



BARIATRIC SURGERY PATIENT MANUAL

Inquiry to Surgery: Pre-Operative Steps

1. Inquiry:

- You submit an inquiry through Bhatti Weight Loss website.
- A team member will reach out to you and check insurance verification for bariatric benefits and network status.
- If your insurance does not cover bariatric surgery, you may pay out of pocket. However, we do require all patients to have health insurance, in case of emergencies.
- If appropriate, we will schedule a consultation with one of our bariatric surgeons.

2. Consultation

- Meet our bariatric surgeons!
- At this visit, you will meet with either Dr. Worden or Dr. Kudav to discuss surgical options and formulate an individualized plan. The doctors will get to know you and decide which surgery option is best for you given your unique weight loss history and goals.

3. After the consultation

- Our nurses will email you the list of requirements that will need to be completed prior to bariatric surgery.

4. Pre-Operative Checklist

- Schedule and complete an upper endoscopy with your surgeon at our surgery center
 - If you have had an upper endoscopy in the last 6-12 months, please let us know and we will obtain those images, so you do not have to repeat this procedure.
 - Occasionally, your doctor may order other imaging studies in place of an endoscopy if they feel those are indicated/acceptable alternatives.
- Schedule and complete oximetry/sleep study if applicable
- Schedule and complete a minimum of 2 appointments with our Registered Dietitian for dietary and nutritional counseling
- Schedule and complete a Behavioral Health evaluation with a clinical psychologist or mental health specialist – you must receive clearance from them prior to having bariatric surgery. If additional therapy or meetings are recommended, you will be asked to complete this prior to your preoperative visit with your surgeon
- Stop ALL forms of tobacco/nicotine/smoking/vaping activities for at least 8 weeks prior to surgery, if applicable. If you actively use nicotine or tobacco when you first meet your surgeon, you may be required to undergo preoperative lab urine testing to ensure compliance with the above requirement, and if you refuse or fail to comply with the requirement, your surgery may be postponed or cancelled
- Obtain pre-operative lab work at a clinic of your preference; the results may be faxed to 952-368-3801
- Schedule Pre-op Visit with Surgeon after above requirements are completed

5. Pre-Op Visit with Surgeon

- This is your final visit at which you will meet with your surgeon again to go over the above appointments and results. He or she will discuss what to expect in the days leading up and immediately after surgery.
- Here we will finalize surgery plans and answer any lingering questions about surgery-day expectations, recovery, medications, and diets.
- Medications will be ordered to your pharmacy for use before/after surgery. Your doctor will review the use of these medications with you at this visit. Remember to bring these medications with you on the day of surgery!
- Please feel free to bring your spouse or family member with you to this appointment.

6. Final Steps

- Schedule Pre-op History and Physical with primary care provider within 30 days of surgery date; the report can be faxed to 952-368-3801.
- **Pick up pre and post op medications at your pharmacy AT LEAST 1 WEEK BEFORE SURGERY (see preop and postop medications on page 9 and 14 of this document for details).** Ensure you have received all the prescribed medications and bring them with you on the day of surgery or take them as recommended.
- Ensure you have a driver after surgery and a responsible adult to be with you for the first 24 hours after surgery.
- Start pre-op diet according to the instructions given at pre-op visit (See below).
- Nothing to eat or drink after midnight the night before surgery.



Bariatric Surgery Checklist

1. Check insurance verification for bariatric benefits and network status ☐
2. Complete a consultation with a Bhatti Weight Loss Surgeon ☐
3. Complete an endoscopy at one of our ambulatory centers or obtain imaging at patient's preferred location ☐
4. Complete preoperative dietary counseling with a Registered Dietician (minimum of 2 visits is required; your doctor and some insurance programs require additional visits to be completed) ☐
5. Complete a Behavioral Health evaluation with a clinical psychologist or mental health specialist ☐
6. Obtain pre-operative lab work at laboratory/clinic of patient's preference ☐
7. Schedule Oximetry or Sleep study if applicable ☐
8. Stop all smoking/vaping/tobacco/nicotine/marijuana use 8 weeks prior to surgery if applicable ☐
9. Complete a pre-op visit with surgeon after above requirements are met ☐
10. Schedule surgery date at ambulatory surgery center and 1 day post op visit/ IV fluids ☐
11. Schedule a pre-op History and Physical with a primary care provider within 30 days of surgery date—clinic may fax this report to 952-368-3801 ☐
12. Pick up pre- and post-op medications ordered to patient's pharmacy at least 1 week prior to scheduled surgery ☐
13. Ensure you have a driver for your procedure and a responsible adult to be with you for the first 24 hours after your surgery ☐
14. Start pre-op diet according to the instructions given at pre-op visit ☐
15. Nothing to eat or drink after midnight the night before surgery; you may take the prescribed medications on the morning of surgery with a small sip of water if instructed by your doctor/weight loss team ☐

Payment must be paid in full before the procedure. Acceptable forms of payment include:

- Cash
- Cashier's Check
- Care Credit (See interest packages below)

-6 months- 0% Interest

-24 months- 14.90% Interest

-36 Months - 15.90% Interest

-48 Months- 16.90% Interest

-60 Months- 17.90% Interest

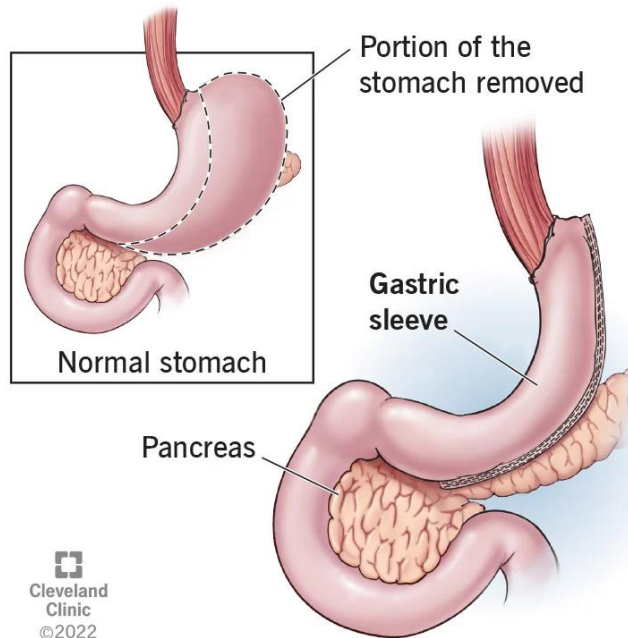


Bariatric Surgery Options at Bhatti Weight Loss

1. Sleeve Gastrectomy

- Much of the stomach is removed, and a tubular stomach is created.
- This is the most performed bariatric procedure in the US.
- At two years, the estimated excess weight loss is approximately 60-65%.
- This surgery has been shown to improve type 2 diabetes, blood pressure, cholesterol, sleep apnea, arthritis, fatty liver, and depression
- Risks include bleeding, staple line leak, stricture, worsening or new-onset acid reflux, portal vein thrombosis, deep venous thrombosis, and pulmonary embolism.

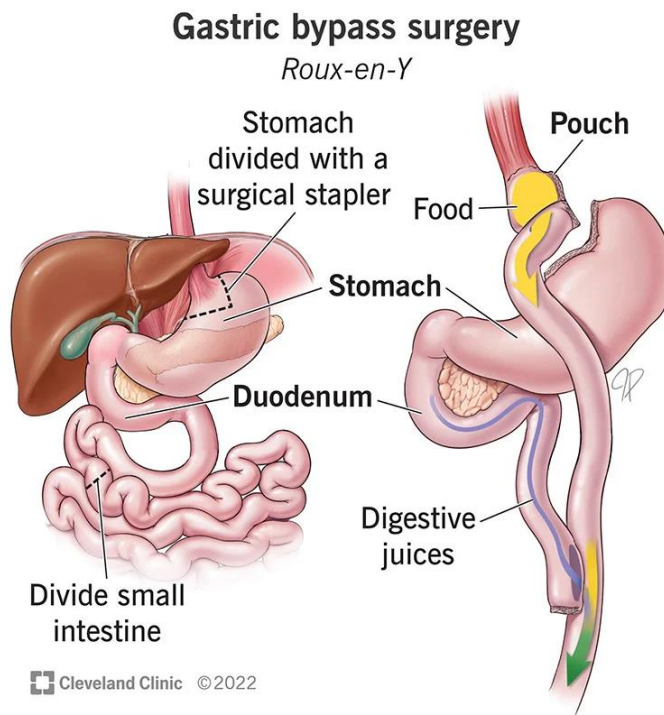
Gastric Sleeve Surgery



Bariatric Surgery Options at Bhatti Weightloss

2. Roux-en-Y Gastric Bypass

- The stomach is made into a small gastric pouch that is then connected (anastomosed) to a limb of the small intestine.
- Food “bypasses” the majority of the stomach and first portion of small intestine, and goes to a more distant part of the small intestine where it mixes with digestive fluid (bile) and gets absorbed.
- At two years, the estimated excess weight loss is approximately 70-75%.
- This surgery has been shown to improve type 2 diabetes, blood pressure, cholesterol, acid reflux, sleep apnea, osteoarthritis, fatty liver, and depression.
- Risks include bleeding, staple line leak, anastomotic stenosis/strictures (narrowings), marginal ulcers, dumping syndrome, gastro-gastric fistula, internal hernia, small bowel obstruction, deep venous thrombosis, pulmonary embolism, and psychosocial impairments.



Pre-Operative Diet ("Liver Shrinking Diet")

Introduction:

- You will be instructed to start a **pre-operative diet** BEFORE surgery to help shrink your liver and reduce internal abdominal fat before surgery so your surgeon can better visualize your stomach during procedure.
- It is **very important** to follow the food and beverage guidelines provided by your dietitian. Doing so makes the surgery **easier and safer** for both you and your surgical team.
- When followed correctly, this diet often results in **active weight loss** before surgery.
- **Your surgery may be CANCELLED if you do not follow the pre-operative diet as instructed.**
- **A comprehensive Nutrition Manual with complete diet instructions will be provided to you at your dietitian visits.**

Timeline

- The pre-operative diet will begin between 1 and 3 weeks prior to surgery, depending on BMI and surgeon preference

BMI: 35-39	1 week of 3 protein shakes + 1 solid high protein, low carb/fat meal (1 week total)
BMI: 40-49	2 weeks of 3 protein shakes + 1 solid high protein, low carb/fat meal (2 weeks total)
BMI: 50+	3 weeks of 3 protein shakes + 1 solid high protein, low carb/fat meal (3 weeks total)

Guidelines:

- Avoid caffeinated and carbonated beverages
- You should aim to take in a **MAXIMUM of 1000-1200 calories per day** during this preoperative diet
 - You may want to download a calorie counting app (i.e. Lose It! Calorie Counter, MyFitnessPal, etc) and keep track of your daily caloric intake during your preop diet)
- Drink low-carb, low-fat liquid protein shakes (i.e. Premier Protein, Fairlife Corepower, etc) as meal replacements.
- Aim to take in between **60-80 grams of protein** per day
- Aim to consume **50-70 grams or less** of carbohydrates per day
- Aim to consume **10-20 grams or less of fat** per day
- Aim to drink between **64 and 80 fluid oz.** of liquids per day

Meal replacement protein drink choices include:

- Ensure Max protein, Equate High Performance Protein shake, Premier Protein, or any other protein shake approved by our dietitian. A more extensive list will be provided on your first dietitian visit.
- Aim for 20-30 grams of protein per serving, less than 200 calories per shake, less than 10 grams of carbohydrates, and under 5 grams of fat

Planned solid meal choices examples- this will be discussed more in depth at your dietitian visits:

- One lean protein + one non-starchy vegetable + fibrous carbohydrate
- Lean protein options: 4 oz tuna, 1 cup low fat cottage cheese, 4 oz chicken breast (no skin), 6 oz Greek yogurt, ½ cup of beans (black, pinto, kidney), 4 oz tofu, 4 oz pork tenderloin, 4 oz fish or shrimp, 3 poached or hard-boiled eggs.
- Non-starchy vegetable options: 1 cup carrots, 1.5 cups broccoli, 1.5 cups zucchini, 1.5 cups cauliflower, 1 cup green beans, 1 cup Brussel sprouts, 1 cup peppers, 1.5 cups cucumbers, 1.5 cups asparagus, 1.5 cups mushrooms.
- Limiting starchy or higher carbohydrate foods to < ½ cup at meal your mealtime. Aiming for carbohydrates that contain fiber.
- Healthy fats in moderation- fish, avocado, olive or avocado oils, nuts and seeds
- Cook by baking, grilling, broiling, steaming, or microwave

If you are hungry in between liquid meals, you may do the following:

- Drink LOW Sodium broth- less than 10 calories per serving
- Eat sugar-free Jell-O or sugar free popsicles
- Eat 1 cup of non-starchy vegetables from the list between meals (3 cups precooked total per day)
- Drink warm herbal (decaffeinated) teas
- Drink plenty of water in between shakes or veggies
- If you have diabetes, you must check your blood sugar more frequently and you may be asked to change medications during this time, please discuss your medications with your surgical team or primary care provider, If you have two blood sugars of 70 or less you need to call your provider who is prescribing your medications to adjust further.

Pre-Surgery Goals

- Eliminate caffeinated and carbonated beverages
 - Caffeine acts as a diuretic and can dehydrate, in addition it interferes with iron absorption. Carbonated beverages can cause excess gas in the stomach which can be irritating and even stretch your pouch or sleeve.
- Eating and drinking slowly. Aiming for 20- 30 minutes per meal time. Drinking small sips often throughout the day to reduce gulping behaviors.
- Aim to drink 64oz of fluid per day- no sugar/calorie beverages are preferred.
 - Practice taking small frequent sips or water, one oz. every 15 minutes. Avoid using straws as this increases the air swallowed and can build up gas in your stomach.
- Practice separating meals and fluid intake as this will be crucial after your procedure.
- Find a protein supplement that meets the requirements.
- Start taking a multivitamin/mineral supplement daily.
- Start or maintain an exercise regimen
 - Your goal should be 30 minutes per day at a brisk pace

Pre-Op Medications and Instructions

The following two medications are prescribed to all patients prior to surgery.

- **PLEASE PICK THESE MEDICATIONS UP PRIOR TO SURGERY DAY AND BRING THESE MEDICATIONS WITH YOU TO SURGERY (UNLESS INSTRUCTED TO TAKE IT BEFOREHAND).**

The two medications include:

- **Scopolamine**
 - 1.5 mg/72 hr transdermal patch
 - Once you arrive on surgery day, the nursing staff will help you place this patch behind your ear.
 - This medication helps prevent anesthesia-induced nausea and/or vomiting after surgery takes place.
 - The medication patch can stay on for up to three days. When removing, please make sure to wash your hands after removing or use gloves or a tissue to remove it, as the medication is absorbed through direct skin contact.
 - Common side effects including dry mouth, drowsiness, and blurred vision
- Aprepitant (Emend)
 - 80 mg PO x1 dose
 - **Take this capsule 3 hours prior to arrival OR as soon as you wake up the morning of surgery – take with a small sip of water only**
 - This medication helps prevent nausea and/or vomiting after surgery takes place.

The following medications may be given to you throughout the surgery day. You do not need to pick up these medications prior to surgery, as we have them in the surgery center. This list is purely for your information.

- Gabapentin 300 mg PO x1 dose
 - This medication is for pain control
- Celebrex 400 mg PO x1 dose
 - This is a strong NSAID for pain and inflammation. If you have a sulfa allergy, we will give Naproxen 500 mg PO x1 dose
- Acetaminophen 1000 mg PO or IV x1 dose
 - This is Tylenol, given for pain control
- Ondansetron (Zofran) 4 mg IV x1 dose
 - This is an anti-nausea medication
- Dexamethasone (Decadron) 10 mg IV x1 dose
 - This is an anti-inflammatory given by anesthesia
- Heparin 5000 units SQ
 - This is a blood thinner used before surgery to prevent blood clots
- Cefazolin (Ancef) 2-3 gm IV x1 dose
 - This is an antibiotic used to prevent surgical site infections
 - If you have an allergy to this medication, alternative antibiotic options are available and will be administered prior to your surgery.

Surgery Day

Before Arriving

- Within 48 hours of your scheduled surgery, a member of our team will call and confirm your arrival time at our facility for your procedure and review any pertinent details.
- Please follow all instructions for the day of surgery including your preoperative fasting requirements.
- You must avoid all oral intake other than sips of water to take medication after midnight the night before your procedure.
- Please remember to bring the required prescription medications, including the Scopolamine patch to the ambulatory center on the day of surgery.
- If you use a CPAP machine, please bring this with you to the surgery center with the home settings pre-programmed for use after surgery.

Arriving for your procedure

- When you arrive at our facility, it is advised that you dress in comfortable, loose-fitting clothing.
- Leave all jewelry, cash, and other valuables at home.
- Bring only necessities such as a pair of reading glasses if required to see. If you use contact lenses, avoid using these on the day of surgery.
- The surgery center staff will provide you with a space to store your clothing and necessities until you are discharged to the care of your designated family member or friend.
- Remember, you **MUST** have a responsible adult with you on the day of surgery who can transport you home after you are discharged; if you do not have anyone to take you home, your procedure will need to be rescheduled. You should have a responsible adult present with you for the first 24 hours after your operation.

Arrival

- After you arrive at the surgery center, you will be escorted to your pre-operative room.
- You will be asked to change into a surgical gown for your procedure. Remove all undergarments before going to the operating room. Remove all body piercings—if you are unable to do so, let your nursing staff know, and you may be asked to sign a waiver before proceeding with your surgery.
- Your surgical team will then prepare you for your procedure. This will include connecting you to monitors that will periodically check your vital signs such as your heart rate, blood pressure, and breathing.
- Staff will place intravenous catheters into your arm so that they can begin to hydrate your body and give you any medications needed.
- You may be asked several times which procedure you are receiving. This is a safety precaution to ensure that everyone, including nurses, anesthesia, surgeon, and yourself, are on the same page.
- Your surgeon and anesthesia provider will also come in for a brief exam and review of any of your concerns before your procedure.

Operating Room

- After any necessary preoperative tasks are completed, you will be brought to the operating room and introduced to any other team members you may not have met.
- Your team will then begin to prepare you for your procedure by positioning you on the surgical bed prior to going under anesthesia.

Surgery

- Your comfort and safety will be our primary concern during your stay. During your procedure, your vital signs (oxygenation levels, heart rate, blood pressure, and breathing) will be monitored continuously.
- Our team is trained extensively to understand these indicators. The anesthesia care provider is also trained to immediately identify any concerns that may arise and to react appropriately.
- We do not expect any emergencies in your same day care, but we must be prepared if an emergency does occur.

Postoperative Care

- Once your procedure is complete, your anesthesia provider and surgeon will approve your transfer to our recovery team who will care for you until you are discharged home.
- After your procedure is complete, you will be cared for by our experienced recovery team for the duration of your stay.
- We will continue to monitor your vital signs in the recovery area. Our recovery team has strict guidelines that are followed to be certain it is safe for you to be discharged home. They will answer any questions or concerns you have during your immediate postoperative care in our facility.
- Our recovery team will assist you while waiting for you to become more alert after anesthesia. Everyone recovers at a different pace, and we will care for you until you are ready to go home. Only after your anesthesia care provider and your surgeon approve your release will you be disconnected from monitors, IVs removed, dressed and prepared to return home.
- Once you are deemed safe to return home, your responsible adult friend or family member will be notified that you are ready discharge. They will also be given the appointment date and time for your follow-up appointment at your provider's office.
- Under **NO** circumstances will you be released without a responsible adult to assist you. You will not be allowed to take a taxi or use ride-share services like Uber or Lyft after your procedure.
- You **MUST** have a reliable designated responsible caregiver to escort you home; if you do not have someone available to assist you/accompany you to and from your procedure, your procedure will be rescheduled. We require that a responsible adult remain with you for a minimum of 24 hours after the procedure.

What to Expect After Surgery

What to expect

- You should be up and walking shortly after surgery. Walk often and take breaks whenever needed
- Expect some pain, but it should be tolerable (think 5 on a scale of 1 –10)
- Left shoulder pain and incisional pain is common—take the medications prescribed to help

Once you are home

- Take medications your surgeon has instructed you to take (see below).
- Be aware that blood pressure or diabetic medications may have been adjusted or held. Watch the associated conditions carefully and call the office with any questions.
- If pain medication is not working once you get home or your pain is significantly worsening, call 952-368-3800 and follow the prompts to speak with the on-call team.
- You may take a shower the day **after** surgery. Do NOT scrub or attempt to pull off scabs. Let warm soapy water run over the incisions. Do NOT soak/submerge your incisions until they are completely healed, and your scabs have come off your incisions

Call your doctor immediately if you have:

- Fever of 100.5°F (38°C) or above
- Redness or streaks of red, increased swelling, increased pain, or pus-like drainage from the surgical incisions
- Worsening chest pain or shortness of breath
- Rapid breathing (over 25 breaths per minute)
- Racing heart (if your heart rate is over 100 beats per minute consistently for at least 10 minutes)
- Nausea or vomiting that lasts more than 8 hours
- Inability to keep down your liquids for more than 8 hours
- Pain, redness, or swelling in one or both of your legs
- Decreased urination (peeing <4 times in 24-hour period) or dark/concentrated urine
- Pain that is unrelieved by your pain medication or significantly worsening
- Severe depression or thoughts of harming yourself

Nutrition Guidelines

- Refer to the postoperative diet section in your Nutrition Manual.
- Sip fluid slowly and frequently. Avoid gulping fluids. Do not drink carbonated beverages at all. Avoid drinking with straws.
- Follow the postoperative diet stages carefully. You will go home on a clear liquid diet and then advance to a full liquid diet at home. **Do NOT prematurely advance your diet as this can put you at serious risk of major complications!**
- Stop eating when you begin to feel full. Even one extra sip/bite can make you extremely uncomfortable
- Eat slowly. Put your spoon down between bites. Chew each bite of food at least 15-20 times. Failure to do so could result in nausea, pain, and/or vomiting. Eating too much or too quickly could also cause blockage, leaking and other serious medical problems.
- It is ok if you cannot eat the recommended meal sizes. Do NOT overeat or eat to the point of physical discomfort.
- Follow up with the dietitian at 6 weeks post op and on a regular basis for the first year. Contact the dietitian with any questions or concerns regarding diet.

Side effect troubleshooting

- If you are constipated, try Miralax as directed or ½ prune juice and ½ milk of magnesia to help with this. Also try taking an over-the-counter stool softener (Docusate or Senna) once to twice a day.
- If you are nauseated, try herbal teas; chamomile or peppermint, or other warm fluids to help settle your stomach. Avoid extremes of temperature (very hot beverages or very cold beverages).
- Check the color of your urine; dark colored and low-volume urine could mean you are not drinking enough fluid and at risk for dehydration.

Drain to Bulb Suction

- Sometimes, a drain is left after surgery to monitor for any excessive bleeding for 24 hours. If you have a drain after surgery, it will need to be taken out the day after surgery.
- Your surgeon or physician assistant will help you remove the drain the day after your surgery or at a separate follow up visit scheduled.

Activity Guidelines

- No lifting more than 30lbs. for about 4 weeks after surgery
- Do not drive a car or operate heavy machinery while taking prescription pain medication after surgery.
- You may climb stairs and do routine household activities as tolerated.
- Walk as often as possible (i.e. 10 minutes of every hour you are awake). Gradually increase your movement to 30 minutes of slow exercise after 2 weeks.
- Trunk stretching is important during this healing time to maintain your normal range of motion. While sitting down, rotate the upper half of your body in one direction (either right or left) until you feel gentle tension (not pain). Hold the stretch for 30 seconds. Then shift to the other side and perform the same stretch, holding for 30 seconds. Lastly stretch your arms straight above your head as far as they will go to the point of tension.
- REMEMBER—no stretches should be done to the point of pain!
- At 4-6 weeks after your operation (around the time your diet has progressed to solid foods), you should begin strength training and more routine aerobic exercises

*****Call 911 for any emergency situation, including loss of consciousness*****

****Do NOT wait to hear back from office staff in the event of an emergency—if a responsible adult is present and can drive you, go to the ER for immediate evaluation. Don't forget to tell them you had recent bariatric surgery and have them call your surgeon directly to update him/her about your condition****

Post-Operative Medication Instructions

The following medications will be sent to your pharmacy about 1-3 weeks PRIOR to your surgery. We encourage you to pick these up prior to your surgery, so you have them by the time you come home from surgery. While we want you to have them ahead of time, please do not start taking these medications until after your surgery has been completed.

The medications include:

Ondansetron ODT (Zofran ODT)

- Dose: 4mg tablets
- Frequency: take one tablet by mouth every 6 hours as needed for nausea and vomiting. Allow the tablet to dissolve under the tongue – no need to swallow this tablet
- Rx: 15 tabs, 2 days, 2 refills
- Purpose: Nausea/vomiting relief.
- Common side effects: coughing, allergic reactions including itching, constipation, diarrhea, headache, or fatigue
- Contact physician if any changes in heart rate

Methocarbamol (Robaxin)

- Dose: 500mg tablet
- Frequency: take one tablet by mouth three times daily as needed for muscle spasms
- Rx: 25 tabs, 8 days, 2 refills
- Purpose: This helps reduce abdominal pain and abdominal muscle spasms after bariatric surgery.

Omeprazole (Prilosec)

- Dose: 20mg capsule
- Frequency: take one capsule by mouth once daily for acid-reflux
- Rx: 30 tabs, 30 days, 2 refills (take for 3 months after surgery)
- Purpose: The incidence of acid-reflux can increase after bariatric surgery. This medication helps prevent/treat heartburn, GERD, and GI ulcers after surgery.

Tramadol (Ultram)

- Dose: 50mg tablets
- Frequency: take one to two tablets by mouth every 6 hours as needed for severe pain
- Rx: 20 tabs, 4 days, no refills
- Purpose: this is a narcotic pain medication. Take this medication for moderate or severe pain uncontrolled by non-narcotic pain medications like Tylenol.
- Notice: take this medication as prescribed, with or without food. Avoid alcohol or other medications that cause dizziness or drowsiness. If you miss a dose, do NOT double up on medications.
- Side effects: Drowsiness, constipation, dizziness, nausea, vomiting.
- ****Do NOT drive or operate heavy machinery when using this medication****
- **Contact your doctor if you experience shortness of breath, difficulty breathing, or severe abdominal pain uncontrolled by your pain medications**

Life After Surgery: Post-Operative Information

Patients who follow up after surgery are more successful. There are many reasons follow-up is important after weight loss surgery:

- Nutritional counseling
- Surgical complication identification and treatment
- Medication adjustment or elimination
- Vitamin and mineral deficiency monitoring
- Weight loss plateau identification and treatment

Best practices

- Take your own measurements and record them at least once a month
- Avoid pregnancy for 18 months. Even a 10% decrease in body weight can increase fertility in women of childbearing age
- Be sure to take any vitamins and/or supplements as recommended for you

Follow-Up Schedules

TIME SINCE SURGERY	APPOINTMENT TYPE
1 day	IV fluids at the ASC. Surgeon or APP will check on you and answer any questions
2 weeks	Follow up with physician or APP
4-6 weeks	Follow up with physician or APP Follow up with Dietitian
3 months	Follow up with physician or APP Labs as needed Follow up with Dietitian
6 months	Follow up with physician or APP Labs required Follow up with Dietitian
9 months	Follow up with physician or APP Labs as needed Follow up with Dietitian
1 year	Follow up with physician or APP Labs required Follow up with Dietitian
Annually	Follow up with physician or APP Labs required Follow up with Dietitian

Post-Operative Diet

Bariatric Surgery Nutrition & Diet Guidelines

- Bariatric surgery patients have unique dietary needs after surgery.
- Your diet after surgery will begin with liquids and slowly advance back to solid foods over several weeks, maintaining a low-fat, low-carbohydrate diet.
- Strict adherence to this postoperative diet progression will help generate weight loss success, improve or resolve medical problems related to obesity, and help prevent unwanted symptoms such as severe nausea, vomiting, retching, and/or difficulty swallowing.

****For MEDICAL EMERGENCIES**, please call 911; after receiving emergency medical attention, notify your surgeon immediately!

*****For other questions or concerns**, please call the office at (952) 207-2424 from Monday through Friday, 8 AM – 4 PM, for urgent needs, contact our on-call provider line at (952) 368-3800.

Meal Plan General Guidelines

- **Hydration:**
 - Drink enough fluids to keep hydrated (this roughly amounts to 48-64 fluid oz. daily)
 - Take small sips frequently. **AVOID** gulping liquids
 - Avoid drinking fluids both 30 minutes before and 30 minutes after meals once you are on a solid diet
 - Avoid using straws to drink liquids – this can result in air entering your stomach after surgery and can result in a feeling of fullness, thus preventing you from meeting your hydration and nutritional needs
 - Avoid caffeine, carbonation, and alcohol after surgery. These may cause irritation to the stomach and will result in loss of fluids, making it difficult to stay hydrated.
- **Meal patterns and preparation:**
 - Eat very slowly
 - Chew your food well before swallowing. Ideally, food should be a pureed consistency before you swallow it. Aim for a goal of 20 minutes per meal.
 - Avoid high fat, high sugar foods. A general rule of thumb is to eat less than 10 g of sugar per meal
 - Meals should be relatively small in portion size
 - **ALWAYS** eat your protein **FIRST**. You should aim to eat between 60-80 grams of protein daily. Your dietitian will advise you on more specifics.
 - If you are feeling full, stop eating. Indications of fullness include a feeling of pressure in the chest just below the rib cage, feelings of nausea, and/or pain in your shoulder or upper chest
- **Vitamin/Mineral Supplementation:**
 - Take required vitamin and mineral supplements daily to meet daily nutrient requirements.
 - Take one adult multivitamin, chewable or liquid, **EVERY DAY, for the rest of your life.**

- You can transition to a regular pill/non-chewable multivitamin once you are on regular, solid foods. Try to avoid gummy vitamins if possible as they are not absorbed as well.
- You may want to take vitamins in divided doses throughout the day to ensure optimal absorption.
- See below for an extensive list of vitamin and mineral requirements.

DIET ADVANCEMENT PROTOCOL

Stage/Day of Diet	Diet
STAGE ONE Day 1 (day of surgery) – Day 3	Clear Liquid Diet
STAGE TWO Day 4 – Day 14	Full Liquid Diet • Start protein shakes • Work toward 30 grams of protein daily
STAGE THREE Week 3 – Week 6	Pureed Diet • Start chewable multivitamin, calcium citrate supplement
STAGE FOUR Maintenance Diet Week 6 +	Solid, Low-Fat, Low-Carbohydrate Diet • Continue daily multivitamin and calcium • 60 grams of protein intake daily • Begin Vitamin B12, 350-500 mcg daily • Can transition to whole pills if able

Nutrition Guidelines Following Bariatric Surgery

DAY 1 – DAY 3

- **STAGE ONE:** Clear Liquid Diet
- **Goal:** at least 48 oz. of fluid
- Suggested liquids:
 - Water
 - Sugar-free gelatin
 - Sugar-free popsicles
 - Crystal Light
 - Decaffeinated tea or decaffeinated coffee
 - Clear broth (chicken, beef, vegetable)
 - This should have no chunks of food contained within, ONLY broth
 - Propel Fitness Water
 - Sugar-free Gatorade

Remember:

- 1 ounce = 2 tablespoons = 30 mL of liquid intake is recommended every 15 minutes to maintain hydration
- Avoid taking large gulps; stick to small sips only
- **Aim to set a pace of 1 ounce of liquid every 15 minutes to stay hydrated**

DAY 4 – DAY 14

- **STAGE TWO:** Full Liquid Diet
 - ****Full liquids are any low-sugar liquid that is pourable without chunks****
- **Goal:** 64-80 oz. of fluid and 30 grams of protein intake
- **Protein intake is very important after bariatric surgery**
 - Adequate protein intake will assist with wound healing after surgery. It provides an important source of calories to the body during rapid weight loss that occurs after bariatric surgery.
 - A lack of protein after surgery can make you feel weak, tired, and even lead to hair loss; protein serves to maintain muscle mass while you are losing weight, and without it, lean muscle will get broken down during this period of rapid weight loss.
 - Protein powders or premade protein drinks are readily available at most stores and can be mixed with liquids to meet protein requirements after surgery.
- To prevent nausea after surgery, **DRINK YOUR LIQUIDS SLOWLY** and **STOP** drinking when you feel full!

Remember:

- 1 ounce = 2 tablespoons = 30 mL of liquid intake is recommended every 15 minutes to maintain hydration
- Avoid taking large gulps; stick to small sips only
- **Aim to set a pace of 1 ounce of liquid every 15 minutes to stay hydrated**

WEEK 3 – WEEK 6

- **STAGE THREE: Pureed/ Soft Foods Diet**
- **Begin taking chewable multivitamin and calcium citrate chews daily**
- **Goal:** 64-80 oz. of fluid with 60 grams of protein intake. ½ cup to ¾ cup per meal 3-4x daily.
- “Pureed”:
 - Pureed foods are the consistency of applesauce. They are only slightly thicker than full liquids, as they may not be readily pourable from one cup to another.
 - Most foods can be pureed by placing in a blender and finely blending them until the food is the consistency of applesauce or baby food.
 - Meat and eggs may be finely ground, mashed, and moistened to make it easier to chew thoroughly and swallow.
- Examples of pureed/ soft foods:
 - Low-fat cottage cheese without fruit chunks, small curd
 - Sugar-free yogurt
 - Pureed/ soft proteins like eggs, chicken, turkey, or beef
 - Mashed potatoes, sweet potatoes, squash
 - Bananas, applesauce, pureed or softened peaches, pears, apricots
 - Mashable vegetables- riced cauliflower, blended spinach or tomatoes
 - Baby food, pureed fruits or vegetables are also an easy option.
 - Smoothies that combine protein powder, yogurt, fruits and/or vegetables.

Remember:

- You should sip on calorie-free fluids in between meals to stay hydrated.
- **If you are having worsening nausea when you advance your diet** from full liquids to pureed foods, **GO BACK TO FULL LIQUIDS for 3-4 days** and then slowly advance and try again. Each patient is different!

General guidelines:

- You should transition to true “meals” at this stage. Aim for 1-2 protein shakes per day if needed to meet protein goals in addition to meals.
- Chew all food thoroughly before swallowing.
- Meals should be taken in over 20-30 minutes
- Do NOT mix liquids with solid foods at the meal table—avoid drinking liquids 30 minutes before and 30 minutes after mealtime to avoid “dumping syndrome”.
- **EAT PROTEIN FIRST.** Start with 1 ounce and slowly increase to 2 ounces
- Avoid straws and chewing gum
- Do not skip meals
- Avoid very hot or very cold foods
- **Avoid grazing behaviors**— this behavior will ultimately lead to weight loss failure/weight regain

Sample Pureed Meal Plan:

- 8:00 AM – 2-4 ounces of lite yogurt or small-curd cottage cheese, +/- added Whey powder
- 10:00 AM – 2-4 ounces of low-carb protein supplement
- Noon – 2-3 ounces of pureed poultry or fish, 1-2 tablespoons of pureed vegetables
- 2:00 PM – 4-6 ounces of low-carb protein supplement
- 6:00 PM – 2-3 ounces of pureed poultry or fish, 1-2 tablespoons of pureed vegetables
- 8:00 PM – 2-3 ounces of low-fat cottage cheese

WEEK 6 and beyond

- **STAGE FOUR:** Maintenance Diet – Low-carb, low-fat diet
- Continue taking multivitamin and calcium citrate daily
 - **Begin 350 – 500 mcg Vitamin B12 daily**
- **Goal:** 64-80 oz. of fluid with 60 grams of protein intake or as advised by your dietitian
 - Aim for 3-4 small meals a day
 - Begin exercise regimen

Remember

- The maintenance diet is meant to serve as “maintenance of a healthy lifestyle” so it should be sustainable for you. Ask your dietitian for suggestions if needed.
- Avoid foods that are high in fats and sugars
- Avoid alcohol—alcoholic beverages are “empty calories”, or calories that your body will have a very hard time processing/converting to energy and can lead to weight regain.

General guidelines:

- Avoid liquid calories
- Eat protein in your meals FIRST (protein can come from poultry, beef, fish, cottage cheese, eggs, tofu, low-fat yogurt, milk and cheese)
- Chew all foods to a pureed/applesauce consistency before swallowing
- Avoid tough/fibrous/gummy foods like popcorn, breads, raw veggies, salads, rice)
- Avoid drinking liquids 30 minutes before and 30 minutes after meals
- Remember, do not skip meals. Skipping meals will NOT lead to faster weight loss and could put you at risk for nutrient deficiencies.
- **If you feel full, STOP EATING – do NOT overeat**

Sample Maintenance Meal Plan: Eat $\frac{3}{4}$ to 1 cup of food per meal

- Breakfast
 - 2-3 egg whites
 - 2-3 oz applesauce
 - 1 teaspoon of peanutbutter
- Snack (optional)
 - 1 low-fat cheese stick or protein shake
- Lunch
 - 3-4 oz. of poultry, beef, or fish – baked, broiled, or boiled, NOT fried
 - $\frac{1}{4}$ cup of cooked veggies
 - $\frac{1}{4}$ cup of brown rice if desired
- Snack (optional)
 - $\frac{1}{2}$ cup of sugar-free pudding OR Protein bar – 150 kcal or less with 6 or more grams of protein
- Dinner
 - 3-4 oz. of poultry, beef or fish – baked, broiled or boiled, NOT fried
 - $\frac{1}{4}$ cup cooked veggies
 - $\frac{1}{4}$ cup of diced sweet potatoes if desired
- Snack (optional)
 - $\frac{1}{2}$ cup low-fat greek yogurt with 1-2 oz blueberries

Recommended Vitamin and Mineral Supplementation

Daily vitamin and mineral supplements should be taken for a lifetime. Chewable and liquid forms are recommended for at least the first 3-6 months after surgery as they may be better tolerated and better absorbed. Progression to capsules or tablets may be an option and can be discussed with the dietitian. It is recommended to take vitamins with a meal or snack.

Your dietitian will review all vitamin and mineral requirements more in depth prior to your surgery.

Sample Daily Schedule for Supplements

Breakfast	
Snack	Calcium Citrate (500-600 mg)
Lunch	Calcium Citrate (500-600 mg)
Snack	Calcium Citrate (500-600 mg)
Dinner	Bariatric Multivitamin(s) with recommended amount of Vitamin D and B12. OR • Over the counter Multivitamin (s) & • Vitamin D (3,000 IU every day) & • Vitamin B12 (350-500 mcg every day or 1,000 mcg every other day)
Snack	Additional Iron if recommended

This may vary depending on your dietitian's recommendations. Specific amounts and type of vitamins are listed below

1. Multivitamin

Multivitamin must be complete, containing iron and other trace minerals. Should contain at least:

✓ 200% Daily Value for most contents, specifically iron (36mg), folic acid (800mcg) and thiamin (3mg)

✓ 100% Daily Value for zinc (15mg), copper (2mg) and other nutrients

- Taking a Bariatric Multivitamin may eliminate the need for additional Vitamin D and B12 supplements.
- AVOID GUMMY Multivitamins. Gummies do not have all the vitamins and minerals you need and may not be absorbed as efficiently.

Multivitamin Options	Serving Size Per Day	Amount of Iron	Where to Purchase
Chewable			
Bariatric Formulations- include higher levels of vitamin D and Vitamin B12. You do not need to take an additional supplement of these if taken.			
Bariatric Advantage Bariatric Advantage Ultra Solo with Iron	1	45 mg	www.bariatricadvantage.com
Celebrate - Celebrate One 45 - Celebrate Multi Complete 60 - Celebrate Multivitamin Soft Chew	1 2	45 mg 60 mg none	www.celebratevitamins.com or at your local pharmacy
ProCare Health Bariatric Multivitamin w/ 45 mg Iron	1	45 mg	www.procarenow.com
Over the Counter (OTC)- Need to take additional Vitamin D and Vitamin B12 with these options.			
Equate Childrens Multivitamin Complete	2	36 mg	Walmart or most grocery stores/ online
Target Brand Kids' Multivitamin Complete	2	36 mg	Target or most grocery stores/ online

2. Calcium Citrate

Choose Calcium Citrate as this type is better absorbed than other types (i.e., calcium carbonate and gummy tricalcium phosphate).

- Recommended daily dose is 1,200-1,500 mg per day.
- Take in divided doses of 500-600 mg 2-3 times a day. Your body can't absorb more than this at one time.
- Calcium should contain Vitamin D to increase absorption.
- Take at least 2 hours apart from multivitamin with iron and any additional iron supplements to maximize absorption.

Calcium Citrate	Amount of Calcium	Where to Purchase
Chewable	Per tablet/chew	
Bariatric Advantage • Calcium Chewable • Calcium Chewy Bites	500 mg 500 mg	www.bariatricadvantage.com
Celebrate • Calcium PLUS 500 chewable • Calcium Soft Chews	500 mg 500 mg	Local Pharmacy or www.celebratevitamins.com
Liquid	Per Tbsp	
Lifetime Calcium Magnesium Citrate	600 mg	On line
Solgar	600 mg	Vitamin Shoppe/ On- line
Wellesse to Liquid Calcium	500 mg	www.wellesse.com/ Drug Store/ Costco/ On line
Powder (add to fluid)	Per 2 scoops	
Bariatric Advantage Powder Mix Calcium	600 mg	www.bariatricadvantage.com

3. Vitamin D

Take 3,000 International Units (IU) of Vitamin D3 per day.

- If included in your bariatric brand multivitamin, you do not need to take a separate supplement.
- Vitamin D liquid and soft gels are best absorbed when taken with food. Chewable and quick melts can be taken at any time

Vitamin D	Amount of Vitamin D	Where to Purchase
Chewable/Chewy	Per tablet/chew	
Bariatric Advantage chewable gel	5000 International Units	www.bariatricadvantage.com
Celebrate Quick Melt	5000 International Units	Local pharmacy or www.celebratevitamins.com
Kal	1000 International Units 2000 International Units	Vitamin Shoppe/GNC/ On- line
Nature Made Chewable	1000 International Units	Drug Store/Costco/ On- line
OPURITY Chewable D3	5000 International Units	www. Opurity.com
GNC Chewy D3	1,000 International Units	GNC
Vitamin Shoppe D3 Chews	1,000 International Units	Vitamin Shoppe
Liquid	Per Serving	
Bariatric Advantage	.5 ml= 5000 International Units	www.bariatricadvantage.com
Carlson Super Daily	1 drop= 1,000 International Units	Vitamin Shoppe/ On line
Nature's Answer	1 drop= 2000 International Units	Walmart/Target/ On line
Wellesse	2 tsp= 1000 International Units	Drug Store/Costco/ On- line

4. Vitamin B12

Take 350-500 mcg per day or 1,000 mcg every other day by mouth in the form of a disintegrating or sublingual (under the tongue) tablet or liquid.

- If included in your bariatric brand multivitamin, you do not need to take a separate supplement.
- Alternate options to discuss with your primary care physician:
 - o Injection- 1,000 mcg once a month
 - o Nasal Spray- 500 mcg once a week

Vitamin B12	Amount of B12	Where to Purchase
Sublingual	Per Tablet	
Bariatric Advantage	1,000 mcg	www. bariatricadvantage.com
Celebrate	1,000 mcg	www.celebratevitamin.com
GNC	1,000 mcg	GNC
Nature Made	1,000 mcg	Rite Aid, Walgreens, On-line
OPURITY	1,000 mcg	www.opurity.com
Rexall	500 mcg	Walmart
Twin Lab	500 mcg	Vitamin Shoppe/Walmart/Walgreens
Injections	1,000 mcg/month	Prescription
Nasal	500 mcg/week	Prescription

5. Iron

The iron in your multivitamin may be sufficient. Most people need 36 mg per day.

- Menstruating women and/or patients with iron deficiency anemia need more iron.
- Take 45-60 mg per day if you are female and are still menstruating.
 - o If your bariatric brand multivitamin contains 45-60 mg of iron, you do not need to take a separate supplement.
 - o If you take an over-the-counter multivitamin, take an additional 18-30 mg iron supplement.
- If you are anemic, discuss current iron supplementation and recent blood work with the dietitian to determine the correct dose.
- Taking Vitamin C at the same time as iron can increase absorption.

Iron	Amount of Elemental Iron	Where to Purchase
Chewable/Chewy	Per tablet/chew	
Bariatric Advantage • Iron Chewable • Iron Chewy Bite	18, 29, & 60 mg 30 mg	www.bariatricadvantage.com
Celebrate • Iron + C Chewable • Iron + C Soft Chew	18,30,45, & 60 mg 45, 60 mg	Local pharmacy or www.Celebratevitamins.com
Liquid	Per Tbsp	
Ferretts IPS Liquid	40 mg	www.pharmics.com
Wellese Liquid Iron	18 mg	www.wellesse.com/ Drug Store/ Costco/ On line

For further questions or concerns, please contact your dietitian at Bhatti Weight Loss.

Frequently Asked Questions

How do I qualify for Bariatric Surgery?

- Patients who qualify for bariatric surgery at the Bhatti Weight Loss Center:
 - Ages 18-65 years old with a BMI >35 kg/m²
 - If your BMI is between 30-34.9, you must have at least one of the following co-morbid conditions: type 2 diabetes, obstructive sleep apnea, hypertension, hyperlipidemia, nonalcoholic fatty liver disease, nonalcoholic steatohepatitis, pseudotumor cerebri, GERD, obesity hypoventilation syndrome, venous stasis disease, severe urinary incontinence, debilitating arthritis, or impaired quality of life
 - Having one of these co-morbidities does not automatically qualify you for bariatric surgery. These requirements may be insurance-dependent. Contact your insurance to find out which comorbidities are listed on their policy to see if you qualify.
 - If your BMI is below 30, you do not qualify for bariatric surgery.

What if I fall below the BMI criteria prior to my surgery?

- We encourage patients to participate in lifestyle changes prior to surgery to demonstrate their commitment. If patients have resultant weight loss which lowers their BMI below the above guidelines, this reduction in weight does NOT prevent patients from having surgery. **We use initial entry BMI to determine eligibility.**
 - We recognize obesity as a chronic disease, and any weight lost in preparation for surgery is not likely to be substantial enough to treat comorbidities, and also not likely to be sustained. As such, we believe this preoperative weight loss should not preclude surgery.

Why might I not be a candidate for bariatric surgery?

- We consider the following medical/psychiatric conditions as contraindications to bariatric surgery:
 - Untreated major depression or psychosis, uncontrolled and/or untreated eating disorders (i.e. bulimia, binge eating disorder), current drug or alcohol abuse, severe cardiac disease with prohibitive anesthetic risks, severe coagulopathy (bleeding tendency)
 - Inability to comply with nutritional requirements including lifelong vitamin replacement
 - Age <18 years old or >65 years old
- Please talk to your surgeon if any of the above conditions apply to you

What are some examples of what I can consume on clear liquids vs full liquid diet?

- Clear liquids (post-op day 1-3)
 - Water
 - Diluted Juices (fruit or vegetable)
 - Broth Based Soups
 - Gatorade or Generic Equivalent
 - Flavored water
 - Unsweetened Tea
 - Decaf coffee
 - Crystal Light
 - Sugar Free Beverages
 - Jell-O

- Popsicles
- Premier Protein “Clear”
- Ensure Clear
- Gatorade w/ protein
- Full liquids (post-op day 4 – 14)
 - *No chunks, able to pour*
 - Everything included in the “Clear Liquids” list
 - Hot Cereals (i.e. oatmeal, grits, cream of wheat)
 - Yogurt (low fat or fat free)
 - Pudding (sugar free)
 - Milk (skim or 1%)
 - Sherbet
 - Low fat/sugar ice cream
 - Protein Shakes
 - Protein powder mixed into items or by itself, with milk, water or broth.