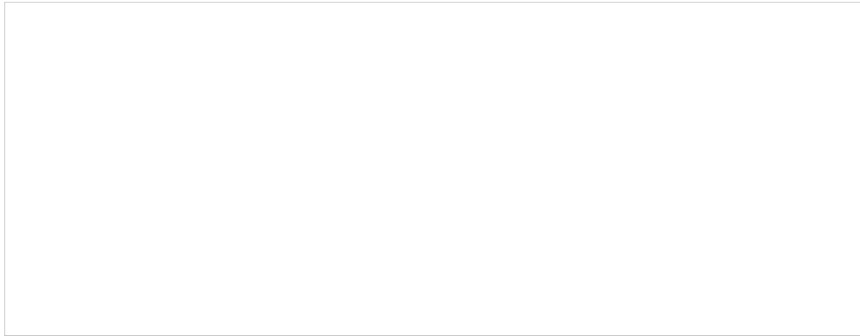

Patient Education Manual
Laparoscopic Gastric Bypass

Obesity, an American Epidemic

Obesity is now recognized as an American epidemic and its prevalence continues to rise in many industrialized countries as well. It is estimated that there are 500 million overweight and 250 million obese adults in the world. Currently, approximately 61% of adults (aged 20-47 yrs) in the United States are overweight or obese according to the National Center for Health Statistics. Numerous studies demonstrate the increased morbidity and mortality of this disease. These patients are at such greatly increased risk of death and disability that there is uniform agreement that these patients should consider surgery as the treatment for their obesity. (See the NIH Consensus Conference Report for more details). Of course, the preferred method of weight loss is through proper diet and exercise; however, when that fails, there are surgical options available.

Are You Obese?

To calculate your BMI, please visit our web site at www.hamptonbariatric.com.

Currently, the most accepted classification of weight status is based on body mass index (**BMI**), defined as weight (in kg) divided by height (in m). This classification helps identify the patients who are at increased risk for obesity-related medical complications. Men and women who have a BMI between 25 and 29.9 are considered overweight, and they have higher risk of medical complications than lean persons. Men and women who have a BMI between 30 and 39.9 are considered obese and are at higher risk than overweight. Those with a BMI of 40 or more are considered morbidly obese and have the highest risk of medical complications.

Surgery for Obesity

Although many studies document the value of surgery for obesity, there remain many physicians and surgeons who are averse to the idea of surgical treatment for these patients. The operations previously available for the treatment of obesity have been shown to have very serious associated problems and complications. A critically ill, severely obese patient, taxes the limits of any hospital. Thus, while it has been generally agreed that operations can and should be offered to the severely obese, there is also clearly room for improvement in the surgical treatment of obesity. The laparoscopic revolution that took place in the last fifteen years has affected many areas of surgery. In each of the areas in which it has been adopted, laparoscopic surgery has resulted in decreased patient hospital stay, decreased pain, decreased complication rates, and shorter time to return to work. Bariatric surgery was affected in a similar fashion by the advancement in laparoscopic techniques.

Criteria for patient selection

1. Minimum age of 18yrs.
2. No history of psychosis
3. BMI of 40 or greater. BMI between 35 and 40 in the presence of other diseases such as high blood pressure, diabetes, heart disease, etc.
4. Failure of non-surgical attempts at weight reduction.
5. Absence of alcohol and drug abuse.
6. Commitment to post operative follow-up
7. 8 week smoking cessation

Results of the Laparoscopic Gastric Bypass

Disclaimer: Statistics may vary significantly on rates of complications and/or outcomes. Studies cited in this manual are meant to demonstrate variability and do not reflect the most recent results. We strongly recommend that you do your own search for the most recent articles and statistics. You can ask the doctor for recent articles if you wish to do so. You should take advantage of the internet for your research or to contact any organization that caters to patients like yourself.

Gastric bypass operation is considered the benchmark operation for treatment of morbid obesity. The operation can be done in an open fashion or with the use of laparoscope. As mentioned above, laparoscopic surgery improved the outcome of most surgical procedures particularly in regard to the postoperative pain and length of hospital stay. Our results from Laparoscopic Gastric Bypass are similar to those of other centers of excellence. The following discussion reflects some of the results published by other centers.

Pories et.al. reported on 479 patients undergoing the "Greenville gastric bypass (GGB) procedure" with

an "acceptable" mortality rate of 1.2%. [1] Dr. Rutledge's average hospital stay is 1.5 ± 1.9 days. This is 5-7 days shorter than in other series. Dr. Rutledge's overall complication rate is 5.4%. This is also ½ to 1/10 of that reported in most other series. In a series of Laparoscopic Gastric Bypasses reported by Schauer et.al. the complication rate was 30%. [2] They also reported 1 death in 275 patients. In several reports of bariatric surgery, the expected rates of pulmonary embolus for this type of surgery has been estimated to be 1% or greater. In other series, acute wound complications in bariatric surgical patients ranges up to 15%. In a recent study from UCLA, "Risk Assessment For Roux-En-Y Gastric Bypass (Rygb) Complications." by Lee et. al., [3]the risks associated with RNY gastric bypass surgery in obese patients were studied. 245 consecutive patients undergoing RYGB at UCLA were studied. The mean (±SEM) weight was 333±6 lbs with a body mass index of 53±0.8. This is similar to the patients undergoing surgery by Dr. Rutledge at Durham Regional Hospital. In the UCLA series there were 5 deaths (2.0%) as compared to one death in the Rutledge series (0.08%.) In the UCLA series there were 38 complications (16%) as compared to a complication rate of 5.4% in Dr. Rutledge's patients.

In the UCLA series there were 12 (4.9%) anastomotic leaks, as compared to 19 leaks in Dr. Rutledge's series (1.6% leak rate.) [Other reported complications were bowel obstruction or ileus occurred in 6 patients, 2.4% splenectomy in 3, 1.2% Pulmonary embolus in 3, 1.2% sepsis of unknown cause in 3, ulcer in 2 and 1.2% 10 miscellaneous complications occurred resulting in prolonged hospitalization (>1 wk).] In several reports of the outcomes of bariatric surgery, the expected rates of pulmonary embolus for this type of surgery has been estimated to be 1% or greater. Acute wound complications in bariatric surgical patients ranges up to 15% (J Am Coll Surg 2000 Sep; 191(3):238-43 Wound closure technique and acute wound complications in gastric surgery for morbid obesity: a prospective randomized trial. Derzie AJ, Silvestri F, Liriano E, Benotti P Mount Sinai School of Medicine, New York, NY, USA.

Weight Loss

Several studies documented postoperative weight loss to average 30 lbs lost at one month, 50 lbs. at 3 months, 80 lbs. at 6 months and 140 lbs. at one year. The mean excess body weight in patients was 57 lbs. In a study by Lise et.al. [4] of 111 patients undergoing stoma adjustable silicone gastric banding (SASGB) the mean preoperative body weight was 284 lbs and this decreased to 222 lbs. at one year. In a study by Choban et.al. [5] the weight change for patients undergoing Open RNY gastric bypass was from 306 ± 8 lb. preoperatively to 211 ± 55 lb. at one year. The laparoscopic Gastric Bypass appears to do as well or better than these and other studies of weight loss surgery.

Relief of Associated Medical Illness

Medical illness is common in patients prior to surgery: 23% are diabetic, 36% have sleep apnea, 49% have hypertension, 57% suffer from incontinence and 79% have arthritis. As reported in most series of weight loss surgery, resolution of the obesity associated medical illnesses was over 70 - 90% in all cases.

You Need To Know That:

1. Leak

Leak is one of the most feared complications of gastric bypass. It can be variable in its manifestation and lethal if not treated. In Dr. Rutledge's series of laparoscopic Gastric Bypass the overall rate of leaks was 1.6%. This rate declined markedly throughout the series. This rate compares favorably to other reported series. Other series reported higher incidence of leakage.

2. Pulmonary Embolism

Pulmonary embolism is the blockage of blood flow to the lung by blood clots. This condition could be fatal. Most of these clots are formed in the veins of lower extremities of pelvic area. There are measures that are taken to decrease the incidence of venous clots; however there are no known measures to completely prevent these clots from forming during surgical procedures. The incidence of deep vein thrombosis and pulmonary embolism varies among different studies. The following discussion reflects this variation.

In the study referred to above by Wu et. al. [6] ASBS members were surveyed to determine the incidence of deep vein thrombosis (DVT) and pulmonary embolism (PE). In that study there was a self-reported incidence of 2.63% rate of DVT and a 0.95% rate of PE. In Wu's survey 48% of respondents had at least one death due to PE. By comparing the above data to those published in different series of laparoscopic gastric bypass, we find the rate of DVT and PE are far below those seen in other types of weight loss surgery. This low rate of DVT and PE may be related to the very short operative times, low levels of pain and very early mobilization of patients following the laparoscopic Gastric Bypass.

Prophylactic Greenfield filter placement has been advocated in morbidly obese patients because of the fear of pulmonary embolus, however this concept has not been agreed upon and we do not follow it. In a study by Greene et. al. [7] of Greenfield filters placed over three years, the average cost was $4,141.00.

3. Hernias

Incisional hernia is a defect in the abdominal wall muscles that can happen after any abdominal surgery. Hernias require surgical repair. Incisional hernias are frequently reported complications following most types of weight loss surgery[8]. In the series reported by Brolin [9] 229 patients were randomized to PDS or Ethibond wound closure. Two of 109 the Ethibond patients had a wound dehiscence. There were 20 incisional hernias (18%) in the Ethibond group and 11 hernias (10%) in the

PDS group. In a series reported by Sugerman et.al., [10] incisional hernia occurred in 20% (198/968) of his Gastric Bypass patients. In Dr. Rutledge's series of 1218 patients who underwent Gastric Bypass, there were no incisional hernias.

4. Esophagitis

Esophagitis, inflammation of the esophagus, is a well-described complication of several types of weight loss surgery. In a study by Westling[11] of 90 patients undergoing Silicone-adjustable Gastric band 32 patients (35%) were re-operated upon. Erosive esophagitis was the cause requiring reoperation in 14 patients (16%). In a study by Ovrebo[12] of gastric banding with respect to post surgical gastro esophageal reflux, the prevalence of acid regurgitation among patients treated with gastric banding increased from 13% preoperatively to 69% following surgery. Acid inhibitors were needed in 81% of patients. The incidence of gastro esophageal reflux increased markedly after gastric banding. In a study of 159 patients after vertical banded gastroplasty 55 of the 159 patients complained of upper gastrointestinal symptoms such as vomiting (72%), esophageal reflux (17%), and epigastric pain (3%). Stenosis of the outlet of the gastric pouch was described in 40 of the 55 symptomatic patients. Esophagitis was observed in 60% of these patients.[13] In a study of 185 laparoscopic adjustable silicone gastric banding cases there were eight cases (4%) of esophagitis.[14] These and other studies show that esophagitis is a significant risk in many types of weight loss surgery.

5. Marginal Ulcer

Ulcer is the sloughing of the lining of the gastro-intestinal tract. Ulcers can develop after surgeries. In Rutledge's series, the rate of marginal ulcer following surgery was 3%. This compares favorably to the experience of Capella and Capella.[15] In their series the incidence of marginal ulceration ranged from 5.1% to 8.5% in differing types of Roux-en-Y gastric bypass. In another series reported by Sapala et. al.[16] they state that "marginal ulceration after Roux-en-Y gastric bypass (RYGB) is a well-recognized complication. Its incidence varies between 1% and 16%." The factors they identify that are associated with the development of marginal ulceration include: pouch size, pouch orientation, staple line integrity, and mucosal ischemia. Nonsteroidal anti-inflammatory drugs (NSAIDs) and Helicobacter pylori may also contribute to marginal ulceration. In a series by Fox et. al.[17] the reported rate of marginal ulcer was 12%. Again these reports suggest that the ulcer rate seen in the laparoscopic Gastric Bypass is as good as, or better than that seen in patients undergoing Roux-en-Y types of bypass procedures.

6. Mortality Rate

In the series by Pories et.al.[18] the mortality rate was 1.5%. In a series of 212 gastric bypass patients by reported by Kirkpatrick[19] there were four post operative deaths (1.9%) and three late deaths. There were 13 anastomotic leaks (6%). 18% had complications. In the series reported Smith et. al.[20] of 3,855 patients undergoing Roux-en-Y gastric bypass for morbid obesity between 1988 and 1994 the operative mortality was 0.18%. In a study by Baltasar[21] of Bilio-pancreatic Diversion and Duodenal Switch in 23 patients there was one death (4.5%.) In a study by Hess[22] of 440 patients undergoing biliopancreatic diversion combined with the duodenal switch there were 2 deaths (0.45%.) Sugerman et.al. reported that patients with respiratory insufficiency had a higher operative mortality than did patients without pulmonary dysfunction (2.4% vs. 0.2% after gastric bypass[23].) In a study of Diabetics undergoing gastric bypass the mortality rate over the course of the study was 28% in the unoperated patients compared to 9% in the bypass group (including perioperative deaths).[24]

7. Reoperation

When considering surgical treatment of obesity consideration should be given to the higher risks associated with the occasional need for revision or reversal of the operation. In our program we offer revision of the operation, if needed for treatment of stenosis or leakage. We do not offer reversal of the operation for excessive weight loss, however we can refer you to another center for such operation if needed. The information listed below is meant to give you an idea about the reason for reoperation. As you will read through you will discover that different procedures are associated with different rates of reoperation. Revision rates of up to 20-40% are reported with some forms of weight loss surgery because of excessive weight loss, severe unresponsive anemia, persistent nausea and vomiting, unsatisfactory weight loss resulting from staple line disruption, pouch dilatation, and/or stomal enlargement and other problems. [25,26,27] Studies show that the morbidity and mortality are higher for revision than primary surgery [28] In a series reported by Sugerman and Wolper[29] 46% of 122 gastroplasties for morbid obesity failed. They stated that "Conversion of a failed gastroplasty to a Roux-Y gastric bypass is a ***difficult procedure that carried a significantly higher complication rate***."

Lovig et. al.[30] reported a five-year follow-up of 174 morbidly obese patients with gastric banding performed between 1981 and 1985. In their series 48 patients (28%) had 60 late complications requiring 26 reoperations (14.9%). In a series of 170 patients undergoing Biliopancreatic Diversion followed for 7 years the re-operation rate because of these side effects was 7%[31].

Even newer types of surgery such as the silicone band types of surgery have revision rates of up to 10%[32,33]. Miller and Hell[34] performed 102 adjustable silicone gastric bandings and 54 Swedish adjustable gastric bandings. They report that the late complications that required reoperation were two pouch dilatations (1.3%), three band leakages (2%), one band migration (0.6%), and one late infection of the port (0.6%). Band removal was necessary in one patient because of an esophageal motility

disorder. The overall reoperation rate was 7%. This is ten times higher than the 0.6% rate reported in Rutledge's series of Mini-Gastric Bypass patients.

In a series of 391 patients undergoing laparoscopic adjustable silicone gastric banding reported by Abu-Abeid and Szold a total of 26 (6.4%) reoperations were performed[35]

In a series of 40 Lap-Band patients reported by Angrisani et. al.[36] 8 of 40 patients who underwent laparoscopic adjustable silicone gastric banding experienced proximal gastric pouch

dilation (18%) or band dislocation (3%). Debanding was performed in 3 patients with pouch dilation (8%), while in 4 the pouch dilation was successfully treated with deflation of the band. Two patients (5%) were treated with band repositioning. In a study by O'Brien et. al.[37] prolapse of the stomach through the band occurred in 27 of 302 patients (9%). These reported rates of revision are much higher than the revision rate in this series of laparoscopic Gastric Bypass patients (revision rate of 0.6%). From these data it appears that the laparoscopic Gastric Bypass has a revision rate that seems much lower than that reported for other forms of weight loss surgery.

8. Hospital Stay

In the Smith [38] study the average length of stay for patients hospitalized in 1994 was 3.6 days. In the study by Chua[39] the average length of stay was 7.4 days. In the study by Fox [40] hospital stay was 3 versus 4 days for vertical banded gastroplasty and distal gastric bypass respectively. The hospital stay reported for the Fobi operation is "usually 4 days" [41]. Our hospital stay for uncomplicated cases average 2-3 days. Complicated cases will require longer hospital stay that varies depending on the type of complication and the treatment needed.

9. Operative Times

While there is major variation in the reported operating times for both the laparoscopic and open types of weight loss surgery, in every case the laparoscopic Gastric Bypass appears to have a much shorter operating time. In the series from Smith et. al. [42].the average operating time reported was 78 minutes. In fact, most other studies have reported much longer operative times. In a study by Eriksson et. al. the mean operating time was 128 minutes [43]. Chua reported a mean operating time of 202 min for laparoscopic vertical banded gastroplasty.[44] In the study by Nguyen et. al. [45].the operative times for both laparoscopic and open Roux-en-Y procedures were 246 + 70 minutes for laparoscopic Roux-en-Y and 294 $\pm$ 79 minutes for open Roux-en-Y. In a series of laparoscopic gastric banding the operative time was 106 $\pm$ 8 minutes [46]. In a series of open and laparoscopic adjustable silicone gastric bands the operative times were 150 minutes for laparoscopic vs. 76 minutes for open.[47] In a series of LapBand patients the operating time was 65 minutes.[48]

Preoperative Instructions

Stop Taking Any Aspirin, Motrin, Ibuprofen, Naproxen, Advil or Other Arthritis or Pain Medicines.

Make certain you **do not take any aspirin or medicines containing aspirin for two weeks before surgery because this can increase your risk of bleeding.** Aspirin and the other salicylates belong to a group of drugs called nonsteroidal anti-inflammatory drugs (or NSAIDs for short). You should avoid anti-inflammatory agents such as Ibuprofen (Advil) and aspirin products as well as excessive quantities of Vitamin E (the small amount contained in most multi-vitamin preparations is not harmful) for two weeks before surgery, as these inhibit the clotting mechanism and increase your chances of unnecessary operative bleeding. Aspirin-like products, which interfere with blood clotting, can promote bleeding during and after your surgery.

***For 24 hours prior to surgery, do not eat solid foods. Liquids, puddings, Jell-o, yogurt, broth, and juice are acceptable to consume.**

***Do not eat or drink after midnight except for your daily medications with a sip of water.**

Pre-Op Surgical Instruction

Read the surgical consent and ask your surgeons to answer any item you do not completely understand prior to signing it.

Discharge Instructions

I. Remember you can always come back.

✂ If any problem arises at any time, we stand ready to do everything possible to try and fix it. If you are having any problem at all, please, call and let us know to see if we can help.

II. Call at any time to speak with Dr. Allam.

If you develop a problem or have questions you can call the doctor at any time.

III. Activity

You may have heard after other types of surgery that you should beware of vigorous exercise or heavy lifting after surgery. This is not the case with laparoscopic surgery. Vigorous exercise can be started immediately after surgery if you wish. You do not have to start exercising immediately after surgery, but you can if you want to. Exercise does not put your stomach pouch at risk. Walking soon after operation is very helpful in your recovery. You can start water aerobics or swimming within seven days after operation. Weight lifting and sit-ups are fine and are encouraged. Take it easy if your have not done this type of exercise before.

IV. Bandages and Wounds

Bruising often occurs with surgery and it often worsens several days after. Bruising or bloodstains are usually not a source for concern unless accompanied by steady foul smelling drainage, worsening pain, tenderness, redness or progressive swelling. You may shower or wash the incision gently with mild unscented soap. Between baths, keep the wound dry with a bandage for the first 2 to 3 days. After the first 3 days you can leave the wounds open to air or cover them with a band-aid type bandage if you like.

V. Showering After Surgery

It is OK to shower and get your incision wet 3-4 days after the operation but do not soak in a bathtub for a week or 10 days. If the incision becomes red or starts to drain, you should immediately contact Dr. Allam.

VI. Future Appointments

You should call for an appointment with Dr. Allam within one to two weeks of surgery. However, if you feel that you need to see the doctor earlier, you can call the office and arrangements, will be made.

VII. What you should expect after you leave the hospital

You should be alert and oriented. You should understand what day it is, where you are and what is going on around you. In summary, you should feel that you are almost back to normal.

You should be able to stand, walk and move about steadily and without dizziness or lightheadedness. You should be up and walking very often during the day. You should not have undue amounts of pain. You should be able and encouraged to go up and down steps and to be reasonably active during the day and to be able sleep well at night. It is recommended that you alternate periods of rest and activity. You may do normal daily activities, light housework, and walking as tolerated. You

will tire more easily for a while after surgery, but gradually the periods of activity will get longer before you need to rest.

You should NOT have high fevers, night sweats or shaking chills at home. Your temperature should be less than 101.5.

You should be able to breathe comfortably without pain or shortness of breath. You should not be coughing up sputum or blood. You are encouraged to breathe deeply, to cough, and clear and open the lungs to help them recover from the operation.

You should be able to drink fluids without nausea or vomiting. Remember you have a new and very small stomach. Drink slowly and drink only a small amount at one time. Sip your juices. Don't rush it. Sometimes it may help to dilute your juices with water; half juice and half water.

You may have diarrhea for several days after the surgery. This can be severe for a few days and if you are not near a bathroom can lead to accidents in some cases. In every patient so far this problem has resolved in the first week or 10 days following the operation as the body begins to adjust to the new bypass.

You may have constipation: This usually resolves in the first week after the operation. If you are having problems call Dr. Allam, he may ask that you take a small dose of Milk of Magnesia.

You should be able to pass your urine without difficulty. You should not have burning pain, bleeding or hesitancy when you pass you urine.

You may have some clear or bloody drainage from the wounds. If you do, you can change your bandages whenever necessary. The drainage should not be foul smelling or contain pus. There may be some bruising around the port site wounds, but they should not turn red, swell, or become more painful.

You can take a shower. Treat the wounds with care, but they can get wet. You can cover them with a Band-Aid, if you wish.

VIII. Follow Up

Every month, you are asked to make appointment to see Dr. Allam. The doctor may request that you be seen earlier than that. As your progress pattern is established, you will be seen less often. You will have to make appointment with your primary care physician, psychiatrist, and nutritionist within one month of surgery and as needed thereafter.

IX. Discharge Medicines

Warning: **Please do not take any medicines other than those prescribed unless you discuss them with Dr. Allam first**. You will be given prescriptions for the medications listed below or other medications that have similar effect. You will not be given prescription if the medication is available over the counter.

Remember: It is very important that you plan on taking high doses of multivitamins for the rest of your life after Gastric Bypass.

Prevacid: (Lansoprazole) 15 mg by mouth once/day. You may be given a substitution or other medications based on the advice of your insurance.

Promethazine: (Phenergan®) SIG: Dose: 25mg to 50mg **ONLY TO BE TAKEN IF** needed every 4-6 hrs. for nausea. Phenergan is effective in the relief of nausea, and vomiting. It produces marked sedation in most patients. In general, gastrointestinal side effects are minimal. It is stronger than the Diphenhydramine (Benadryl). Dispense # 20, Patient may have up to 3 refills. You will be given a prescription for these medications if your postoperative course is complicated by persistent nausea or vomiting.

Pain medications: You will be given a prescription for pain medications at the discharge time. The type and dosage will vary depending on the amount of pain. You should use these medications only as needed. If the medications do not relief your pain, do not hesitate and call Dr. Allam.

Multivitamin: 1 tablet two times a day **Beginning immediately after surgery and then for the rest of your Life.** The Gastric Bypass is very effective in causing weight loss because it causes malabsorption of fat and calories, which is good. But the Gastric Bypass also causes malabsorption of some vitamins and minerals, which is bad. **Warning:** You must plan on taking high doses of multivitamins for the rest of your life after Gastric Bypass. Multivitamins come in the form of tablets, chewable tablets and liquids and are available over the counter.

Methylcellulose: (Citrucel) Dose 1 teaspoon PO BID in 2 -3 oz. of liquid. Citrucel is a synthetic bulk forming product dietary fiber, which has the ability to hold water and form bulk. We use it to 1-coat the lining of the new stomach pouch, 2-increase weight loss and 3-to normalize your bowel movements. (Note: You may substitute Metamucil or its equivalent for the Citrucel if you wish)

Vitamin B12: After gastric bypass surgery, you will not be able to absorb vitamin B12 through your pouch.

You have a choice of Vitamin B12 injections once a month or a 500mcg lozenge under the tongue once a week.

Calcium: 1500 mg daily.

Your Diet

There are several stages to the diet that you should eat after surgery. Different protocols have been developed representing variations in the schools of thought. These protocols are constantly changing reflecting the advancements that are being made everyday in treatment of obesity. However, these protocols are designed to help you lose weight and keep it off. Our nutritionist will provide you with a pamphlet that details the different stages of postoperative diet with recommendations as to the types of food. She will also spend the time educating you in this regard. Listed below is a simplified form of that pamphlet.

Generally speaking, the gastric bypass diet is broken down into several stages; ours is broken down into four stages and moves from liquids to solids over a 6-week period. At first, you will only be able to eat a few spoonfuls of food. You must

take your time while eating and drinking and recognize when you are full. **Stop eating at the very first sign of fullness**. One more bite can cause stomach pain or make you vomit.

Stage I: Clear Liquids

The first stage of the gastric bypass diet is a clear liquid diet and usually lasts for 1-2 days after surgery. You will start with sips of water and then move to apple, cranberry, and grape juice, diet gelatin, sugar-free popsicles, clear broth, and decaffeinated tea. These liquids are to be taken in small amounts, with a total amount of no more than ½ cup per meal. All liquids should be non-carbonated, since liquids with carbonation can put pressure on your small stomach pouch.

Stage II: Low Fat Full Liquids

Once you can handle clear liquids without difficulty, you will move to full liquid diet. Foods you can have include nonfat or 1% milk, plain soy milk, No Sugar Added Carnation Instant Breakfast (CIB), reduced calorie smooth yogurt, sugar-free pudding or custard, unsweetened applesauce, strained fruit, low fat strained cream soup, Cream of Wheat, and Cream of Rice. Each meal is about ½ cup (8 T) in size with a gradual increase to ¾ cup (12 T). You will stay on this diet for 3 weeks after surgery.

Whey Protein

Whey protein has been shown to have numerous positive effects on wound healing, increased immune function and increased strength and stamina. Recommended Dosage: Add one tablespoon to yogurt once or twice a day

Due to the restrictions of this stage of the diet and your post-operative nutritional needs, we suggest that you drink 2 cups (16 oz) of nonfat or 1% milk between meals, in 4 individual servings of ½ c (4 oz) each. For extra protein and flavor, add powdered No Sugar Added Carnation Instant Breakfast to your milk. If you cannot tolerate milk, try plain soymilk or a low carbohydrate soy shake. Your dietitian can help you determine which drinks are appropriate for you.

Stage III: Pureed

After 3 weeks on a liquid diet, you may eat a pureed or blended diet. The key here is texture. Food must be the consistency of baby food. Examples of pureed

food are low fat cottage cheese, low fat ricotta cheese, scrambled eggs, oatmeal, pureed fruit, unsweetened applesauce, mashed potato, pureed vegetables, tofu, pureed poultry, and pureed fish. Meals should be about ¾-1 cup in size. You are on this diet for approximately 3 weeks.

Stage IV

About six weeks after gastric bypass surgery, your diet will be expanded to include solid food. Your diet must be low fat from now on, and must be eaten in **very small portions**. Most foods can be eaten at this stage as long as they are reduced in sugar and low in fat.

You must be careful to chew your foods well. There is a risk of intestinal blockage if you swallow large bites of food. In general, each meal should be about 1 cup in size.

You must not eat certain foods because they may obstruct the stomach pouch. Examples are tough meat, untoasted bread, stringy vegetables (celery, corn, and spinach), membranes of oranges and grapefruit, skins of various fruits and vegetables (apple, pear, and potato), coconut, seeds, and nuts. Also, you should not eat foods high in sugar and fat as they will prevent or slow down weight loss and may cause dumping syndrome. Remember, meals should be about 1 cup in size.

Beware of the “Dumping Syndrome”

The dumping syndrome consists of mild, moderate or severe abdominal pains and cramping, occasionally causes diarrhea, lightheadedness, sweating, and palpitations. A concern after all types of gastric bypass surgery is condition called "dumping syndrome" in which there is discomfort following eating or drinking. This may include mild moderate or severe cramping, full feeling, rapid pulse, weakness, cold sweating, dizziness, and nausea and vomiting can even follow. (In simple terms, the rapid movement of food into the small intestine causes this syndrome from the stomach.) When there is liquid with the dry/solid foods, it causes a faster movement into the small intestine, sometimes precipitating the dumping syndrome. Thus, the recommendation is not to have liquids with solid foods or close to eating times.

Other recommendations to help prevent dumping include:

-Six or eight very small meals throughout the day

-Inclusion of protein and fat with carbohydrates, and may even want a relatively low carbohydrate content to decrease the chance of dumping

-Avoid sugar, sweets, and desserts (again, simple carbohydrates digest fastest and move quickest through the system).

-Avoid alcohol and sweet carbonated drinks

The Dumping Syndrome can be caused by sugary foods, fatty foods, too much food or liquid at one time and other foods in individual patients. Changing what you eat and how much you eat can treat the dumping syndrome. Remember that you must eat several

small "meals" throughout the day, to be careful of liquids and foods that contain sugar, and to eat foods high in protein (like nonfat yogurt). To reduce the amount of fluid that enters the small intestine, patients are usually encouraged not to drink more than a very small amount at a time. Medicine can also help control the dumping syndrome. The symptoms usually disappear in 3 weeks to 3 months.

Anti-dumping/Gastric Bypass diet is for persons with the Gastric Bypass for morbid obesity. Things people usually don't tolerate are:

- (Remember You are on Liquids for the first several weeks, this stuff is for later ☺)
- Tough meat, especially beef
- Fried or fatty foods
- Concentrated sweets
- Milk and dairy products are some times problems (yogurt seems to work best.)
- Bread, especially when fresh or fluffy can form a ball and be a problem (remember to chew your food very, very carefully)
- Citrus juices and fruits can be too sweet (mix them with water if they bother you)

Also drinking fluids with meals displaces nutrient dense foods and tends to make the person feel bloated and sick even if flat (fizz gone) carbonated beverages are consumed.

In the smaller gastric pouch, the simple sugars aren't broken down prior to being dumped into the intestines. The sugars ferment and cause bloating or sometimes vomiting.

Nausea, vomiting, bloating, indigestion, or heartburn can also be caused by: Eating or drinking too quickly, Not chewing food adequately especially beef, bread, Eating too much, Eating fatty, rich or sweet foods, Eating gas producing foods or drinking carbonated beverages, Eating foods that usually cause gastric discomfort to the individual.

Consider resting or lying down with your head elevated for 15 minutes after a meal to decrease movement of food from the stomach to the small intestine. This can decrease the severity of symptoms in some patients. You may want to avoid very hot or cold foods or liquids, which may increase symptoms in some patients.

The best advice is to go very, very slowly on taking any liquids or foods as you begin to adjust to the Gastric Bypass.

Supplements

Supplements are an addition to your diet that may be advantageous in your recovery and in the maintenance of your long-term good health. It is important to note that you do not have to take these supplements. They might be of some help but they are not necessary for your recovery. **They may be started as soon as you like after surgery.**

Supplements to consider:

Vitamin E

Vitamin E is an important antioxidant and has been shown to aid in wound healing and to assist in preventing and treating stomach ulcers. Recommended Dosage: Vitamin E 400 units three times a day for one month then the vitamin E in your multivitamin supplement should be adequate. Remember that ulcer is one of the long-term risks of this operation. Studies have shown that vitamin E is more effective than various antacids in healing gastric ulcers. In one study the rate of gastric healing was faster in vitamin E treated group compared to a control group treated with ranitidine (Zantac.)

Creatine

Skeletal muscle function is decreased in obese men and women. Studies have shown that ATP, **creatine**, glycogen, and lactate are decreased in obese patients. Creatine is a naturally occurring compound found in muscle. It is made from three amino acids - arginine, glycine and methionine. It has been shown that Creatine supplementation can increase muscle energy, stamina, and strength, muscle mass and fat loss. Creatine supplementation enhances maintenance of fat-free mass (muscle) and the progress of muscle strength during training in sedentary females. Recommended Dosage: Creatine Monohydrate is taken 7,500 mg of the powder mixed in liquid 1-3 times daily, depending on how much you can tolerate.

Eur J Appl Physiol Occup Physiol 1998 Jun;78(1):83-92 Effect of creatine supplementation during rapid body mass reduction on metabolism and isokinetic muscle performance capacity., Oopik V, Paasuke M, Timpmann S, Medijainen L, Ereline J, Smirnova T

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Subjects studied before and after losing a 3-4% of their body weight has shown that muscle strength could be maintained or even enhanced by dietary creatine supplementation.[49] The results indicated that creatine supplementation in comparison with placebo treatment during rapid weight loss may help to maintain muscle mass.

Glutamine

Glutamine is the principal fuel for the cells that line the stomach and the gut. Studies have shown that Glutamine can decrease damage of jejunum (small bowel) and aid in healing. Glutamine is safe and easy to take and can be a valuable supplement for a sound nutritional program. Research has shown that an increased amount of glutamine can help to protect and heal the digestive tract, strengthen the

immune system and improve muscle mass. Glutamine plays a key role within the intestinal tract. Glutamine supplementation can promote intestinal health and help to alleviate symptoms. Glutamine is a primary source of energy for the cells of the gastrointestinal tract. The cells that line the intestine get replaced with new cells every 72 hours. Glutamine plays a key role in the process of intestinal renewal as well as healing and repair of damaged cells. Conversely, it has been proven that a lack of adequate glutamine can result in diarrhea and damage to the intestinal tract. Glutamine supplementation has been shown to promote the healing of diseased or damaged intestinal tract and enhance intestinal regeneration following surgery. Recommended Dosage: 1-5 grams mixed in yogurt 2-4 times per day.

Studies have sown that 14 grams of glutamine per day helped AIDS patients keep on muscle and not gain fat. The study also demonstrated improved immune function in AIDS patients receiving supplemental glutamine.

Fish Oil/Flax Oil Tablets: Recommended Dose: 1-2 tablets 1-3 times a day. Start Slow and build up slowly.

Information: Several studies suggest that not all fats are the same and that indeed some fats be good for you and treat and reverse different types of disease. Recent studies of the so called Mediterranean diet suggest that relatively high amounts fat as olive oil actually improved survival. In another study addition of the omega 3 fatty acids (olive oil) improved the outcome of patients with bipolar (manic depressive) disease. Fish and fish oil, rich sources of omega-3 fatty acids, have sparked intense interest studies, which suggest a favorable effect on Heart Disease and other studies, which show a striking improvement in lipid profiles in hyperlipidemic patients. Patients after gastric bypass malabsorb fat and calories in part leading to the weight loss. One concern is the possible deficiency of essential fatty acids. It may be a good idea to take a fatty acid supplement of fish or flax seed oil. It also may be advantageous to use olive oil when possible. Corn and safflower oils on the other hand may not be good choices.

Zinc l-monomethionine zinc/magnesium aspartate (TwinLab ZMA Fuel available at Wal-Mart and GNC Stores). **Recommended Dose:** 3 capsules for men and 2 capsules for women taken on an empty stomach 30-60 minutes before bedtime. Healing, recovery, tissue repair, and muscle growth are maximized during sleep when growth hormone is released by the pituitary gland. Zinc and magnesium may potentiate this healing effect of growth hormones during sleep. **Information:** In a recent double-blind placebo study conducted with NCAA college football players, researchers at Western Washington University found that eight weeks of nightly supplementation with ZMA: Increased plasma zinc levels 29%, while placebo levels decreased 4.4%---a 33.5% difference. Increased plasma magnesium levels 6.2% while placebo levels decreased 9.2%--a 15.4% difference. Increased total testosterone levels 32.4% while placebo levels decreased 10.5%--a 42.9% difference. Increased free testosterone levels 33.5% while placebo levels decreased 10.2%--a 43.6% difference. Increased Insulin-like Growth Factor (IGF-1) levels 3.6% while placebo levels decreased 21.5%--a 25.1% difference. Increased muscle strength 11.6% while placebo strength increased only 4.6%--a 2.5-fold difference. Other reported benefits of ZMA include increased physical endurance, a decrease in muscle cramps and strains, faster healing from injuries, improved mental concentration and alertness, decreased water retention, and deeper, more restful sleep.

Bran Tablets: Recommended Dose: 1-2 500 mg. tablets 1-3 times per day. Start slow and build up. **Information:** Fiber has been shown to have a variety of positive effects. Bran has been shown in hundreds of studies to decrease fat absorption, protect the lining of the gut and improve bowel functions.

CAUTIONS - "What to Look Out For"

Nausea: Nausea is common for the first several days after surgery. In unusual cases the nausea can be so severe that prevent patients from taking in an adequate amount of liquids. If this happens you need to come back to the hospital to receive intravenous fluids. Rarely this can last as long as several weeks. In every single case so far this has always resolved. For nausea that occurs in the first days after surgery medications such as the Scopalamine patch, phenergan and benadryl are often helpful.

Nausea and Estrogen Levels: Nausea is common in the first several months of pregnancy. It is felt that the nausea of pregnancy may in part be related to changing hormone levels. We have seen that nausea can occur after Mini-Gastric Bypass and that this nausea can sometimes be reversed by a low dose estrogen patch, Climara 0.05 mg/day. Climara is indicated for the treatment of menopausal symptoms, hypoestrogenism and the prevention of osteoporosis. Estrogens should not be used by patients with known or suspected pregnancy, breast cancer, estrogen-dependent neoplasia, undiagnosed abnormal genital bleeding, active thrombophlebitis or thromboembolic disorders. Estrogens have been reported to increase the risk of endometrial carcinoma.

Infection: Watch for signs and symptoms of infection. These are: a rapid pulse rate of over 100 beats per minute that does not slow down, a fever greater than 101.5 degrees, chills, increased redness or pus draining from the incision sites. Look for increasing abdominal pain, nausea, vomiting or shortness of breath. If you experience any of these please CALL Dr. Allam immediately.

Depression: Experience has shown us that in the period of stress, starvation and weight loss that occurs following laparoscopic Gastric Bypass mild to severe depression is common. You and your family should look for the signs of depression: Persistent sad, anxious, or "empty" mood, · Loss of interest or pleasure in activities, including sex, Restlessness, irritability, or excessive crying, Feelings of guilt, worthlessness, helplessness, hopelessness, Sleeping too much or too little, early-morning awakening, Decreased energy, fatigue, feeling "slowed down", Thoughts of death or suicide, Difficulty concentrating, remembering, or making decisions, Persistent physical symptoms that do not respond to usual treatment. Effective drug and psychological treatments for depression are available. With treatment patients can improve and return to normal quickly. Unfortunately, most depressed persons do not recognize their depression. You and your family need to be aware of the risk of depression in the recovery period and if present we need to discuss possible treatment.

Do Not Drive for one week or until you are completely back to normal.

NO SMOKING! I know you've heard this before, but it really is an important part of your recovery. Smoking causes narrowing of your blood vessels that in turn decreases circulation. If you smoke you will need to stop as soon as possible. Ask your doctor for information on smoking cessation drugs and programs.

Long Term Risks

Ulcers: Gastric bypass operations have been under study for 25 years. The RNY gastric bypass operation involves dividing the stomach in small and large sections and connecting the small pouch to a limb of small intestine. This is RNY Gastric Bypass operation requires two intestinal "anastomoses", or Hook-ups, and is associated with an 11% incidence of stomal stenosis (too tight an opening) and a 12%

incidence of ulcer at the site of the gastrojejunostomy (stomach to small intestine. If stomal stenosis develops, it usually responds to dilation with balloon catheter if an ulcer develops, it usually responds to medical treatment. Ulcers can lead bleeding and perforation if not recognized and treated. Make sure that you stay in touch with Dr.Allam if you develop pain and indigestion type symptoms after the surgery. To prevent ulcers it is strongly recommended that you be careful to remember to take your "Tums", Citrucel, Bran, Whey protein, Vitamins and other supplements religiously after the surgery. Remember to avoid all kinds of aspirin, ibuprofen, Aleve, naproxen and other similar drugs that can cause ulcers. Remember that a healthy diet high in vitamins A, C and E as contained in fresh fruit and vegetables may help protect against ulcers and the development of stomach cancers. Remember that drinks such as coffee, tea and sodas are all bad, as they do not contain any healthy vitamins or minerals. Thus they displace drinks such as orange juice and grape juice that are good for you and your stomach and thus they should not be taken. Alcohol is also very dangerous as it damages the lining of the stomach and should be avoided.

Vitamin and Mineral Deficiencies: The gastric bypass type surgery has been done for many years and it is clear that the absorption of some vitamin and minerals is decreased after this surgery. The most common problems are iron and vitamin B12 deficiencies. Patients must be aware that folate, vitamin B12, and iron deficiencies occur after gastric bypass, though the time to development is variable. Vitamin and mineral deficiencies that can be devastating can be prevented by taking the recommended supplemental vitamins and minerals and by carefully monitoring blood levels of these vitamins and minerals. In a study of vitamin E, vitamin B-6, vitamin B-12, and folate status of gastric bypass surgery patients. By Boylan et. al. from the Department of Human Nutrition and Foods, Virginia Polytechnic Institute and State University, Blacksburg. J Am Diet Assoc, 1988 May, 88:5, 579-85 The vitamin E, vitamin B-6, vitamin B-12, and folate status of 22 gastric bypass subjects aged 23 to 60 years was evaluated before surgery and at 6 and 12 months after surgery. Before the surgery, 77% of patients had adequate plasma vitamin E levels; 36%, adequate plasma pyridoxal phosphate (vitamin B-6) levels; 100%, adequate plasma vitamin B-12 levels; and 45%, adequate plasma folate levels. After surgery, some patients did not take the prescribed daily vitamin supplements. Patients that took higher levels of vitamins had higher blood levels of the vitamins than those taking fewer vitamins. In patients taking fewer vitamins blood vitamin levels were often deficient. Patients taking more than 100 micrograms vitamin B-12 daily had good vitamin B-12 levels. This study clearly demonstrated that the more vitamins patient took the higher their blood vitamin concentrations were. **Moral of the story: Take your vitamins (Forever) and see your Doctor once a year to have all of your blood levels tested, it a life and death proposition!)**

Patient Letter

One of the most important efforts of the preoperative preparation of patients for the Laparoscopic Gastric Bypass is an education about the risks and benefits of the operation

It's extremely important that you understand the surgery before you undergo it... as well as your alternatives. If you have to rethink the surgery, its potential complication and its alternatives once or twice... that's not so bad, as the surgery you are undertaken is life changing and potentially life threatening (as is any surgery). Sure, you've thought about it a million times in your mind, but writing it out... that takes a bit more thought. My advice as to writing... pretend you are talking to your best friend... assume s/he is asking you the questions... make your letter your answer to your friend.

The letter requirement is based upon educational research showing that retention of information is improved by asking the learner to think about and write down the information. Patients who are not able to understand enough to write a letter detailing the risks and benefits of the operation will be poor candidates for Laparoscopic Gastric Bypass.

Required Letter Contents:

- ☐ The patient understands the risks of obesity
- ☐ The patient understands the definition of morbid/clinically severe obesity
- ☐ The patient understands that he/she is morbidly obese
- ☐ The patient understands why the operation is performed
- ☐ The patient understands how the operation is performed
- ☐ The patient understands the expected benefits of surgery
- ☐ The patient understands the expected risks of surgery
- ☐ The patient understands that there are other non-surgical methods to loose weight
- ☐ The patient understands the post-operative dietary changes
- ☐ The patient understands the possibility of depression after surgery
- ☐ The patient made their choice based on full understanding of the proposed procedure with its risks
- ☐ The patient understands the need for long-term follow-up

Psychiatric Evaluation

All our patients are now requested to undergo a psychiatric evaluation to assess their psychological status prior Gastric Bypass.

This can not be performed by your usual medical doctor. It can be performed by either a psychologist or a psychiatrist.

Guideline for Psychiatric Evaluation

- Purpose of Evaluation

The psychiatric evaluation includes as its central component a face-to-face interview with the patient. The interview-based data are integrated with data that may be obtained through other components of the evaluation, such as a review of medical records, a physical examination, diagnostic tests, and history from collateral sources. A general evaluation usually takes more than 1 hour to complete. Several meetings with the patient should not be necessary.

The psychiatric consultation is requested for the purpose of assisting in the diagnosis, treatment, or management of a patient's possible mental disorder or behavioral problem. This evaluation should be comprehensive.

The aim of the consultative psychiatric evaluation is to provide clear and specific answers

to the questions including:

- ☐ Psychiatric diagnosis relevant to the gastric bypasses; in particular is the patient psychotic?

- ☐ Treatment advice

- ☐ Patient's competency in deciding to proceed with gastric bypass.

- ☐ Patient's ability to handle the stress of the period that follows surgery

- ☐ Willingness of the psychologist/psychiatrist to follow and treat the patient in the post operative period.

Risks/Benefits of Proposed Procedure

Just as there may be some expected benefits from the laparoscopic Gastric Bypass procedure, you should also understand that all medical and surgical procedures, including the laparoscopic Gastric Bypass involve risks. You should understand that obesity increases my risks of these problems and complications. You should consider these risks prior to considering surgical treatment. You are to read, mark in the appropriate boxes, and return the blue original located in your folder to the doctor office keeping this copy for yourself. The list below includes the most common risks; however **other risks that may occur are not listed below.**

The most common risks include:

	Complications	**Description**	

1	Allergic Reactions	All kinds of allergic reactions are possible, from minor reactions such as a rash to sudden overwhelming reactions that can cause death.	If you agree and understand check Yes Here: † And initial here:
2	Anesthetic Complications	Anesthesia used to put you to sleep for the operation can be associated with a variety of different complications up to and including death.	If you agree and understand check Yes Here: † And initial here:
3	Bleeding	Surgery involves incisions and cutting that can result in bleeding complications, from minor to massive, that can lead to the need for emergency surgery, transfusion or death.	If you agree and understand check Yes Here: † And initial here:
4	Blood Clots	Also called Deep Vein Thrombosis (DVT) and Pulmonary Embolus can sometimes cause death. The rate of this complication varies with different studies. I understand that I need to get out of bed the evening after surgery and move and flex my feet and legs to try to help prevent clots from forming in my legs	If you agree and understand check Yes Here: † And initial here:
5	Infection	Including wound infections, bladder infections, pneumonia, skin infections and deep abdominal infections that can sometimes lead to death.	If you agree and understand check Yes Here: † And initial here:
6	Leak	After operation to bypass the stomach the new connections can leak stomach acid, bacteria and digestive enzymes causing a severe abscess and infection. The rate of this complication varies with different studies. This can require repeated surgery, and intensive care and even death.	If you agree and understand check Yes Here: † And initial here:
7	Narrowing (stricture)	Narrowing (stricture) or ulceration of the connection between the stomach and the small bowel can occur after the operation this can require emergency operation, intensive care and can sometimes lead to death. To protect your new stomach from ulcers you must never again take aspirin, or aspirin like drugs such as Motrin, Ibuprofen, Naprox, Relafen or other similar drugs.	If you agree and understand check Yes Here: † And initial here:
8	Indigestion, Reflux or Ulcers	The operation can sometimes lead to severe nausea, vomiting, indigestion, abdominal pain, gastritis or ulcers. This can be severe and can last for days, weeks and possibly even longer. This is especially likely if you have had previous problems with nausea, abdominal pain or ulcers.Nausea is much more common in women than men. Women that have been treated with any type of hormone therapy (Premarin, Estrogen or Birth Control Pills) are much more likely to have nausea and vomiting after surgery.	If you agree and understand check Yes Here: † And initial here:
9	Dumping	Dumping Syndrome (Symptoms of the dumping syndrome	If you agree and understand check Yes

	Syndrome	include cardiovascular problems with weakness, sweating, nausea, diarrhea and dizziness) can occur in some patients after gastric bypass. This can be so severe that the surgery may have to be reversed.	Here: † And initial here:
10	Bowel Obstruction	Any operation in the abdomen can leave behind scar that can put the patient at risk for later bowel blockage or obstruction. The bowel can twist, obstruct and even perforate leading to serious complications and even death.	If you agree and understand check Yes Here: † And initial here:
11	Laparoscopic Surgery Risks	Laparoscopic Surgery uses punctures to enter the abdomen and this can to lead to abdominal injury, bleeding and even death.	If you agree and understand check Yes Here: † And initial here:
12	Side Effects of Drugs	All drugs have inherent risks and complications and in some cases can cause a wide variety of side effects, reactions and in some cases including death.	If you agree and understand check Yes Here: † And initial here:
13	Loss of Bodily Function	The performance of surgery and anesthesia can stress the body's systems leading to a variety of complications including stroke, heart attack, limb loss and other problems related to operation and anesthesia.	If you agree and understand check Yes Here: † And initial here:
14	Risks of Transfusion	Including Hepatitis and Acquired Immune Deficiency Syndrome (AIDS), from the administration of blood and/or blood components. These illnesses are serious and can be fatal.	If you agree and understand check Yes Here: † And initial here:
15	Hernia	Cuts and incisions in the abdominal wall can lead to hernias after surgery. Hernias can lead to pain, bowel blockage, obstruction and even perforation and death in some cases. Treatment of hernias usually requires another operation.	If you agree and understand check Yes Here: † And initial here:
16	Hair Loss	Many patients develop hair loss for a period after operation. When this occurs it usually starts around 3-4 months after surgery and resolves at 7-9 months after operation. This usually responds to increased oral intake of protein and vitamins but it may be permanent.	If you agree and understand check Yes Here: † And initial here:
17	Vitamin and Mineral Deficiencies	After gastric bypass there is a malabsorption of many vitamins and minerals. Patients must take vitamin and mineral supplements forever to protect themselves from these problems. You also need to have yearly blood tests to measure the blood levels of these vitamins and minerals. Common deficiencies that can occur after gastric bypass include iron and calcium deficiency, B12 and Folate deficiencies. This is very important: Patients must take vitamin and mineral supplements forever. In some cases the deficiencies are so severe that they can lead to nerve and brain damage and the	If you agree and understand check Yes Here: † And initial here:

		operation must be reversed.	
18	Inadequate Weight Loss	**WARNING: Remember that you might not lose weight after the operation.** *There are patients that will fail any type of surgery. Inadequate weight loss is a risk of all types of weight loss surgery and indeed of all types of weight loss treatment. *I recognize that the Gastric Bypass is not by any means a perfect treatment and that one of the risks that I face is a real possibility of inadequate weight loss following my Gastric Bypass surgery.	If you agree and understand check Yes Here: † And initial here:
19	Excessive Weight Loss	Some patients sustain excessive weight loss after operation and may require reversal of the bypass to prevent severe malnutrition, nausea or vitamin and mineral deficiencies or death.	If you agree and understand check Yes Here: † And initial here:
20	Complications of Pregnancy	Vitamin and mineral deficiencies can put the newborn babies of gastric bypass mothers at risk. No pregnancy should occur for the first one to two years after operation. Gastric Bypass has been shown to cause multiple types of vitamin and mineral deficiencies including: iron, B12, Folate, calcium and many others. Many of these deficiencies have been shown to cause birth defects or are suspected that they could cause birth defects. We also know that many patients who lose weight feel that they are well after surgery and forget to take their vitamins. Patients must be certain not to miss any of their vitamins if they decide to go ahead with pregnancy later.	If you agree and understand check Yes Here: † And initial here:
21	Unplanned Pregnancy	**Warning to women using Oral Contraceptives (Birth Control Pills):** More than 80 million women worldwide take "the pill" to prevent pregnancy. Typical failure rates among pill users are as high as 12% to 20% in some surveys. Other factors have been shown to increase the risk of pill failure: smoking, diarrhea and/or vomiting drug interactions, systemic illness, psychological stress, and menstrual disturbances. So it is important to recognize that Birth Control Pills may not be an effective method of birth control after the Gastric Bypass until those factors have resolved. We have found on several occasions that in many cases the hormonal methods of birth control fail after Gastric Bypass. Couples need to plan another form of non hormonal birth control for 6-12 months after surgery. Depo-Provera has also been associated with marked cases of nausea in post GB patients. An unplanned pregnancy can be one of life's most difficult experiences.	If you agree and understand check Yes Here: † And initial here:
22	Other	Major abdominal surgery, including the Gastric Bypass, is associated with a large variety of other risks and complications,	If you agree and understand check Yes

		both recognized and unrecognized that occur both soon after and long after the operation.	Here: † And initial here:
23	Depression	Depression and anxiety are common medical illnesses and have been found to be particularly common after operation.	If you agree and understand check Yes Here: † And initial here:
24	Cancer	Cancer can occur in anyone. Many cancers are more common in obese as compared to thin patients. Overweight men have a significantly higher rate of prostate cancer. Obese women have higher risks of developing breast cancer and cancer of the uterus and ovaries. It is expected, but not certain, that with weight loss you will have an overall decrease in your risk of cancer. The Billroth II connection used in the Gastric Bypass has been used for almost 100 years and is performed over 16,000 times a year in America to connect the stomach to the bowel. Some studies have suggested that the Billroth II connection used in the Gastric Bypass can increase the risk of stomach cancer while others do not show this. The studies showing increase risk of stomach cancer are in Billroth II patients that had the surgery for ulcers and since ulcers can cause an increased risk of stomach cancer it may be the stomach ulcer not the Billroth II that causes some studies to show increased risk of stomach cancer after the Billroth II. Diet seems to be much more important as a cause of stomach cancer. Eating processed meats has a much greater effect on increasing stomach cancer risk that the Billroth II. Conversely fresh fruits and vegetables seem to protect against stomach cancer. In the end no one knows what will happen in your case and if you are concerned about stomach cancer then you could either 1) Not have the Gastric Bypass, 2) Have the Gastric Bypass and avoid processed meats and eat more fresh fruits and vegetables. In either case stomach cancer is an unlikely event.	If you agree and understand check Yes Here: † And initial here:
25	Death	This is a major and serious operation. It may lead to death from complications.	If you agree and understand check Yes Here: † And initial here:
26	Internal Hernia	Surgical procedures on the digestive tract, particularly bariatric procedures, can result n the formation of internal hernias. These hernias may become symptomatic at any point in time after the surgery. Hernias can cause bowel blockage, perforation, gangrene, and even death.	If you agree and understand check Yes Here: † And initial here:
27	Follow Up	I understand that I will have to see Dr. Allam on monthly bases. I understand that it is my responsibility to contact his office for appointment. I will not hold the doctor liable if I failed to show up for my appointment.	If you agree and understand check Yes Here: †

			And initial here:

Special Warning About The Risks of Birth Defects After Gastric Bypass:

- Vitamin and mineral deficiencies can put the newborn babies of gastric bypass mothers at special risk of Major Birth Defects.
- No pregnancy should occur for the first one to two years after operation.
- Gastric Bypass has been shown to cause multiple types of vitamin and mineral deficiencies including: iron, B12, Folate, calcium and many others. Many of these deficiencies have been shown to cause birth defects or are suspected that they could cause birth defects.
- We also know that many patients who lose weight feel that they are well after surgery and forget to take their vitamins.
- Patients must be certain not to miss any of their vitamins if they decide to go ahead with pregnancy later.
- **Warning to women using Oral Contraceptives (Birth Control Pills):** Many women take 'the pill' to prevent pregnancy. Typical failure rates among pill users are as high as 12% to 20% in some surveys. Other factors have been shown to increase the risk of pill failure: smoking, diarrhea and/or vomiting drug interactions, systemic illness, psychological stress, menstrual disturbances. Therefore BC Pills may not be an effective method after the Mini-Gastric Bypass until those factors have resolved. An unplanned pregnancy can be one of life's most difficult experiences.

I also realize that there are particular risks associated with the laparoscopic Gastric Bypass procedure proposed for me and that these risks include, but are not limited to: Bleeding, Leak, Abscess and serious intra-abdominal infection and Blood Clots all of which can lead to repeated operation admission to the intensive care unit and sometimes death.

I realize that Dr. Allam plans to perform the operation laparoscopically, and that this approach has special risks including injury to the abdominal contents such as blood vessels, the bowel and other organs.

If you agree that everything in the above paragraph is correct, check Yes Here: †

And initial the paragraph above.

Authorization for Release Medical Information: I herby confirm that I freely approve of the release of my medical information for the purposes of education and advocacy of the rights of obese patients and that I have not in any way been coerced into this authorization. I recognize that I can refuse to approve of this use of my personal medical information with no negative impact upon my care or treatment by Dr. Allam or his staff. I have had the opportunity to consider whether or not to approve this use of my personal information and I state that I have not be the subject of coercion or undue influence to agree to this release of information. I hereby authorize Dr Medhat Allam to use any portions or parts of my medical records and information pertaining to the medical history, mental or physical condition, services rendered, or treatment given for the purposes of education of future patients. I understand that his sole use of this information will be in an attempt to help others. The information supplied is to be used to educate individual patients, Doctors as well as other members of

the public including Health Insurance Companies and the News Media. This authorization shall become effective immediately.

If you agree that everything in the above paragraph is correct, check Yes Here: †

And initial the paragraph above

Patient Signature:

____ Date:

Parent or other person authorized to sign for patient:

____ Date:

Notary Public:

____ Date:

____Date:

Spouse's signature (optional)

____Date:

Parent/Guardian for patients under 21 (optional)

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