Consent Document for Bariatric Surgery

I, __________________________, have read and understand the following document completely.

In addition, my surgeon has discussed with me at length and I completely understand the risks, benefits, and potential complications of undergoing bariatric surgery for weight loss.

I am aware that the Bariatric Surgery Program at Tri-City Medical Center is a new program and is applying for accreditation in Bariatric Surgery. The Bariatric Surgeon, Karen J. Hanna MD FACS has done over 250 cases.

(Patient signature)  (Date)

(Witness signature)

(Surgeon signature)
BARIATRIC SURGERY

I. Introduction

You are considering bariatric surgery to lose weight permanently. Please read the following information carefully. We hope this handout will help answer any questions you may have. There are several types of surgery for obesity. The most commonly performed surgeries are Laparoscopic Roux-en-Y (“roo en why”) Gastric Bypass (LRYGB), Laparoscopic Vertical Sleeve Gastrectomy (LVG), and the Laparoscopic Gastric Adjustable Band.

II. Indications

In order to be considered for bariatric surgery, the patient must have a Body Mass Index (BMI) greater than 40 kg/m$^2$. If the patient does not have a BMI$>40$, they may be considered for surgery if they have one or more of the following co-morbid diseases and a BMI$>35$:

- Diabetes,
- Hypertension,
- Severe osteoarthritis,
- High cholesterol/lipids,
- Obstructive sleep apnea,
- Gastro-esophageal reflux disease,
- PCOS.

The BMI is calculated by dividing the patient's weight in kilograms by height in meters squared. BMI = Weight (kilograms)/Height(meters) squared. There are several online BMI calculators and one is provided in the back.

Other factors used to determine if you are a candidate for the surgery include:

1) **Age**--Older patients have a higher risk profile and do not benefit as much from the procedure. Patients younger than 18 are not considered candidates.

2) **Severity of co-morbid disease processes**--Patients with diseases such as end stage diabetes sometimes do not benefit from weight reduction surgery.

3) **Past history of weight-loss attempts**. It is important that each patient has exhausted the usual methods of weight loss and has not been successful.
III. Benefits

Expectations for surgery need to be realistic. The rate and amount of weight loss is different in each patient. On average, patients lose approximately 50% of their excess body weight over a period of 12-24 months. Over the ensuing 2-5 years, a small weight gain may be anticipated as the body accommodates to the “new anatomy”. At 5 years post-surgery, 40-60% of patients will have maintained their post-operative weight loss. The remainder of patients will have gained back a percentage of their initial weight loss. Patients who are the most motivated, participate in a regular exercise program and continue to maintain good eating habits will have the most success.

In addition to the weight loss, many benefits can occur as a result of co-morbid diseases improving:

1) The decrease in weight will contribute to less stress on the joints and many patients experience less joint and back pain.

2) Gastro-esophageal reflux will resolve in some patients but may worsen in others.

3) Dysmenorrhea (abnormal menstrual cycles) and infertility may improve.

4) Diabetes frequently becomes manageable by diet alone, or in some instances, will disappear altogether.

5) Hypertension frequently improves or may normalize.

6) Obstructive sleep apnea is improved by weight loss, leading to better rest at night and decreased stress on the overworked heart.

![Weight loss after gastric surgery for morbid obesity](image-url)
7) Lowering cholesterol or lipid levels in those patients with preoperative elevations decreases the risk of cardiac disease. In addition, significant weight loss improves the cardiac risk profile by itself.

Finally, the psychological benefits are tremendous. Not only do most patients feel better as a result of increased energy with profound weight loss, many also benefit from improved self-image.

IV. Complications

Bariatric surgery should not be taken lightly. Relative to many General Surgical procedures, Bariatric Surgery carries a higher morbidity (risk of complications) and mortality (risk of death). The following are common complications and the relative percent of patients who will experience them:

1) Failure to lose weight (>40% of excess body weight)  15-20%
2) Incisional hernia  0.4%
3) Wound infection  1-3%
4) Marginal ulceration (ulcer near the pouch)  0.1%-1%
5) Pneumonia  0.8%
6) Deep Venous Thrombosis (blood clot in leg)  0.8%
7) Small Bowel obstruction  0.4%
8) Stomal stenosis (narrowing at the outlet of the stomach)  0.3%
9) Leak  0.5%-3%
10) Death  0.3%

In addition, the following can be considered “side-effects” (some desired) of the procedure:

1) **Roux-en-Y procedures:** Dumping Syndrome (light-headedness, facial flushing, nausea, abdominal pain, and fast heart rate associated with eating foods high in fat and sugar. This can be prevented most of the time with proper nutrition.

2) Chronic nausea and vomiting that is usually related to overeating; however this can be a result of narrowing of one of the intestinal connections or scar tissue leading to a bowel obstruction. In a few patients there is no source identified and this will be a lifelong problem.

3) **Gastric bypass patients (LRYGB):** Vitamins B1 and B12, Folate, Iron, and Calcium deficiency. Not all patients experience these deficiencies, but every patient will be required to take a multivitamin, Vitamins B1 and B12, iron, and calcium with Vitamin D for life. Some patients may be required to get monthly shots of these vitamins if severely deficient.

4) **Gastric sleeve patients (LVG):** you will need to take a complete multivitamin and calcium supplements for life. Your levels for thiamine
and B12 will be checked, and if below normal levels, supplements will be recommended for you to take.

5) Most patients experience some form of hair loss. This will resolve in most cases when weight loss stops. Also, there is a medication (Zinc) which can be used to stop this if it occurs.

6) **Gallstone formation.** In some cases, even though gallstones were not present pre-operatively, stones will form and may necessitate removal of the gallbladder at a later date. To help prevent their formation, we may prescribe Actigall for the first year.

7) **High-risk pregnancy.** Effective birth control **must be practiced** during the period of weight loss during the **first 2 years.** Thereafter, pregnancy is ok but must be carefully supervised by an experienced obstetrician to ensure proper fetal nutrition.

V. **Preoperative Evaluation**

If surgery is deemed appropriate for you, consultations with a dietitian and a mental health provider will be required. In addition, blood work and radiology testing including a chest x-ray and an Upper G.I. will be ordered.

In addition, some patients will require a consultation with an Internal Medicine specialist to evaluate preoperative cardiac and pulmonary risk status. Further tests may be required as indicated during your initial consultation.

Upon completion of your consultations, attempted weight loss, and classes, a surgery date will be arranged for you and you will be seen again in the clinic for your “Pre-Op” appointment.

VI. **Surgery**

The details of surgery will be discussed at your “pre-op” appointment. This will be your opportunity to ask questions about the procedure or any of the items discussed above. If we have not yet met your spouse or another significant family member, we will want to see that individual at this appointment.

Surgery usually takes 2-3 hours. Depending on your medical history, you may stay in the Intensive Care Unit (ICU) for 24 hours post-operatively. Patients with known Obstructive Sleep Apnea (OSA) will stay overnight in a monitored setting.

Most patients remain in the hospital for 2 days. For some patients, a x-ray study (Barium Swallow or CT scan) will be done the morning after surgery to assess the pouch. This is a routine test to look at the new anatomy and to ensure there
is no leakage from the staple lines placed during surgery. It is expected that patients will be out of bed and walking the same day after surgery.

Feeding usually begins the day after surgery. A Bariatric Clear Liquid diet will be started. You will have a great deal of counseling from the registered dietitian and the Bariatric Surgery team regarding your post-operative diet prior to surgery. You will be on a Stage I liquid diet until your first post-operative visit.

**VII. Postoperative Follow Up**

Routine postoperative follow up is crucial to a successful bariatric operation. We expect to follow you very closely for the first year and hopefully for the rest of your life. We encourage visits to the clinic for any problems that may arise in the postoperative period because we are best suited to handle them.

**1st Post-Operative Clinic Visit (2 weeks Post-Op)**

Your first visit after you go home from the hospital will be roughly 14 days after surgery. You will be on a Bariatric liquid diet. We will be checking to see that you are tolerating and following the prescribed diet. You will be advanced to a Bariatric Soft Diet which consists of soft and pureed food. It is important you follow our dietary guidelines so you do not overeat and distend the pouch.

Activity is limited to lifting no greater than 20 pounds for a total of 4 weeks after the surgery. Walking is encouraged to help with deep breathing and to prevent DVT (blood clots in the legs) and pneumonia. Showers are allowed, but NO tub baths or sitting in a pool/spa are allowed until 4 weeks post-surgery.

Weight loss is usually minimal at this visit due to fluid shifts from surgery. However, you should begin to see 1-2 pounds per day weight loss.

**2nd Post-Operative Clinic Visit (4-6 weeks Post-Op)**

Six weeks after your surgery, you will be weighed and a detailed history of your diet will be taken. Particular attention will be paid to episodes of vomiting, dysphagia (difficulty swallowing), dumping syndrome and diarrhea. There are usually no labs drawn at this visit.

You will usually be advanced to a increased regular diet at this visit.

Anticipated weight loss should be 1-2 pounds per day for the first 3-4 weeks.
**3rd Post-Operative Clinic Visit (3 Months Post-Op)**

Weight loss slows to 1-2 pounds per week after the first four weeks. Do not get discouraged. The main focus of this visit is to ensure you are maintaining your dietary discipline. At this point, an ad-lib diet is encouraged for most (within the constraints of the diet plan given preoperatively). In addition, we frequently suggest you see our dietitian to review your dietary habits.

Activity is expanded to include initiation of an aerobic exercise program. This can include fast-walking, bicycling, or swimming at a pace that gets your heart rate up to 70-80% of maximum for 15-20 minutes three times weekly. Maximum heart rate is 220-age.

Example: 40 year old $220 - 40 = 180$

70% of max $180 \times 0.70 = 126$

80% of max $180 \times 0.80 = 144$

Goal Heart Rate 126 to 144

Joining a Gym is a great way to have access to a professional trainer who can help you design an exercise program. This exercise program should be a lifelong event. This will help you maintain the weight loss. It will be up to you to continue this program and your success will be directly linked to your initiative and persistence. Remember, the surgery itself does not guarantee weight loss; rather it needs to be thought of as a **TOOL** to help you lose weight.

**4th Post-Operative Clinic Visit (6 Months Post-Op)**

The main focus of this visit is ensuring you are maintaining your dietary discipline and the exercise program is proceeding favorably.

In addition, we will be looking for evidence of nutritional deficiencies. You will be sent to the Lab for blood work to be done. We will be checking for iron, folate, vitamin B12, thiamine, and calcium deficiencies. Symptoms to be aware of are below:

1) Iron deficiency (anemia) – Fatigue, weakness, rapid heart rate, exercise intolerance, dizziness.

2) Vitamin B12 deficiency – Burning and tingling in hands and feet, profound muscle weakness, poor coordination or unsteadiness while walking, sore tongue which is “beefy” red on inspection. Anemia may occur also secondary to B12 deficiency.

These vitamin deficiencies may take 6-12 months (or longer) to manifest. So it is important to continue to take multivitamins with Vitamins B-12, B1 (thiamine), iron and a calcium supplement until you are instructed not to do so by your surgeon.
5th Post-Operative Clinic Visit (9 Months Post-Op)

The main focus of this visit is ensuring you are maintaining your dietary discipline and the exercise program is proceeding favorably. You will also be weighed to assess weight loss progress.

6th Post-Operative Clinic Visit (12 Months Post-Op)

You will be weighed and counseled on your overall weight loss progress one year post-surgery. Nutritional labs may be drawn again prior to this visit.

After the first year, follow-up will be every anniversary year and should be done by us or a physician experienced with bariatric surgery patients.

VIII. Resources

1) The American Society for Bariatric Surgery
Web: www.asbs.org

2) Diet Journal and Calorie Counter
www.sparkpeople.com or www.myfitnesspal.com or www.caloriecounter.com

3) BMI Calculator
www.cdc.gov/nccdphp/dnpa/healthyweight/assessing/bmi/index.htm

4) Books: “Weight Loss Surgery for DUMMIES”
“The End of Overeating”

5) The internet is an excellent source of information. Please beware of information found on the internet may or may not be accurate.
Acknowledgement of Nutrition Related Health Concerns

Page 1 of 2

Please initial by each statement and sign and date the bottom of form.

I __________________________________________________________________________

(Please print name)

Acknowledge and agree that:

- Good nutrition is an essential part of my lifelong health maintenance. ______

- After surgery, it is essential that I follow the stages of the Bariatric Diet as they have been explained to me. I realize that I must not skip stages in the diet. ______

- If I have questions regarding the diet or foods that are allowed, I will contact the Surgery Clinic. ______

- I have reviewed the nutrition information provided to me and will keep that information for future reference. ______

- I have discussed with my family the way my eating habits must change after I have the surgery. ______

- I have prepared in advance for my changed nutrition needs. I have: 1) Found at least one high-protein drink that I like, to have for the 1st stage of the diet 2) Have a blender, or otherwise have pureed foods available for Bariatric Stage II diet 3) Thought about other high protein foods that I can use for Bariatric Stage III diet. ______

- My nutrient needs after my Bariatric surgery will remain the same as they were before the surgery. However, because I will not be able to eat the same volume of food as before the surgery, I will not be able to meet those nutrition needs with food alone. ______

- I must take multivitamins each day for the rest of my life. A good option is a children’s chewable multivitamin. ______

- I will need to take a calcium and Vit B supplement daily. I may need to take an iron supplement. ______

- I talked to my doctor about additional supplements I may need and I talked to my doctor about any additional herbs I may consider taking. ______
Acknowledgement of Nutrition Related Health Concerns

Page 2 of 2

- I realize that if I neglect to take my vitamin supplements as recommended, I may suffer from deficiencies in sodium and potassium levels in my body. This can cause severe illness and possibly death. I also may develop deficiency diseases like anemia, scurvy and osteoporosis. 

- I need to eat or drink 70 grams of protein per day. 

- I realize that there can be serious health related side effects—including muscle wasting and weakness, damage to the muscle of my heart and weakened immunity—if I do not eat enough protein. 

- I need to have a goal of 64 fluid ounces per day. It is important for me to drink enough fluid to prevent dehydration. Side effects of dehydration may include dry mouth, dark yellow urine and constipation; severe dehydration can lead to a hospitalization.

- Protein drinks or other nutritious fluids can help meet my fluid needs; however water is the preferred fluid. 

- I need to avoid the use of simple sugars. This group includes candy, cookies, regular soda etc. For Roux-en-Y patients, these foods can cause “dumping syndrome.” For all bariatric surgery patients, these foods are a source of empty calories will cause regaining of lost weight.

- After the surgery, I must eat smaller portions, chew my food very thoroughly, eat very slowly and avoid overfilling my pouch. 

- There are significant changes that I need to make in my food choices and the way I eat after bariatric surgery. This new way of eating will last for the rest of my life, even after I have reached a healthier weight.

- I need to follow up regularly as recommended by my doctor, to include follow up with a nutritional professional.

(Signature) ________________________________ (Date) ____________________