



**ENDOBARIATRIC
(Orbera® & ESG)
PATIENT MANUEL**

Pre-Procedure Steps

- **Inquiry:**
 - You submit inquiry through Bhatti Weightloss website.
 - A team member will reach out to you and confirm your interests in endoscopic weight loss options
 - Insurance does not cover endo-bariatrics; therefore, you must pay out of pocket for the procedure. We only accept payment via cash, cashier check, and care credit. We do accept FSA and HSA. We do not accept debit or credit cards.
 - If appropriate, we will schedule you for a consultation with one of our endo-bariatric proceduralists.

- **Consultation**
 - At this visit, you will meet with our endo-bariatric surgeon to discuss options and formulate an individualized plan. The doctors will get to know you and decide which option is best for you given your unique weight loss history and goals.

- **After the consultation**
 - Our nurses will schedule your procedure.
 - Call our office if you have any lingering questions about day-of expectations, recovery, medications, and diets.
 - If you are undergoing an ESG, please schedule Pre-op History and Physical with primary care provider within 30 days of procedure date and fax to 952-368-3801.
 - Pick up pre-op medications at your pharmacy (See below).
 - Ensure you have a driver after procedure and an adult to be with you for the first 24 hours after surgery
 - Nothing to eat or drink after midnight the night before your procedure

Endo-Bariatric Options at Bhatti Weightloss

1. Intra-gastric Balloon: Orbera®

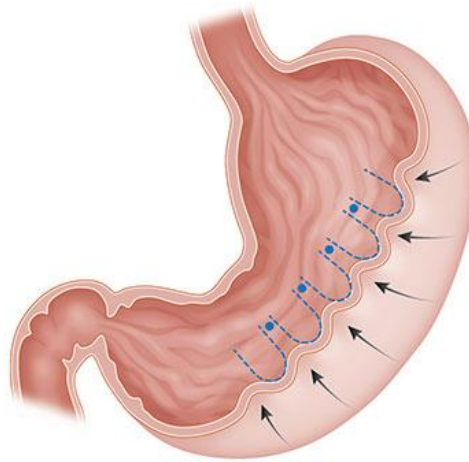
- A gastric balloon (Orbera ®) is inserted into the stomach and filled with a saline solution.
- The balloon takes up enough space in your stomach to help you adapt to healthier portion sizes. During this time, you begin your new diet and exercise program.
- In 6 months, the balloon is removed with a non-surgical procedure.
- Afterward, you continue your new diet and exercise program for at least 6 more months, to keep the weight off.
- Intra-gastric balloon therapy is an option for patients with a BMI of greater than 30 kg/m² who have tried and failed previous attempts at weight management with lifestyle changes alone.
- Balloon placement is contraindicated in patients who have had previous gastric surgery, actively bleeding upper GI lesions, uncontrolled psychiatric disorders, inflammatory bowel disease, pregnancy or desire to become pregnant, or who have large hiatal hernias.
- Intra-gastric balloons can produce anywhere from 6-15% total body weight loss.
- Intra-gastric balloon therapy has been shown to improve metabolic parameters in patients who successfully lose weight. Although intra-gastric balloons are safe and effective in managing obesity for the short term, they are temporary measures, and weight regain is expected after their removal.
- **At the beginning of intra-gastric balloon therapy, up to 91% of patients will develop some form of GI symptoms due to gastric accommodation to the balloon.** Typical symptoms include nausea, vomiting, abdominal pain, acid reflux, burping, dyspepsia, and constipation. Early balloon removal may be necessary if symptoms persist. However, very few patients (4-7%) continue to experience significant gastrointestinal symptoms after the first week of therapy, and even fewer events (<3%) required endoscopic reintervention or early balloon removal.
- Serious adverse events include balloon migration, gastric or esophageal perforation, gastric ulceration, spontaneous hyperinflation and acute pancreatitis.



Endo-Bariatric Options at Bhatti Weightloss

2. Endoluminal Sleeve Gastroplasty (ESG)

- This is an endoscopic (through the mouth) approach to a gastric-restrictive procedure.
- The anterior and posterior walls of the stomach are sutured together internally to create a tubular stomach similar to that of the sleeve gastrectomy.
- This procedure is thought to contribute to weight loss by a number of mechanisms, including restrictive mechanisms, delayed gastric emptying, as well as decreased hunger hormones.
- Studies have shown that, after 1 year, patients lost an average of 13.6% total body weight with this procedure.
- This procedure is contraindicated in patients with large hiatal hernias, pregnancy, prior stomach surgery, ulcers, gastric tumors, intestinal metaplasia, or need for anticoagulation
- Common side effects after this procedure include nausea, vomiting, and abdominal pain.
- Complications include leaks, peri-gastric fluid collections, upper gastrointestinal bleeding, venous thromboembolism-related complications, and pneumothorax/pneumoperitoneum.



Pre-Procedure Medications and Instructions

BEFORE procedure

The following two medications are prescribed to all patients prior to procedure:

- **Scopolamine**
 - 1.5 mg/72 hr transdermal patch
 - **Please bring this patch with you on surgery day.** 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 vomiting after procedure takes place.
- **Aprepitant (Emend)**
 - 80 mg PO x1 dose
 - **Take this capsule 3 hours prior to arrival**
 - This medication helps prevent anesthesia-induced nausea and vomiting after procedure takes place.

The following medication is prescribed to patients receiving Orbera balloon:

- **Omeprazole**
 - 20 mg capsules x 14
 - Beginning two weeks prior to procedure, take one capsule daily
 - This medication help prevent acid reflux after

Post-Procedure Medications and Instructions

AFTER procedure

The following medications will be sent to your pharmacy after your procedure:

Ondansetron (Zofran)

- Dose: 4mg tablets
- Frequency: take 1-2 tabs by mouth every 8 hours as needed for nausea and vomiting.
- Rx: 30 tabs, 7 days, 2 refills
- Purpose: Nausea relief. Recommended take routinely for 7 days, then as needed.

Aprepitant (Emend)

- Dose: 80mg capsule
- Frequency: take by mouth once daily as needed 2-3 days
- Rx: 3 capsules, 3 days, 0 refills
- Purpose: This medication helps prevent nausea and vomiting after the procedure.

Omeprazole (Prilosec)

- Dose: 20mg capsule
- Frequency: take by mouth twice daily for two weeks, then once daily for 6 months
- Rx: 42 tabs, 30 days, 6 refills, refill 30 tabs (take for 6 months post op)
- Purpose: The incidence of acid-reflux can increase significantly after your procedure. This medication helps prevent/treat heartburn.

Hyoscyamine Sulfate (Levsin)

- Dose: 0.125mg tablets
- Frequency: take 1 tablet every 4 hours as needed for stomach cramping/spasms.
 - Do not exceed 1.5mg per day
- Rx: 40 tabs, 10 days, 1 refill
- Purpose: Gut anti-spasmodic. Use as needed for abdominal cramping/ spasms.

Procedure 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 the procedure including your preoperative fasting requirements.
- We request you abstain from all oral intake other than sips of water after midnight the night before your procedure.
- Please remember to bring the Scopolamine patch to your procedure
- Please remember to take the Aprepitant (Emend) 3 hours before you arrive for your procedure

Arriving for your procedure

- When you arrive at our facility it is advised that you be dressed in comfortable, loose-fitting clothing.
- Leave all jewelry and other valuables at home.
- Bring only necessities such as a pair of reading glasses if required to see.
- 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** bring 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.

Arrival

- After you arrive at the surgery center, you will be escorted to your pre-procedure room.
- You will be asked to change into a surgical gown for your procedure.
- 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 the 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 do not know.
- 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.

Post Procedure 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 your procedure, your procedure will be rescheduled. We require that this person remain with you for a minimum of 24 hours after the procedure.

What to Expect After Your Procedure

What to expect

- Up and walking shortly after the procedure
- Expect some pain, but it should be tolerable (think 5 or less on a scale of 1 -10).

Call your doctor immediately if you have:

- Fever of 100.5°F (38°C) or above
- 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)
- Nausea or vomiting that lasts more than 12 hours
- Inability to keep down liquids for >12 hours
- Pain, redness, or swelling in one of 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
- Severe depression or thoughts of harming yourself

Nutrition Guidelines

- Refer to your postoperative diet instruction sheet.
- Sip fluids slowly. Do not drink carbonated beverages at all. Avoid drinking from straws.
- Follow the postoperative diet stages carefully. If you had an ESG, you will go home on a clear liquid diet and then advance to a full liquid diet at home.
- 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 20 times. Failure to do so could result in nausea, pain, vomiting, or bleeding with ESG. It is ok if you are not able to eat the recommended meal sizes. Don't overeat.
- Follow up with the dietician at 3 months after your procedure. Contact the dietician with any questions about diet prior to that.

Activity Guidelines

- Return to regular activity as tolerated.
- There are no post-procedure restrictions, however, do not do activities to the point of discomfort.
- 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).

*****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****

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

ESG

TIME SINCE ESG	APPOINTMENT TYPE
2 weeks	Follow up with physician or APP
4-6 weeks	Follow up with physician or APP
3-6 months	Follow up with physician or APP Follow up with Dietician
1 year	Follow up with physician or APP Follow up with Dietician
Annually	Follow up with physician or APP Follow up with Dietician

Orbera Balloon

TIME SINCE INSERTION	APPOINTMENT TYPE
2 weeks	Follow up with physician or APP
6 months	Orbera removal
1 year	Follow up with physician or APP
Annually	Follow up with physician or APP

ORBERA: Post Procedure Nutrition and Diet Guidelines

Patients who undergo Orbera IntraGastric Balloon will have to modify their diet after the procedure. Your diet after the procedure will begin with liquids and slowly advance back to solid foods over a few weeks, maintaining a low-fat, low-carbohydrate diet. Adherence to this post-procedure diet progression will help generate weight loss success, prevent unwanted symptoms such as severe nausea, vomiting, abdominal cramping/pain, 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) 368-3800 from Monday through Friday, 8 AM – 5 PM

Meal Plan General Guidelines

Hydration:

- Drink enough fluids to keep hydrated (this roughly amounts to at least 64 fluid oz. daily)
- There are two approaches to drinking fluids after your Orbera balloon is placed:
 - Approach 1: Drink slowly, taking small sips. Wait between the sips for a minute or two, and do not drink more than ~1/2 cup at once.
 - Approach 2: Drink as much as you feel like drinking (8-16 oz). Wait 4-5 hours before drinking again. Consider this approach after 2-3 days.
- Figure out which approach to drinking fluid above works best for you
- Keep in mind that for the first 2-3 days, drinking too much fluid at one time may increase nausea or vomiting

Meal patterns and preparation:

- Eat very slowly
- Chew your food well before swallowing. Ideally, food should be a pureed consistency before you swallow it
- 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, use smaller plates to assist in portion control
- Eat your protein **FIRST** when eating meals.
 - You should aim to eat between 60-80 grams of protein daily
- 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, or pain in your shoulder or upper chest
- If severe nausea or vomiting is limiting your ability to drink liquids, try laying down on your left side
 - This will help shift the balloon into the top of your stomach, allowing fluid and food to empty from the pylorus (outlet valve of your stomach)
 - Do NOT stay in this position for long periods; limit laying on this side to 30 minutes and only use this for relief of significant nausea/vomiting. This position should be used in combination with medications and fluid intake

Use the medications prescribed as directed to help with your symptoms

- Omeprazole: used for acid reflux/heartburn symptoms
- Zofran/Ondansetron: used for nausea/vomiting, first-line treatment
- Emend/Aprepitants: used for severe nausea/vomiting for the first 2 days after the procedure, as needed
- Acetaminophen/Hydrocodone: used for pain relief as needed – stick to over-the-counter pain medications first to help with cramping/pain!
- (If prescribed) Levsin/hyoscyamine: used as an additional medication to help with stomach cramping
- (If prescribed) Ativan: helps with anxiety related to the balloon in place

Diet Advancement

Day/Week post procedure	Diet Type
First 24-48 hours	Clear liquid diet
Day 3 – Day 7	Full liquid diet. Start protein shakes. Work towards 30 grams of protein daily
Week 2	Pureed foods (apple sauce consistency)
Week 3	Soft foods
Week 4	Solid foods

FIRST 24-48 HOURS

Stage One: Clear Liquid Diet

Goal: 64 oz. of fluid per day

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
- Clear protein drinks à Ensure Clear, Premier Protein Clear, protein waters

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 for the first 24-48 hours after the procedure.
- Aim to set a pace of 1 ounce of liquid every 15 minutes to stay hydrated

DAY 3 - DAY 7

STAGE TWO: Full Liquid Diet

****Full liquids are any low-sugar liquid that is pourable without chunks****

Goal: Increase fluid intake to 64-80 oz/day with 30 grams of protein intake/day

- Protein intake is very important after Orbera intragastric balloon, for many reasons. It provides an important source of calories to the body during rapid weight loss that occurs after the procedure. A lack of protein after your procedure can make you feel weak and tired; 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 metabolism.
- Protein powders are readily available at most stores and can be mixed with liquids to meet protein requirements after surgery.

Remember:

- There are two approaches to drinking fluids after your Orbera balloon is placed:
- Approach 1: Drink slowly, taking small sips. Wait between the sips for a minute or two, and do not drink more than ~1/2 cup at once
- Approach 2: Drink as much as you feel like drinking (8-16 oz). Wait 4-5 hours before drinking again. Consider this approach after 2-3 days.
- Figure out which approach to drinking fluid above works best for you and stick to it

Examples of clear liquids vs full liquid diet?

Clear liquids	Full liquids
<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• *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.

WEEK 2

Pureed Foods

Goal: 64-80 oz. of fluid, increase protein intake to goal of 60 grams of protein per day. 4-5 small meals daily. Chewable multivitamin and calcium daily.

- Pureed foods are the consistency of applesauce. There 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.

Examples of pureed foods:

- Low-fat cottage cheese without fruit chunks, small curd
- Sugar-free yogurt
- Pureed meats like eggs, chicken, turkey, or beef
- Mashed potatoes/sweet potatoes
- Mashed bananas
- Pureed peaches, pears, apricots
- Pureed tomatoes

Remember:

- You should drink calorie-free or low-calorie 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. Every person is different!

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 ounces of pureed poultry or fish, 1-2 tablespoons of pureed vegetables
- 2:00 PM – 2-4 ounces of low-carb protein supplement
- 6:00 PM – 2 ounces of pureed poultry or fish, 1-2 tablespoons of pureed vegetables
- 8:00 PM – 1-2 ounces of low-fat cheese

WEEK 3

Soft Foods – Low-carb, low-fat, high protein diet

Goals:

- 64-80 oz. of fluid with 60- 80 grams of protein intake
- 4-5 small meals a day
- Begin exercise regimen
- Continue multivitamin and calcium

The soft diet is meant to maintain a healthy lifestyle. 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:

- Eat protein in your meals **FIRST** (protein can come from poultry, beef, fish, cottage cheese, eggs, tofu, low-fat yogurt, milk and cheese)
- **If you feel full, STOP EATING – listen to your body and use mindful eating**
- Chew all foods to a pureed/applesauce consistency before swallowing, should take 20- 30 minutes to finish a meal.
- Avoid tough/fibrous/gummy foods like popcorn, breads, raw veggies, salads, rice, watermelon)
- Avoid drinking fluids within 30 minutes of a meal; after the meal is complete, drink 1-2 glasses of water to help rinse the balloon
- Eat the protein portion of your meal first, and don't forget your liquids between meals (about 30 minutes after each meal)

Examples of Soft Foods:

- Scrambled, poached, or soft-boiled eggs
- Boiled pasta, noodles or white rice
- Mashed potatoes, mashed beans, mashed peas
- Hot cereals- oatmeal, malt o meal
- Tofu
- Finely diced/ground meat or fish
- Moist legumes
- Soft, cooked vegetables without skin or seeds
- Cottage cheese
- Yogurt
- Jell-O
- Soups
- Soft fruits such as bananas, raspberries, canned peaches or pears
- All items listed on clear, full liquid and pureed diets

WEEK 4

Solid Foods – Low-carb, low-fat, high protein diet

Goals:

- 64-80 oz. of fluid with 60- 80 grams of protein intake
- 4-5 small meals a day
- Maintain exercise regimen
- Continue multivitamin and calcium supplementation, other supplements as advised by doctor or dietitian.

Solid foods are regular consistency. Once you get to this point in the diet progression, you can slowly try normal foods again.

Remember:

- If you try a new food and you do not tolerate it, avoid it!
- When adding regular/solid foods to your diet, try one thing at a time and wait several minutes before trying the next item; keep track of the foods that cause any symptoms and avoid them
- Choose a balanced diet— emphasize protein first, then move on to fruits/vegetables, fats, and carbohydrates
- Avoid fried foods, instead bake, broil, or boil your foods.
- Drink 1 glass (4-6 oz) of water 30 minutes prior to eating a meal.
- Drink 2 glasses (4-6 oz each) of water 30 mins after each meal to rinse the balloon.

“Low Fat” = 30% or less of the calories from the serving of food is fat

- Ex. For a serving size of a food with 100 calories, no more than 30 calories come from fat

“Low Carbohydrate” = 15 grams TOTAL carbohydrates or less per serving

“High Protein” = 15- 20 grams per serving

ESG: Post Procedure Nutrition and Diet Guidelines

ESG patients have unique dietary needs after their procedure. Your diet after the procedure will begin with liquids and slowly advance back to solid foods over several weeks, maintaining a low-fat, low-carbohydrate diet with an emphasis on increasing protein. Strict adherence to this 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 Bhatti Weight Loss office at (952)-368-3800 from Monday through Friday, 8 AM – 5 PM.

Meal Plan General Guidelines

Hydration:

- Drink enough fluids to keep hydrated – aim for 64 fl oz per day unless you have been given a higher goal.
- When you return home after surgery it may seem difficult to get fluids in initially because of inflammation. Aim for 4-8 oz of fluid over an hour.
- Eventually you should be able to take 8 oz of fluid over 5-15 minutes.
- 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.
- Wean off beverages containing carbonation, caffeine, sugar and alcohol. Carbonation may cause abdominal discomfort and may stretch out your new stomach over time. Caffeine may irritate the stomach and increase your risk for an ulcer after surgery. Caffeine as well as alcohol may also contribute to dehydration. Beverages containing sugar and alcohol are high in calories and will hinder your weight loss. May also result in “Dumping Syndrome”.
- And finally, alcohol metabolism is altered, and you may feel the effects more quickly- it is recommended to avoid consumption.

Recommended Beverages:

- Water is a great beverage choice! If you are having trouble tolerating plain water, try adding a wedge of citrus fruit or sliced cucumbers.
- Sugar free or light beverages with less than 10 calories per serving are also appropriate.
- Try beverages sweetened with artificial or non-nutritive sweeteners.
- Try True Lemon/Lime/Orange® for touch of flavor without artificial sweetener.
- Switch to decaffeinated coffee and tea.
- Avoid ALL beverages with carbonation, even diet soda and sparkling water.
- If you choose to drink alcohol in moderation after surgery, please do not plan on driving.

Meal patterns and preparation:

- Eat very slowly, it is recommended you take 20-30 minutes to finish your meal, especially when moving to solids.
- Sit down and focus on eating. Avoid activities (i.e. reading, watching TV, on computer) where you can become distracted. Practice mindful eating.
- Savor each bite, noting its aroma, flavor and texture. Engaging all your senses can increase satisfaction and help prevent overeating.
- Put your fork down between bites.
- Chew your food well before swallowing. Ideally, food should be a pureed consistency before you swallow it
- Meals should be relatively small in portion size
- 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

Read food labels.

Begin by identifying the amount of sugar, fat and protein in a particular food.

- **Sugar**
 - Food and beverages high in sugar will slow down the rate of weight loss and may even cause weight re-gain. For patients having Gastric Bypass surgery, food and beverages that are high in sugar may cause symptoms of flushing, dizziness, weakness, headache, nausea, vomiting, diarrhea and abdominal discomfort known as Dumping Syndrome.
 - Avoid high sugar foods such as sweets, candy, fruit drinks and sodas.
 - Limit foods that contain sugar in the first 3 ingredients on the food label. Aim for no more than 10 grams of sugar per serving.
- **Sugar Alcohols**
 - Sugar alcohols are sometimes used in foods to provide a sweet taste without the calories of sugar. You may find sugar alcohol in sugar free foods such as sugar-free candies, cookies, ice cream and chewing gum. You may even find sugar alcohol in foods not labeled sugar free such as protein bars. If a product contains sugar alcohol the type (i.e. sorbitol, xylitol, mannitol, maltitol, starch hydrolysates, etc.) will be included on the list of ingredients and the amount will be included on the nutrition facts label.
 - Limit sugar alcohol to less than 10 grams per serving as greater amounts may lead to cramping, abdominal pain, excess gas and/or diarrhea.

- **Fat**
 - Food and beverages high in fat are high in calories and like sugar will slow down the rate of weight loss and may even cause weight re-gain. High fat intake may also cause symptoms of intolerance or Dumping Syndrome.
 - Avoid obviously high fat foods such as fried foods; fast food; snack chips; high fat meats like bacon, sausage, hot dogs, bologna, pepperoni and wings; cream soups and sauces like Alfredo; whole milk, ice cream; donuts; cakes; cookies; and pastries.
 - Choose foods that are labeled “light”, “low fat” or “fat free”.
 - When looking at a food label...Choose foods with 5% or less of the Daily Value (DV) for total fat. Avoid foods with 20% or more of the Daily Value for total fat. These would be considered a high fat food.
 - Choose lean cuts of meat. Lean cuts include round, chuck, sirloin and tenderloin and meats that are greater than 90% lean.

- **Protein**
 - Protein is important for wound healing, immune function and maintaining muscle mass. Needs are individual but ranges of **60-80 grams or 80-100 grams per day** are often suggested. Your dietitian can help determine the amount of protein that is best for you. Protein should be consumed **FIRST** at each meal, then vegetables/fruits, then whole grains.
 - Avoid dry meats, they are usually not tolerated well.

Explore, purchase and begin taking protein supplements (see handout).

- Choose supplements with:
 - At least 20-30 grams of protein per serving.
 - Less than 5 grams of sugar per serving.
 - Less than or equal to 200 calories.
 - Please account for the additional calories of any fluids or foods mixed or blended in (i.e. fruit, yogurt, peanut butter, milk, etc).
 - Choose whey protein isolate over whey protein concentrate and milk protein concentrate if you are lactose intolerant or feel symptoms of gas, bloating or are having loose bowel movements after surgery. Whey protein isolate is absorbed well and has no lactose or milk sugar.
 - Avoid and/or limit products with collagen (not a complete protein).
 - If you mix protein powder with skim or 1% milk, you will get an additional 8 grams of protein per 8 oz.

Vitamin/Mineral Supplementation:

- Begin taking a multivitamin (MVI) now if you do not already.
- Look for a MVI that contains at least 100% Daily Value for iron (18mg), folic acid (400mcg), thiamine (1.5mg) and copper (2mg).
- In addition, you will need to take:
 - Calcium Citrate + Vitamin D: 500 mg, 3 times daily for a total of 1200-1500 mg and 3000 IUs Vitamin D.
 - Vitamin B12: 500 mcg sublingual pill/day or 1cc injection monthly or 1 nasal spray (Rx)
 - Vitamin B complex (w/ Thiamine): 75-100 mg/day
 - Iron (to be taken with Vitamin C, NOT calcium): iron: 45-60 mg/day, Vitamin C: 500 mg/day
 - Zinc: 15 mg/day
 - Biotin: 3000 mcg/day
- Vitamins and minerals are absorbed differently after surgery therefore daily supplementation is needed for the rest of your life.
- You can transition to a regular pill/non-chewable multivitamin once you are on regular, solid foods
- You may want to take vitamins in divided doses throughout the day to ensure optimal absorption

**Reference “Vitamin and Mineral” Handout for more specific information on which vitamins to choose and where to find them.

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 <ul style="list-style-type: none"> • Start protein shakes • Work toward 30 grams of protein daily
STAGE THREE Week 3 – Week 6	Pureed Diet <ul style="list-style-type: none"> • Start chewable multivitamin, calcium citrate supplement
STAGE FOUR Maintenance Diet Week 6 +	Solid, Low-Fat, Low-Carbohydrate Diet <ul style="list-style-type: none"> • 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

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 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.
- In order 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 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.
- Examples of pureed foods:
 - Low-fat cottage cheese without fruit chunks, small curd
 - Sugar-free yogurt
 - Pureed meats like eggs, chicken, turkey, or beef
 - Mashed potatoes, sweet potatoes, bananas
 - Pureed peaches, pears, apricots
 - Pureed tomatoes

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
- 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
- If you are not getting in enough protein in your diet, you can consider adding protein powder like Whey protein
- 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 ounces of pureed poultry or fish, 1-2 tablespoons of pureed vegetables
- 2:00 PM – 2-4 ounces of low-carb protein supplement
- 6:00 PM – 2 ounces of pureed poultry or fish, 1-2 tablespoons of pureed vegetables
- 8:00 PM – 1-2 ounces of low-fat 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 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 – discontinue protein shakes
- 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
 - 1 egg
 - 1 slice of toast
 - 1 teaspoon of margarine
- Snack (optional)
 - 1 low-fat cheese stick
- Lunch
 - 2 oz. of poultry, beef, or fish – baked, broiled, or boiled, **NOT** fried
 - $\frac{1}{4}$ cup of cooked veggies
 - $\frac{1}{4}$ cup of pasta 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
 - 2 oz. of poultry, beef or fish – baked, broiled or boiled, **NOT** fried
 - $\frac{1}{4}$ cup cooked veggies
 - $\frac{1}{4}$ cup of pasta if desired
- Snack (optional)
 - $\frac{1}{2}$ cup low-fat reduced carbohydrate yogurt

Common Foods that may cause discomfort during this phase:

- Breads or pastas
- Carbonated drinks
- Raw vegetables
- Cooked fibrous vegetables (celery, corn, broccoli)
- Tough meats
- Red meats
- Fried foods
- Highly seasoned or spicy foods
- Nuts/ seeds
- Popcorn

Orbera Removal

Scheduling

- We will remove your Orbera balloon **6 months** after insertion.
- We typically schedule this procedure at your 2 week follow up appointment.

Preparing for Removal:

- **You must be on a clear liquid diet two days prior to removal.**
 - Clear liquids include 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
- 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.
- We request you abstain from all oral intake other than sips of water after midnight the night before your procedure.
- Remember, you **MUST** bring 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.

Arriving for your procedure

- When you arrive at our facility it is advised that you be dressed in comfortable, loose-fitting clothing.
- Leave all jewelry and other valuables at home.
- Bring only necessities such as a pair of reading glasses if required to see.
- 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.

Arrival

- After you arrive at the surgery center, you will be escorted to your pre-procedure room.
- You will be asked to change into a surgical gown for your procedure.
- Our 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 the 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 do not know.
- 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.

Post Procedure 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 your procedure, your procedure will be rescheduled. We require that this person remain with you for a minimum of 24 hours after the procedure.