



Banner Health

North Colorado
Medical Center®

Bariatric Surgery



Gastric Bypass Patient Handbook

WELCOME TO THE NORTH COLORADO MEDICAL CENTER BARIATRIC PROGRAM

This Patient Handbook contains an overview of the bariatric surgery program for the laparoscopic Roux-en-Y gastric bypass procedure offered at North Colorado Medical Center. Our multidisciplinary team of surgeons, nurses, dietitians, 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.

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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/m². Obesity is defined as a BMI greater than or equal to 30 kg/m². 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/m². 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®, REALIZE™ Adjustable Gastric Band, sleeve gastrectomy 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 Metabolic and 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 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 co-morbidities, OR have a BMI of 40 or greater with or without co-morbidities.
2. You have failed at previous attempts to achieve lasting weight loss.
3. 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.
4. You are able and willing to make permanent lifestyle changes, and can comply with the required patient behaviors both preoperatively and postoperatively.
5. You do not have any current or recent substance abuse problems.
6. You do not have severe bipolar disorder, schizophrenia, or a severe personality disorder.
7. Our psychologist determines that you are a good candidate for surgery.

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:

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

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

THE GASTRIC BYPASS SURGICAL PROCEDURE

The Roux-en-Y gastric bypass is the most frequently performed bariatric surgical procedure in the United States. The Roux-en-Y gastric bypass procedure surgically divides the stomach into two sections, reducing the size of the functioning section from about two quarts to about one half ounce, or 15 cc.



A small opening is left at the bottom of the newly formed stomach, enabling food to pass. This “pouch” will effectively reduce your stomach’s capacity to hold food, so you will feel full after eating a small amount. This is the restrictive component of the operation in that it limits the amount of food you can eat. Instead of the food emptying into the lower portion of the stomach, however, the food empties directly into the small intestine (bypassing the rest of the stomach and the upper portion of the small intestine) through a connection called a Roux-en-Y (See Figure 10).

The Roux-en-Y introduces an element of malabsorption into the weight loss, allowing you to lose more weight faster than with a purely restrictive procedure, such as the adjustable LAP-BAND®. The remaining portion of the stomach that is bypassed rests in its original position in the upper abdomen. It continues to receive a good blood supply and remains healthy, but no longer receives food. There is no need to remove the bypassed stomach.

The gastric bypass operation can be performed in the standard open fashion, with a six to twelve inch incision between your breastbone and your navel. It can also be done laparoscopically with five or six smaller (1/2 to 1 inch) incisions. The advantage of laparoscopic surgery is that you may have less discomfort, a shorter recovery from surgery, and fewer complications. Dr. Johnell performs the vast majority of his cases using a laparoscopic approach.

The adjustable gastric band the LAP-BAND® and REALIZE™ Adjustable Gastric Band are procedures for weight loss that has been proven successful for long-term weight loss throughout the world, and was approved by the FDA for use in the U.S in 2001 and 2007. Please refer to the Adjustable Gastric Band Patient Handbook for more information about these procedures.

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”). Many of the sessions are presented by the “experts” including patients, Dr. Johnell, and several members of our multidisciplinary team. These special presentations are our “Expert Panel” sessions. 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 that is included in the packet you received with this handbook.

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®/REALIZE™ Adjustable Gastric 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 regularly per 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 the seminar.

Read all of the materials in this packet carefully so that you will come into the office consultations well informed. ***Take the True/False Quiz 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, and make sure that you meet the basic requirements for surgery. 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.

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. If you would like to receive psychological counseling regarding your surgery or behavioral problems please let us know and we can assist you in locating resources. Our psychologist is available for private counseling and medical hypnosis.

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 do not require all patient get a nutrition evaluation prior to surgery, we require an evaluation on

some patients depending on your history and/or if your insurance company require one. If this is the case we will assist you with setting up an appointment with our dietician.

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.

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. Testing can be completed at North Colorado Medical Center in Greeley or near your home town.

If you have not had your gallbladder removed, and have not been previously diagnosed with gallbladder disease, a sonogram will be ordered to rule out gallstones. The sonogram will assist the surgeon in deciding whether or not to advise you to have your gallbladder removed during your surgery. Approximately one-third of patients who still have their gallbladders after gastric bypass will eventually need to have them removed *unless* medication is taken to prevent stones. If you do not have your gallbladder removed, you can be put on a medication after your operation (for six months only) to help prevent the formation of gallstones.

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

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 Gastric Bypass 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 it is advised that you do not plan to work or travel on this day.

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

You will be admitted to the hospital 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 program coordinator you met in Pre-op 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 finished, Dr. Johnell will go to the surgery waiting area to give your family a progress report. The surgery itself usually requires an average of two hours, and the actual length of time for the gastric bypass procedure varies among patients. If patients are having their gallbladder removed at the same time, an additional half hour will be required to complete the procedure.

RECOVERY AFTER SURGERY

After surgery, you will go to the PACU (Post Anesthesia Care Unit) for approximately one to two hours. From PACU you will be transferred to the General Surgical/Bariatric Surgical floor. Some patients who have had an open procedure and/or complications during surgery may stay overnight in the ICU for special monitoring. Patients with pre-existing heart and lung problems, and on a rare occasion, patients with a BMI over 50, may go to the ICU for closer monitoring.

In PACU you will notice that you have a urinary catheter in place in your bladder. This catheter is inserted in the operating room while you are asleep, and is usually removed on the first post-op day. Dr. Johnell does not use nasogastric (nose to stomach) tubes, but on a rare occasion one may be required to prevent nausea and vomiting in certain cases. You will also notice that you may have a second IV line inserted on the right side of your neck. This IV is called a "central line" because it is placed in a vein in the neck instead of in the arm. Central lines are inserted while patients are asleep in the operating room. Patients do not remember placement of this line. The central line is less likely to fail compared to IVs placed in the arm, and it does not cause pain or too much discomfort. In fact, it actually lessens discomfort overall because blood samples can be taken directly from it, eliminating the need for multiple needle sticks to the arms.

You will also have a "JP" (Jackson-Pratt) drain in your abdomen that drains the area around your new stomach pouch. The JP drain is made out of flexible plastic, and consists of a soft, slender tube (about the diameter of a drinking straw) that is attached to a clear plastic bulb. This tube is not painful, and is almost always removed on the day you go home

from the hospital. If the JP drain is left in at discharge, instructions will be given to you by one of the hospital nurses on the proper care of the drain. In that case, the JP will likely be removed in the surgeon's office at the first postoperative visit.

Pain control is managed by use of an IV attached to a pump called a PCA (patient controlled analgesia). This pump delivers pain medication on an intermittent basis, and is controlled by you. The PCA pump decreases the chance of an overdose to occur. Your nurse will make sure that your pain is under control. IV antibiotics and subcutaneous blood thinners are usually also given in the postoperative period.

Pressure devices such as anti-embolism stockings and SCD's will remain on your legs to prevent blood clots. These devices work independently, and are not painful. The single most effective way to prevent blood clots and pneumonia (the two most common complications after surgery) during this critical post-op period is to get out of bed and walk. Once you have been evaluated by the nurse or physical therapist, you will be getting out of bed to a chair and will be walking with assistance on the day of your surgery.

As a precaution, oxygen will be provided to you via a nasal cannula on a continuous basis after surgery. 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. 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 at this time.

Blood sugar monitoring may be necessary after surgery and 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.

POSTOPERATIVE DAY ONE

On the first day after surgery, 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. An x-ray of the stomach is then taken to determine if fluid can flow freely through the pouch, and to help rule out any "leaks" in the sutured or stapled areas of the pouch or small intestine.

When OK with the radiologist and surgeon you will start taking small portions of water by mouth. At this time you will be restricted to drinking one ounce of water every 60 minutes. If this is well-tolerated you will progress to once ounce of water, plus clear liquids every thirty minutes. The urinary catheter will be removed if your urine output is adequate. You will be getting up to walk the hall with assistance at least seven times this day, and each subsequent day spent in the hospital. You will be reminded to continue with your hourly coughing and deep breathing, and your every-hour incentive spirometry. Some patients will start oral pain medication this day and if doing well, are able to be discharged home or to the Hospitality House.

POSTOPERATIVE DAY TWO

On this day, if you do not already have your PCA IV pump removed, you may have it discontinued and begin taking oral pain medicine. You will likely be advanced to one ounce of clear liquids every 15 minutes. A dietician will check in on you to monitor your progress. You will be up walking a minimum of seven times throughout the day, and you will be doing your breathing exercises as you have on previous days. You will likely be discharged this day and will continue your walking and breathing exercises at home.

DISCHARGE AND FOLLOW-UP

You will be discharged from the hospital when you are taking adequate amounts of fluid to prevent dehydration, and have good pain relief from oral pain medication. This most often occurs 1-2 days after surgery. If you live a long distance from the hospital, we may require that you stay in the Greeley area the first night. North Colorado Medical Center covers the cost of your lodging if you choose to stay in the Hospitality House (on the Medical Center campus) after discharge. 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, and other instructions. Please note that some patients go home on oxygen for a short period of time if they have demonstrated a need for oxygen while in the hospital. In the event that you have questions or problems post-discharge, you will be able to contact a member of the bariatric surgery team by calling the surgeon's office.

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.

Depending on how well you are doing after discharge, you will have a minimum of five follow-up appointments at the surgeon's office within the first postoperative year. Unless you are having a problem, most of the follow-up visits will be conducted by the nurse practitioner (NP) or physician assistant (PA). They will perform exams, and counsel you on exercise, diet, and emotional and physical adjustment to your weight loss. Blood work is usually drawn one week before the 6 month, 12 month and yearly visits to check for any nutritional deficiencies or anemia. Once a year thereafter, you will be contacted by one of our staff for an office visit so we can determine and record your continued progress.

WORK, ACTIVITY, AND EXERCISE

Most patients find that they can return to work three to six weeks 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 for two weeks after your procedure, after that increase the amount gradually. 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. If you do not follow the diet restrictions carefully, you may trigger vomiting episodes which can lead to esophageal tears, or you may cause the sutures or staples in your stomach pouch to pull apart and produce a leak. Several patients have had to undergo a second operation *as a direct result of starting solid foods too soon*. Failing to follow the diet plan by taking in too much food or drink at one time can cause severe nausea and vomiting, and will cause your pouch to distend.

Eating foods that are made of highly concentrated calories of sugar and/or fats will stimulate your small intestine in a negative way, and will produce “dumping syndrome”. Dumping syndrome is a very unpleasant reaction to improper food intake that is characterized by a sudden feeling of dizziness or feeling faint; nausea, vomiting, severe abdominal cramps, diarrhea, and cold sweats. Dumping syndrome can occur when food is taken too quickly. Not everyone is susceptible to dumping syndrome, and others have variable reactions. There is no way to know ahead of time just how susceptible patients will be to the syndrome. Most patients hope for better control of sweet-eating and are not disappointed when they learn they have dumping syndrome after eating sweets.

The following is 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 stomach pouch's sutures or staple lines. 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 may 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 75 and 85 grams of protein per day. However, due to the initial small size of the pouch, *patients will have to increase their protein intake very slowly* and may not be able to achieve this goal for protein intake for several weeks after surgery.

At this time in your recovery, you will need to concentrate on drinking enough fluids to prevent dehydration. You will be able to consume approximately 30cc's of fluid every 15 minutes (while awake), which is equal to one ounce of fluid. You will need to drink at least six cups or 48 ounces of fluid every day. We recommend that you use a small kitchen timer to remind you to drink your ounce of fluid every 15 minutes.

In the Pre-op 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, protein shakes, cream soups (strained of solids), cooked cereals (soupy, such as Cream of Wheat), plain mashed potatoes, low-fat yogurt (no sugar added, no pieces of fruit), sugar-free pudding and fruit juices (small amounts).

WEEKS THREE, FOUR, AND FIVE

(Pureed foods)

At this time, you will increase the amount of liquids you take at one time to 2 ounces (1/4 cup or 60 cc's). Now you will only drink or eat every 30 minutes instead of every 15 minutes. 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 fresh fruit smoothies, scrambled eggs, creamy peanut butter, pureed fruits and vegetables, and pureed meats. It is best to stay with as many types of baby foods as you can, to play it safe. At this phase of the diet, foods *must be pureed in a commercial blender* or food processor before putting them in your mouth, if they are not already of the consistency of applesauce.

WEEK SIX

(Soft Foods)

This stage of your nutrition plan allows you to advance from pureed and baby food items to foods that are well cooked. You should eat 5 small meals a day instead of eating every 30 minutes. You can now drink up to 1/2 cup or 4 oz. of fluid at a time, being careful not to go over 8 oz. (one cup) of fluid in one hour. Continue to drink at least 6 cups of

liquid a day. 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 or boiled vegetables
- Canned fruit, packed in its own juice or soft fresh fruit
- Toasted breads, baked potato (no skin),
- Melba toast, crackers
- Lettuce and tomato

WEEK SEVEN

(Regular Foods)

Week seven you will 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:

Eat 5 small meals per day. 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 well and which ones are not, thus avoiding problems.

After hunger returns, approximately 4 to 6 months after surgery, you will drink liquids between meals only. For best weight loss, drink liquids up to one half hour before and 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 or two 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 pouch wall, flushing foods through the pouch too soon after eating will lead to early between meal hunger and snacking.

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 and low-carbohydrate meals. You need not eat entirely 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 contain 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 may cause dumping syndrome.
- 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. There is evidence in the scientific literature to show a correlation between alcoholic beverages and gastric or duodenal ulcers.
- It is best not to 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 pouch to stretch and result in minimal weight loss and/or weight regain.
- 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 Gastric Bypass 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 bypass. 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, untoasted 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 right after surgery. Pills should be swallowed one at a time. Large pills and capsules are not well tolerated because they have difficulty traveling through the small opening in the stomach pouch. 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 any doubts about whether your medications can be crushed.

VITAMINS & MINERALS

Before surgery, you must make a lifetime commitment of taking supplemental vitamins and minerals. Supplementation is critical to your health and weight loss success for two primary reasons. One is the fact that the anatomy of your gastrointestinal tract has been altered in such a way that your body’s ability to absorb some of the essential vitamins and minerals has been permanently reduced. The second reason is the fact that you are simply taking in lesser amounts of food (and therefore nutrition) after your gastric bypass operation.

After your first postoperative visit in Dr. Johnell’s office, you will begin to take multivitamin and mineral supplements. You will also be taking iron and calcium. To supplement calcium intake you will be required to use a calcium “citrate” source for better absorption, and use a calcium product that has extra vitamin D.

In addition to the multivitamin, the iron, and the calcium supplementation, you will be placed on vitamin B-12. After surgery you will no longer be able to assimilate Vitamin B-12 by

swallowing it in pill form or through the foods that you eat. For the rest of your life you will have to supplement Vitamin B-12 in other ways. Most patients opt to take B12 in a sublingual (under the tongue) tablet or drop. However, patients may use monthly B-12 injections (self-injected or received at the physician's office) to satisfy Vitamin B-12 requirements. All of the vitamin and mineral supplements mentioned above will have to be taken throughout your lifetime.

Bone loss is a major potential long term complication of gastric bypass, and is caused by poor calcium absorption after the duodenum is surgically bypassed. If calcium intake is inadequate the body will regulate blood calcium levels by continuously taking calcium from the bone. The body is careful not to allow blood calcium levels to drop too low because calcium is essential for critical body functions such as heart contraction, the mechanism of breathing, and overall brain function. A normal blood calcium level *does not necessarily indicate adequate calcium intake*. Adequate calcium intake is extremely important after gastric bypass, and a bone scan is the best way to monitor bone health.

There are serious consequences of forgoing supplements. One of the most dangerous deficiencies associated with gastric bypass surgery is that of vitamin B-12 because it is an essential component of red blood cell formation and if not available in the body, will result in severe anemia. A devastating side effect of vitamin B-complex deficiency is Wernicke's Syndrome. This is an irreversible and serious neurological syndrome that manifests itself in confusion, disorientation, and dyskinesia (poor motor control of legs and arms). Thiamine deficiency is the primary cause of this disease which occurs most often with frequent vomiting, poor nutrition, and not taking enough B complex in supplement form.

SUPPORT GROUPS & AFTERCARE CLASSES

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 and the Lafayette clinic. All potential and postoperative patients and their families are invited to attend these meetings.

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.

Aftercare classes are offered for all postoperative patients. These are classes taught by our clinical dietician and psychologist and are ideal for all postoperative patients at any stage of recovery.

For a list of upcoming support groups, classes and patient information seminars you may visit our website: www.BannerBariatric.com or visit Dr. Johnell's website at: www.bariatricoperation.com and select the options for these topics.

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 Metabolic and Bariatric Surgery www.ASMBS.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 open gastric bypass operation carries significant risk with a mortality rate of 0.5-2% in the U.S. The latest data on laparoscopic gastric bypass is consistently showing a lower death rate, with a number of studies indicating a mortality rate of 0.0-0.5%. Dr. Johnell has a mortality rate of zero. 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. The mortality rate for gastric bypass is similar to the rate for other major general surgery procedures performed on a group of patients who are obese and have multiple health problems. Risk of death from any surgical procedure depends on the general health, age, and weight of the individual.

Although complications can be a real problem, statistics show that the patients who undergo gastric bypass surgery do better and live longer than equally heavy patients who try to lose weight without surgery. There is no way to guarantee that a given patient will fall within the group of patients who enjoy few or no serious complications. Gastric bypass surgery is not necessarily any more risky than other abdominal operations, but where surgery is concerned, obese patients are at a disadvantage when compared to patients with normal body weight. The risks involved are mainly related to complications after surgery.

Operative or early complications of gastric bypass surgery include bleeding, a leak or narrowing of the anastomosis (where the small bowel is attached to the stomach pouch), abscesses inside the abdomen, wound infection, wound opening, internal hernias (small bowel becomes entangled in the surgical sites within the abdomen causing obstruction), blood clots developing in the legs (deep venous thrombosis), or a blood clot going to the lungs (pulmonary embolism). Some patients may require a prolonged period on the breathing machine (ventilator) following surgery, particularly those with existing respiratory problems.

Late complications of surgery include marginal ulcer, fistula (connection between the pouch and the bypassed stomach), incisional hernia, stricture (narrowing) of the connection to the stomach pouch, bowel obstruction, gallstone formation, anemia, and dumping

syndrome. Some complications may require one or more additional surgeries to correct. Up to ten percent of gastric bypass patients fail to lose weight as expected.

A minor complication of gastric bypass is hair loss. Most patients have some degree of hair loss after surgery. This is usually a temporary side effect that rarely lasts longer than three months, at which time the hair grows back. One way to reduce the amount of hair loss is to follow the protein requirements very carefully as they are described in the literature given to you.

Studies show that the majority of gastric bypass patients who do not supplement with additional iron after surgery, will become iron deficient between their 3rd and 12th postoperative month. This is due to the fact that the bypassed duodenum is the location where much iron absorption takes place. Long-standing iron deficiency leads to iron deficiency anemia, which is more difficult to treat. Some patients will need to get infusions of iron (IV) if lab studies indicate that their iron stores are not replenishing with iron supplements taken orally. As described previously, lack of B12 causes anemia too. This is a different kind of anemia called “pernicious anemia” and occurs when B12 is deficient due to poor absorption and lack of intrinsic factor, which is produced in the stomach, but not produced, in sufficient quantity in the new stomach pouch.

It is not uncommon for severely obese women of childbearing age to be infertile due to the hormone changes of obesity. As such, they often go for periods of time having sex without the use of birth control. If you are one of these women, you need to BEAWARE. After the operation and resulting weight loss you may be fertile again, and pregnancy must be avoided. It is unsafe to be pregnant until the majority of weight loss has occurred, which is at least one year postoperatively. Pregnancy is very safe after 12 months post gastric bypass for the majority of women.

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. 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 gastric bypass 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.

A more detailed written description of the risks and complications of gastric bypass surgery will be given to you in the surgeon’s office. You will be asked to read and show a

thorough understanding of these risks and complications prior to signing the consent for surgery.

BENEFITS, EXPECTATIONS, AND OUTCOMES

Gastric bypass 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 bypass works to help patients lose weight 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.

With gastric bypass surgery, you can expect to feel full on smaller meals; you will feel an improved sense of self-control, and will find it easier to avoid sugary foods. On the other hand, you will be expected to avoid snacks, avoid drinking fluids for at least 90 minutes after meals, choose healthy foods, be active and exercise, and make psychological adjustments. Research indicates that the average patient will lose approximately 10 to 15 pounds per month for the first 6 months. After 6 months, weight loss proceeds more gradually until the patient reaches equilibrium at about 12 to 15 months post-surgery. Average weight loss at two years is 70% of excess weight, and at 4 years is 65% of excess weight. Long-term studies have shown that on average, patients keep off at least half of their excess weight at the 15-year interval.

Research over the last 20 years indicates that there is a great variation of weight loss among patients. Many surgeons, who have followed up on their patients over the long term, have found that the great variation in weight loss is due to variations in dietary and exercise patterns. Patients who do well with weight loss tend to avoid snacks, eat healthy types of 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 habits. It is a fact that patients who drink a lot of fruit juice and other high calorie drinks have poorer weight loss outcomes. 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 not.

Gastric bypass weight loss has been shown to dramatically improve medical conditions such as diabetes, high blood pressure, obstructive sleep apnea, reflux disease (GERD), and joint pain. Gastric bypass will improve conditions such as congestive heart failure, high cholesterol, high triglycerides, urinary incontinence, menstrual irregularity, back pain, hirsutism (excessive hair growth on the face, etc.), and pseudotumor cerebri (a neurological syndrome that causes frequent headaches).

At least seventy percent of patients who have high blood pressure, and who are taking medications to control it, are able to stop all medications and have a normal blood pressure within two to three months after surgery. When medications continue to be required, the dosage can usually be lowered thus reducing the negative side effects of these drugs. Over eighty percent of patients with high blood cholesterol will develop normal cholesterol levels within two to three months.

Over ninety-eight percent of Type II Diabetics have a complete remission of their disease after gastric bypass surgery. Usually within a few days after surgery, patients have normal blood sugar levels, improved hemoglobin A1C values, and are able to come off of their medications including insulin injections. Many physicians now believe that bariatric surgery may be the best treatment for diabetes in the seriously obese patient. Patients with abnormal glucose tolerance tests or “borderline diabetes” show an even greater improvement in blood sugars after surgery. Since these patients often go on to develop diabetes, surgery in effect, prevents the onset of Type II Diabetes.

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 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. Spouses and patients report sleep apnea is completely gone within one year, and snoring has stopped completely as well.

Within a few days of surgery, the majority of patients experience complete relief from all symptoms of gastric reflux. Stress urinary incontinence (leaky bladder) is usually cured in patients who suffer from this disease. If after gastric bypass surgery the condition does not improve to a satisfactory degree, patients stand a much better chance of obtaining curative results from subsequent bladder surgery.

Seventy five percent of patients lose a great deal of weight without major complications and enjoy significant improvement in medical condition and outlook on life in general. These patients keep their weight off in the long term, and maintain a happy, healthy lifestyle. Twenty percent of patients have some significant problem (outlined in “Risks and Complications”) following the surgery. These problems are usually resolved in the short term, and the patients do very well overall. Five percent of patients have unresolved post operative problems over the long term. Most of these problems are related to difficulties with diet and/or nutrition, poor stomach pouch function, or inadequate weight loss.

ACHIEVING SUCCESS

A great many things have been learned from the thousands of gastric bypass patients who have been studied over the past twenty years. One of the most important things you can do if you are seriously considering surgery, is to read and learn all you can about the past experiences of others living with gastric bypass and other bariatric operations. By visiting websites and by reading books from the library and bookstore, you can begin arming yourself with the knowledge of what to expect, and what will be expected of you. This will help make the overall journey go much more smoothly.

One of the most essential keys to success in weight loss surgery is to thoroughly understand that the surgery is not magical. The newly formed 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 given to you in your classes, the better you will do and the greater success you will enjoy!

The first year after surgery is usually very rewarding because the majority of weight loss occurs during this time. However, the first year can also be anxiety provoking and challenging. For the first six months, losing weight is practically out of the patient's control. Patients simply cannot take in enough food *not* to lose weight. This period is deceiving for patients because they lose weight so readily and without much effort. However the challenging time occurs around six to nine months after surgery when patients find that the pouch has expanded, they can tolerate larger portions of food, and they find that their appetite is increasing.

Although this phenomenon of increased appetite and capacity is a normal process in the first postoperative year, patients often feel anxious that they are losing control of their weight again. Patients who strive for the best long-term success, begin their exercise program, and low fat/low carbohydrate/high protein nutrition plan before surgery, and maintain this healthy eating style beginning very early in the first year. These patients get through the first year with the greatest of ease, and go on to enjoy the largest percentages of weight loss.

INSURANCE & FINANCIAL INFORMATION

Bariatric surgery is covered by many 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. 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 Pg.13 “Medically Supervised Weight Loss Program”). Some companies require a psychological evaluation, and some require a nutrition 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, we encourage you to seek an appeal. Appeals must be made directly by the patient to the insurance carrier. Dr. Johnell can assist in the process if it is determined that an additional letter from him is required (the first letter was “proof of medical necessity” and was sent before the denial was returned. He will also agree

to have a telephone conversation with the medical director of the insurance carrier if the carrier or the medical director request specifically request that he do so.

Health Maintenance and Managed Care Organizations

Managed care organizations may not accept a letter or request from Dr. Johnell's office 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.

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 that is included in the packet sent to you. The patient supplement form requests specific information about previous weight loss attempts. Remembering exact dates and years of previous diets etc, is very difficult to do. Just do the best job that you can, and if you are off by a year or two it is not likely to be a problem.

The following items are very 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, hypnosis, psychotherapy, behavior modification, HCG shots, etc., 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 (see list of obesity related medical problems under “Facts About Obesity” pg. 4).

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.

When the patient and surgeon agree to proceed to gastric bypass 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. Patients, who want to expedite the pre-approval process, can often achieve positive results by communicating directly with their insurance companies.

NAME _____

DATE _____

TRUE/FALSE QUIZ

Gastric Bypass

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, and bring it back to the clinic when you come in for your first visit.

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

- | | |
|-----|---|
| T F | It is absolutely necessary that after surgery I take the vitamins recommended by my surgeon for the rest of my life. |
| T F | This operation for weight loss will commit me to periodic physician follow-up visits for the rest of my life. |
| T F | Re-operation is sometimes necessary due to bleeding, hernias, ulceration, bursting of stitches or staples, leakage, blockage of the intestines or stomach and other causes. |
| T F | Once I have the gastric bypass operation, I will no longer have to exercise. |
| T F | Two of the most common complications after major surgery are pneumonia and blood clot formation in the legs. |
| 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 | "Dumping syndrome" refers to the thing that occurs when post-op patients eat too little protein. |
| T F | Twenty percent of gastric bypass patients have some significant problem following the surgery which eventually gets resolved. |
| T F | Five percent of gastric bypass patients end up having unresolved postoperative problems. |
| T F | If supplements are not taken; deficiencies in Vitamin B12, Iron, and Calcium are likely to occur after gastric bypass surgery. |
| T F | If I don't like the gastric bypass operation, I can easily get it reversed. |
| T F | If I try to eat more than the amount recommended after surgery, I will most likely develop severe nausea and vomiting. |

- T F As is true for all patients undergoing major surgery who have similar co-morbidities, 0.5 to 2% of postoperative “open” gastric bypass patients die as a direct result of the surgery.
- T F The majority of gastric bypass patients do very well, and go on to live longer and healthier lives than they would have, had they not undergone the surgery.
- T F Some of the complications associated with gastric bypass surgery are: leak in the stomach pouch, narrowing of the connection between pouch and small bowel, and vitamin deficiencies.
- T F Patients should work up to getting at least 30 minutes of continuous exercise daily, such as walking, bike riding, and swimming. They should add resistance training to their programs when OK with the surgeon.
- T F There is a higher incidence of gallbladder disease among gastric bypass patients, which is why the surgeon will remove a diseased gallbladder (with prior consent) while performing the gastric bypass surgery.
- T F There is a specific nutrition plan for gastric bypass patients that must be strictly followed to prevent “dumping syndrome”, stress on the pouch staples, and other complications.
- T F When I am discharged from the hospital, I will not have to worry about getting enough protein.
- T F After gastric bypass surgery, I will be able to drink as much water as I want at mealtime.
- T F Women can safely get pregnant six months after surgery.
- T F After surgery, I will need to take Vitamin B-12 because if I don't, I can become anemic.

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 _____