There are also risks that come with the medications and the methods used in the surgical procedure. You also have risks that come from how your body responds to any foreign object implanted in it. Published results from past surgeries, however, do show that LAP-BAND® System surgery may have fewer risks than other surgical treatments for obesity.

Patients can experience complications after surgery. Most complications are not serious but some may require hospitalization and/or re-operation. Adverse events that were considered to be non-serious, and which occurred in less than 1% of the patients, included: esophagitis (inflammation of the esophagus), gastritis (inflammation of the stomach), hiatal hernia (some stomach above the diaphragm), pancreatitis (inflammation of the pancreas), abdominal pain, hernia, incisional hernia, infection, redundant skin, dehydration, diarrhea, abnormal stools, constipation, flatulence (gas), dyspepsia (upset stomach), eructation

(belching), cardiospasm (an obstruction of passage of food through the bottom of the esophagus), hematemsis (vomiting of blood), fatigue, fever, chest pain, incision pain, contact dermatitis (rash), abnormal healing, edema (swelling), paresthesia (abnormal sensation of burning, prickly, or tingling), dysmenorrhea (difficult periods), hypochromic anemia (low oxygen carrying part of blood), band system leak, cholecystitis (gallstones), esophageal ulcer (sore), port displacement, port site pain, spleen injury, and wound infection.

The LAP-BAND® System is a long-term implant, but it may have to be removed or replaced at any time. For instance, the device may need to be removed to manage any adverse reactions you might have. The device may also need to be removed, repositioned or replaced if you aren't losing as much weight as you and your doctor feel you should be losing.

The specific risks and possible complications are as follows:

- ulceration
- gastritis (irritated stomach tissue)
- gastroesophageal reflux (regurgitation)
- heartburn
- gas bloat
- dysphagia (difficulty swallowing)
- dehydration
- constipation
- weight regain
- death

Laparoscopic surgery has its own set of possible problems. They include:

- spleen or liver damage (sometimes requiring spleen removal)
- damage to major blood vessels
- lung problems
- thrombosis (blood clots)
- rupture of the wound
- perforation of the stomach or esophagus during surgery

Laparoscopic surgery is not always possible. The surgeon may need to switch to an "open" method due to some of the reasons mentioned here. This happened in about 5% of the cases in the U.S. Clinical Study. Dr. Johnell has had no patients require a conversion.

There are also problems that can occur that are directly related to the LAP-BAND® System:

- The band can spontaneously deflate because of leakage. That leakage can come from the band, the reservoir, or the tubing that connects them.
- The band can slip.
- There can be stomach slippage.
- The stomach pouch can enlarge.
- The stoma (stomach outlet) can be blocked.
- The band can erode into the stomach.

Obstruction of the stomach can be caused by:

- Food
- Swelling
- The band being over-inflated
- Band or stomach slippage
- Stomach pouch twisting
- Stomach pouch enlargement

There have been some reports that the esophagus has stretched or dilated in some patients. This could be caused by:

- The band being tightened too much
- Stoma obstruction
- Binge eating
- Excessive vomiting

Patients who have a weaker esophagus may be more likely to have this problem. A weaker esophagus is one that is not good at pushing food through. Patients are instructed to call the office if they have difficulty swallowing. Weight loss with the LAP-BAND® System is typically slower and more gradual than with some other weight loss surgeries. Tightening the band too fast or too much to try to speed up weight loss should be avoided. The stomach pouch and/or esophagus can become enlarged as a result. You need to learn how to use your band as a tool that can help you reduce the amount you eat. Infection is possible. Also, the band can erode into the stomach. This can happen right after surgery or years later, although this rarely happens.

Complications can cause reduced weight loss. They can also cause weight gain. Other complications can result that require more surgery to remove, reposition, or replace the band. Some patients have more nausea and vomiting than others. Call the office if vomiting persists.

Rapid weight loss may lead to symptoms of:

- Malnutrition
- Anemia
- Related complications

It is possible you may not lose much weight or any weight at all. You could also have complications related to obesity.

If any complications occur, you may need to stay in the hospital longer. You may also need to return to the hospital later. A number of less serious complications can also occur. These may have little effect on how long it takes you to recover from surgery. If you have existing problems, such as diabetes, a large hiatal hernia (part of the stomach in the chest cavity), Barrett's esophagus (severe, chronic inflammation of the lower esophagus), or emotional or psychological problems, you may have more complications. Your surgeon will consider how bad your symptoms are, and if you are a good candidate for the LAP-BAND® System surgery. You also have more risk of complications if you've had a surgery before in

the same area. If the procedure is not done laparoscopically by an experienced surgeon, you may have more risk of complications.

Anti-inflammatory drugs that may irritate the stomach, such as aspirin, Motrin, Advil, and Aleve should be used with caution. Some people need folate and vitamin B12 supplements to maintain normal homocysteine levels. Elevated homocysteine levels can increase risks to your heart and the risk of spinal birth defects.

You can develop gallstones after a rapid weight loss. This can make it necessary to remove your gallbladder.

There have been no reports of autoimmune disease with the use of the LAP-BAND® System. Autoimmune diseases and connective tissue disorders, though, have been reported after long-term implantation of other silicone devices. These problems can include systemic lupus erythematosus and scleroderma. At this time, there is no conclusive clinical evidence that supports a relationship between connective-tissue disorders and silicone implants. Long-term studies to further evaluate this possibility are still being done. You should know, though, that if autoimmune symptoms develop after the band is in place, you may need treatment. The band may also need to be removed. Also, if you have symptoms of autoimmune disease now, the LAP-BAND® System may not be right for you.

If the LAP-BAND® System has been placed laparoscopically, it may be possible to remove it the same way. This is an advantage of the LAP-BAND® System. However, an "open" procedure may be necessary to remove a band. In the U.S. Clinical Study, 60% of the bands that were removed were done laparoscopically. Surgeons report that after the band is removed, the stomach returns to essentially a normal state.

At this time, there are no known reasons to suggest that the band should be replaced or removed at some point unless a complication occurs or you do not lose weight. It is difficult, though, to say whether the band will stay in place for the rest of your life. It may need to be removed or replaced at some point. Removing the device requires a surgical procedure. That procedure will have all the related risks and possible complications that come with surgery. The risk of some complications, such as erosions and infection, increase with any added procedure.

All female patients will be given a pregnancy test prior to surgery regardless of age or reproductive status. The pregnancy test not only looks for pregnancy, but also conditions that may cause a false positive pregnancy test results. Women who are taking birth control pills, hormone pills or patches to prevent pregnancy, treat menopausal symptoms, polycystic ovarian syndrome, irregular periods or migraine headaches, will be required to come off of their hormone therapy for a period of at least one month prior to surgery and continue off the medications for a least one month post-operative. These medications have a propensity to cause blood clots. For patients who are on Depo-Provera shots there is a decreased risk of developing blood clots compared to other types of hormone medications, discontinuing the injections prior to or after surgery is not necessary.

Acceptable forms of birth control during this period are diaphragms when used with spermicidal cream, and condoms if used in conjunction with spermicidal foam. It is safe to become pregnant after the LAP-BAND® surgery. If you do become pregnant, please notify us so that we can stay in contact with your OB-GYN doctor and insure that you are getting adequate nutrition.

BENEFITS, EXPECTATIONS, AND OUTCOMES

Gastric banding surgery is not a cure for obesity; it is a tool to help patients lose weight. It is not automatic, and the patient's behavior after surgery plays a very large part in his or her outcome. Gastric banding works to help patients with weight loss in two ways; 1) by making the stomach much smaller so that less food can be eaten at a meal, and 2) by curbing appetite after small amounts of food in the stomach pouch trigger a feedback chemical message to the brain which in turn provides an early sense of satiety.

After LAP-BAND® surgery, you can expect to feel full on smaller meals; have less hunger, feel an improved sense of self–control, and will find it easier to avoid snacking between meals. To be successful, you will be want to avoid snacks, avoid foods that will easily flow through the band, avoid high calorie liquids, and avoid drinking fluids for at least 90 minutes after meals. You will need to eat nutritious and healthy foods, be active and exercise, and make psychological adjustments.

You should lose weight gradually. Losing weight too fast creates a health risk and can lead to a number of problems. A weight loss of two to three pounds a week in the first year after the operation is possible, but one to two pounds a week is more common. Twelve to eighteen months after the operation, weekly weight loss is usually less. Overall weight loss averages 60% of excess weight after two years.

Research indicates that there is a variation of weight loss results among patients. Surgeons, who have followed up on their patients over the long term, have found that the great variation in weight loss is due in part to variations in dietary and exercise patterns. Patients who do well with weight loss tend to avoid snacks, eat nutritious foods, and are more active. Those patients who show a less than average weight loss over time tend to be the individuals who do not change their eating and exercise patterns, and/or return to snacking. It is a fact that patients who drink a lot of fruit juice and other high calorie drinks have poorer weight loss. Since there are so many factors involved in an individual's eating patterns (genetic, social, emotional, and cultural), there is no psychological or medical test that can accurately predict who will do very well with weight loss and who will only lose a small amount.

Weight loss after LAP-BAND® surgery has been shown to dramatically improve medical conditions such as diabetes, high blood pressure, obstructive sleep apnea, reflux disease (GERD), and joint pain. Weight loss will improve conditions such as congestive heart failure, high cholesterol, high triglycerides, urinary incontinence, menstrual irregularity, back pain, hursutism, and pseudotumor cerebri. Type II Diabetics obtain excellent results after surgery. Many physicians now believe that bariatric surgery may be the best treatment for diabetes in the seriously obese patient.

Patients with asthma find that they have fewer and less severe attacks after surgery, especially when attacks are triggered by episodes of gastric reflux. Other respiratory problems are improved after surgery. Patients who were unable to walk without getting short of breath prior to surgery, find that they can actually participate in most family activities and can begin more vigorous exercise within a few months after surgery. Sleep apnea (difficulty breathing during sleep) decreases dramatically as patients lose weight.

ACHIEVING SUCCESS

One of the most essential keys to success after weight loss surgery is to thoroughly understand that the surgery is not magical. The new pouch that restricts your capacity to eat and gives you an early feeling of satiety, is a "tool" you put to work to help you control your weight for life. The pouch tool is one part of a larger process that requires you to put forth great effort to decrease your weight for life. In order for the pouch tool to work, the many rules of diet and exercise must be followed. The sooner you become completely familiar with the guidelines in this booklet, the better you will do and the greater success you will enjoy!

INSURANCE & FINANCIAL INFORMATION

Bariatric surgery is covered by insurance policies when it can be established that the patient is "morbidly obese", that the surgery is "medically necessary", and that the patient has attempted and failed at previous weight loss trials. Many insurance companies have however, established that gastric banding procedures are experimental. The Food and Drug Administration has approved the band for use in the U.S., but they choose not to recognize this. Therefore, if you are interested in the LAP-BAND®, try to determine if your insurance will cover the procedure.

The process of getting coverage involves several steps, and in some cases different strategies, depending on the type of insurance, and the practices of individual insurance companies. Proof of medical necessity may also include the need for further medical testing to measure and clarify the degree of health risk of a given health problem. For example, a diagnosis of sleep apnea syndrome may need to be confirmed by a sleep study, when symptoms suggest that it is present.

Insurance carriers often want proof that you have dieted under supervision of a physician – even though no one has ever shown scientifically that diets have therapeutic benefit in the seriously obese (See page 14: "Medically Supervised Weight Loss Programs"). Some companies require a psychological evaluation prior to surgery. Once the indications for surgery have been evaluated, and needed testing is accomplished, our office will prepare and submit a request for health care benefits. The method of this request varies with the type of coverage:

Indemnity Insurance & PPO Insurance Plans

We will prepare and submit a letter to your insurance carrier, requesting certification of your insurance coverage, and authorization for you to proceed with surgery. This letter will detail and specify each of the indications for surgery, and any corroborating information from other physicians. In addition we will include the information you have personally submitted to us. If they issue an initial denial, you have the option of initiating an appeal.

Health Maintenance and Managed Care Organizations

Managed care organizations may not accept a letter or request from NCCBS directly. You will most likely be required to see your primary care physician to get a referral for bariatric surgery. If you have not already visited your primary care doctor for the purpose of a surgical referral, we can prepare a request letter, addressed to you, which details the severity of your weight-related health problems, and the indication for surgery. If you cannot get a referral from one of the primary care doctors in your organization, you may have to pursue the grievance process provided through your carrier. If this is the case, do not give up hope. Continue to persevere through the process, and request a hearing if necessary. Most patients, who have valid indications for surgery, prevail in the end.

Medicare

Under Medicare, there are specific criteria established for eligibility to receive coverage for bariatric surgery. We can determine if you meet the criteria to obtain coverage for the operation.

Cash Pay

If you are interested in learning about the cash pay option available to patients, please contact us. North Colorado Medical Center has established reduced cost fees for cash paying patients. As mentioned previously, we can also provide you with the names of some institutions that finance bariatric surgery.

It is not uncommon for insurance companies to deny an initial request, even when there is substantial evidence that the criteria for medical necessity as established by the National Institutes of Health are met. In these cases, patients who are determined to appeal, and determined to get insurance coverage, will usually win in the end. Insurance companies will often relent when faced with a serious confrontation.

If you wish to seek legal assistance in obtaining good faith coverage of your medical needs, we have names, addresses, websites, and toll free numbers of attorneys who practice solely in the field of Obesity Law.

One the best ways to fend off a denial from your health insurance company is to provide them with as much "evidence" as possible in the initial request for coverage. For

this reason, we send you a "Patient Health Record" questionnaire prior to your initial consultation. If you have filled out this questionnaire, you will have already provided most of the information requested below.

The following items are useful in helping us to obtain coverage for patients:

1. A detailed history of your life as it relates to obesity. This would include:

    a. A chronological account of your weight through time, any associated health and/or mobility problems, and any medical treatment provided to you by doctors and others for obesity related diseases and problems.

    b. A chronological list of specific diets (Atkins', Slimfast), exercise programs (health clubs, Slimnastics), formal weight loss programs (Jenny Craig, Richard Simmons, Weight Watchers), and other treatments such as acupuncture, hypnotism, psychotherapy, behavior modification, and HCG shots, in which you have engaged over the years.

    c. A list of organizations such as Weight Watchers and Overeaters Anonymous that you have been affiliated with, and the dates you attended meetings.

2. A detailed description of your efforts to achieve weight loss by non-surgical methods, identifying each obesity-related medical problem with which you may be afflicted, and a detailed characterization of what impact this (these) problem(s) has/have had in your daily life.

3. A list of all of the names addresses, and telephone numbers of physicians, medically supervised weight loss programs, and any other health professionals with whom you have sought treatment for weight loss, and or weight related medical problems.

4. Copies of any documentation to show proof of the items listed in 1 - 3 above. This includes:

    d. Cancelled checks written to doctors, medical professionals, weight loss organizations, and companies such as Jenny Craig, that sell weight loss products.
    e. Credit Card statements showing proof of purchase for weight loss products, professional services, and organizations.
    f. Receipts for any weight loss related products purchased from any organization, or any store (over the counter drugs, exercise equipment, Slimfast).
    g. Receipts for prescription drugs taken for the purpose of losing weight (Meridia, Adipex-P, phentermine, and others).
    h. Written Materials produced on Professional Letterhead for/of diet plans, nutritional guidelines, exercise regimens, and educational information, which you have used in the past (please date).

6. List of weight reduction medications you have taken before or are taking now requiring a doctor's prescription, and a copy of documentation showing proof of these, which can be obtained from your pharmacist(s). The list should include ALL prescribed medications with MD's name(s), dates, quantities, and dosages.
7. Copies of any documentation you may have related to disability, handicaps, and or loss of work, associated with obesity and/or obesity related medical problems.
8. A brief letter from physicians who have treated you, especially those who have cared for a weight-related health problem. When obtaining a letter, ask your doctor to state in the letter that your health problem is related to your excess weight, and that weight loss is indicated, or medically necessary to relieve it.

When the patient and surgeon agree to go ahead with LAP-BAND® surgery the process of obtaining insurance will begin within our office. We will not be able to reserve operating room time until we receive preauthorization from your insurance company. The turn-around time obtaining insurance coverage can take many weeks. Patients, who want to expedite the pre-approval process, can often achieve positive results by communicating directly with their insurance companies.

When you make your first appointment with the surgeon, our insurance department will check on your insurance coverage for weight loss surgery, and then will communicate with you about the results of the inquiry.

NAME________________________________ DATE_________________

PATIENT TRUE/FALSE QUIZ
LAP-BAND® SYSTEM

Use the patient handbook to help you answer the following true/false questions. When you have completed the test, please detach it from your handbook.

Circle "T" if the statement is True and "F" if the statement is False

T F It is not recommended that I take vitamins because they cannot pass through the Lap-Band®

T F The Lap-Band® operation for weight loss will commit me to periodic surgeon follow-up visits for the rest of my life.

T F Re-operation is sometimes necessary due to bleeding, band slippage, perforation of the stomach or esophagus, and erosion of the band into the stomach wall.

T F Once I have the Lap-Band® operation, I am expected to lose my excess weight and then have the band taken out.

T F Two of the most common complications after major surgery are pneumonia and blood clot formation.

T F The incidence of pneumonia and blood clots after surgery can be controlled to some degree by the patient, but these complications are not always preventable.

T F The first "fill" or "adjustment" to the Lap-Band® occurs in the operating room after the band is sewn into place.

T F Anti-Inflammatory drugs may irritate the stomach, and should be used with caution.

T F The Lap-Band® procedure is less invasive and safer than a gastric bypass operation, but the weight loss is slower.

T F A weight loss of two to three pounds per week is possible in the first year after Lap-Band® surgery, but one to two pounds a week is more likely.

T F Lap-Band adjustments are always performed in the radiology department of the hospital.

T F If I try to eat more than the amount recommended after surgery, I will most likely develop nausea, vomiting, or regurgitation.

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T F The mortality rate for the Lap-Band® procedure is 1/10th that of the gastric bypass procedure.

T F I am not expected to start walking right after surgery.

T F Most complications associated with the Lap-Band® operation such as band slippage and band erosion, are usually resolved by having another surgery to correct the problem.

T F Patients should work up to getting at least 30 minutes of continuous exercise daily, such as walking, bike riding, and swimming. Weight lifting should be started 1 month after surgery.

T F My weight loss struggles will be over after I have the Lap-Band® placement surgery.

T F There is a specific early post-operative nutrition plan for patients that must be followed strictly to prevent major complications resulting from vomiting and/or overeating.

T F Success with weight loss after Lap-Band® surgery, requires a commitment to total lifestyle change such as changing eating habits, and exercising regularly both aerobically, and by muscle strengthening.

T F After Lap-Band® surgery, I will have better weight loss if I can refrain from drinking liquids with and after my meals so as to maintain a feeling of satiety longer between meals.

T F There are bariatric patient support groups that convene on the Internet, and whose websites can be found in this patient handbook.

T F Women can safely get pregnant after Lap-Band® surgery.

T F After surgery, I will need to come in to the surgeon's office for adjustments when I'm finding it harder not to break the eating rules, I am able to eat more at meals, and my weight loss drops below one pound per week.

I have read the patient handbook in its entirety, and have answered the questions in this test to the best of my ability:

Patient's Signature______________________________ Date _________

Physician's Signature ___________________________ Date _________