

Bariatric Patient Manual



BELTLINE HEALTH

WEIGHT LOSS SOLUTIONS



Pre-Operative Visit Schedule

Insurance Track (based on a 3-month requirement – will vary depending on your specific plan)

1. Initial Visit

- At this visit, you meet with Dr. Hill, Dr. Eduardo, or Dr. Procter to discuss your weight loss options & formulate a plan. The doctors will get to know you & decide what weight loss solution would be most beneficial for you & your weight loss journey.
- Next, one of our Patient Coordinators will discuss the process of proceeding through the pre-operative requirements. Also, they will review your bariatric insurance coverage and the specific needs your plan requires for approval. They will also discuss the surgery's cost if you are a cash-pay patient and the various financing options.
- We will schedule your BMR and DEXA scan along with your next appointments with our Registered Dietitians, Physician Assistant, and Registered Nurse Practitioner

2. BMR and DEXA scan Testing Visit

- The BMR test stands for your Basal Metabolic Rate and measures your metabolism. It is not a blood test. You will be required to sit for approximately 5-10 minutes and breathe normally into a tube. The result will be used as a baseline and help us track your progress throughout your entire journey. Knowing your specific metabolism is also helpful in determining what surgery will work best for you. **BE FASTING** for 6 hours before this office visit. Please have nothing to eat or drink besides water for 4 hours before your appointment. ****Also, NO NICOTINE** (no smoking, chewing, patches, e-cig. No nicotine in any form) and **NO STRENUOUS EXERCISE** for 6 hours before your appointment. We will discuss the results of this with you at your next appointment.
- The DEXA scan is a measurement of your body composition. It is a non-invasive test that measures your bone mineral density and lean muscle and fat percentage. It is incredibly accurate and allows us to establish a baseline and help track your process throughout your entire journey, and will typically be done on the same day as your BMR test. The DEXA results will also guide your post-operative progress.

3. 2nd visit

- Meet with one of our Registered Nurse Practitioners to discuss your BMR and DEXA results and the importance of self-monitoring with calorie tracking and exercising to maintain and improve metabolism. They will also address any medical conditions you have, what diagnostic testing you will require, any referral appointments needed, such as Psychological Evaluation, Sleep Study, Cardiac testing, etc. You will also discuss scheduling either an EGD (Esophagogastroduodenoscopy) or TNE (Transnasal Endoscopy). We use these to evaluate your esophagus, stomach, and the first part of your small intestine before surgery.
- Visit with your Registered Dietitian.

4. 3rd visit

- Meet with one of our Registered Nurse Practitioner to review previous studies' results and lifestyle issues. You will discuss topics such as stress, emotional eating, and how it contributes to weight gain. We will review the results of any lab and diagnostic testing you have had performed. If you have a hiatal hernia on EGD or TNE or have significant heartburn, the Registered Nurse Practitioner may refer you back to your surgeon to discuss options.
- Visit with your Registered Dietitian.

5. Pre-Op Visit

- Your final visit, at which you meet with your surgeon. Dr. Hill, Dr. Eduardo, or Dr. Procter. They will



explain what the surgery day will look like for you. Please bring your spouse or family member with you to this appointment.

- We will obtain all surgical consents, and you will have the opportunity to ask your surgeon any final questions you may have regarding recovery, medications, or diets at this time. We will also provide you with a date and time for your pre-anesthesia visit at the hospital.

6. 2-week Post-Op Visit

- On your first visit after surgery, you meet with your Registered Nurse Practitioner to identify surgical complications, adjust or eliminate medications, and evaluate your surgical wounds.



LIFE AFTER SURGERY – FOLLOW UP APPOINTMENTS

Patients who follow up after surgery are more successful.

There are many reasons follow-up is essential after weight loss surgery.

1. Nutritional counseling
2. Identify surgical complications
3. Adjust or eliminate medicines
4. Monitor for vitamin and mineral deficiencies
5. Accountability
6. Identify and treat problems early
7. Identify and treat plateaus or weight regain

TIME	APPOINTMENT TYPE
2 WEEKS AFTER SURGERY	FOLLOW UP WITH NURSE PRACTITIONER CONSULT WITH DIETITIAN
6 WEEKS	FOLLOW UP NURSE PRACTITIONER
3 MONTHS	FOLLOW UP W/ SURGEON, DIETITIAN, LABS AS NEEDED, & PSYCHOLOGIST AS NEEDED
6 MONTHS	FOLLOW UP W/ NURSE PRACTITIONER, DIETITIAN, LABS REQUIRED, PRIMARY CARE PROVIDER, PSYCHOLOGIST AS NEEDED
9 MONTHS	FOLLOW UP W/ NURSE PRACTITIONER AND DIETITIAN
1 YEAR	FOLLOW UP W/ NURSE PRACTITIONER, LABS REQUIRED
18 MONTHS	FOLLOW UP W/ NURSE PRACTITIONER
ANNUAL	FOLLOW UP W/ NURSE PRACTITIONER, LABS REQUIRED



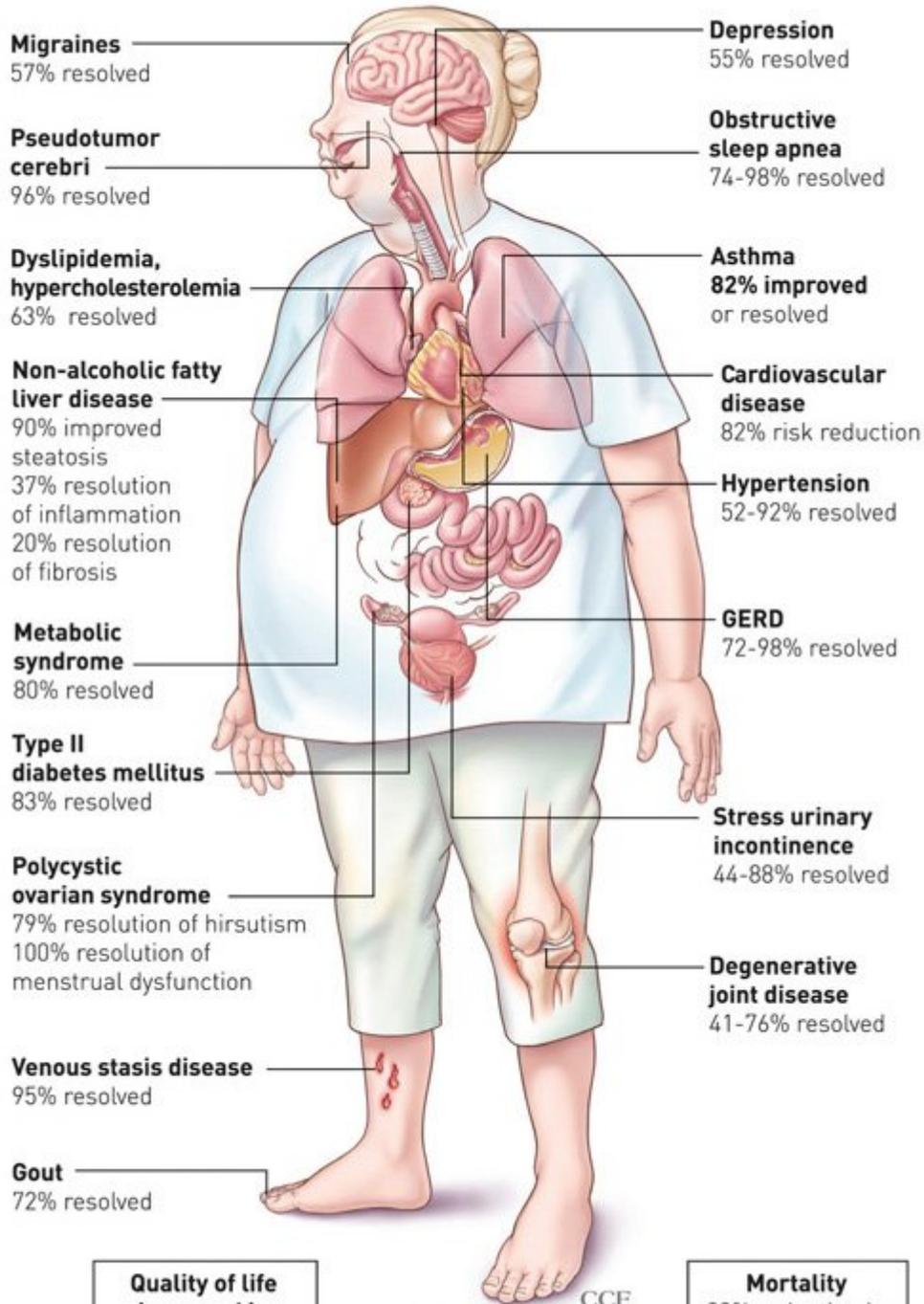
IMPORTANT INFORMATION & NUMBERS

- If you experience a medical emergency at any time, you should call 911 or go to the emergency room and notify Panhandle Weight Loss Center as soon as possible. If possible, return to the Emergency Room at the facility you had surgery.
- If you are experiencing a non-emergent post-operative complication during regular business hours or think you need to be seen by the surgeon, please call your local office for an appointment.
- If you have a medical problem or are going to the emergency room after regular business hours, please call our office immediately; the on-call physician will immediately be notified. Many medical personnel are unfamiliar with weight loss surgery, and serious errors in treatment could occur. Therefore it is crucial that Drs. Hill, Eduardo, or Procter be notified of any emergency.
- ***Notify any medical personnel about your bariatric surgery before they treat you, especially if they plan on inserting a stomach tube for any reason!***

*We know the process before surgery can be lengthy and time-consuming. Please understand you may have to take time off from work to come to multiple appointments and have lab and diagnostic testing performed. Metabolic and bariatric surgery is an effective tool for sustainable weight loss and improvement and potential resolution of the co-morbidities associated with obesity. However, you have to put in the necessary time to learn how to make this tool effective. We ask you to make a lifetime commitment when choosing to allow the Beltline Health Team to guide you through this journey before, during, and after surgery. In return, please know that we are **DEDICATED** to making your journey a **SUCCESS!***



Co-morbidity Reduction After Bariatric Surgery

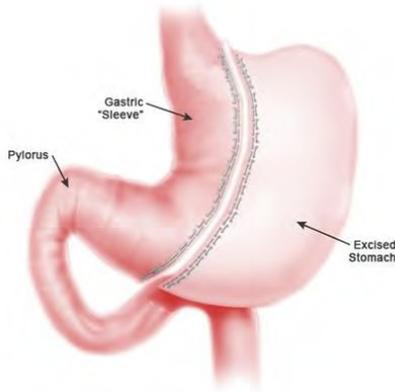


CCF ©2005
Courtesy ClevelandClinic



Procedures Performed at Beltline Health

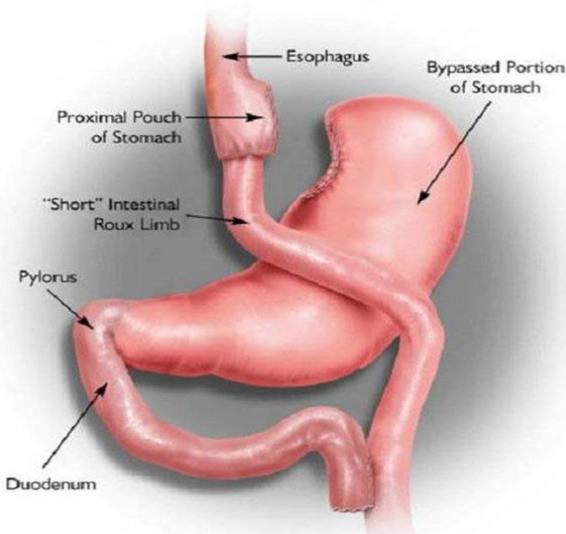
Sleeve Gastrectomy



1. Restriction of food intake with no malabsorption
2. Unlikely to experience dumping syndrome
3. Average 65% excess weight loss
4. Improvement or remission of chronic conditions
5. Potential for weight regain
6. Commitment to lifelong lifestyle changes

Roux en Y Gastric Bypass

The Roux-en-Y Gastric Bypass is considered by many to be the "gold standard" procedure for bariatric surgery, as it has been around the longest and has the most data to show efficacy. It used to be the most frequently performed bariatric surgery in the United States – however, it has been recently surpassed by the gastric sleeve due to fewer disadvantages and somewhat similar outcomes.



1. Restriction of food and malabsorption
2. Nutritional supplements required to rebalance malabsorption
3. Average 60% excess weight loss within first 18 months
4. Improvement or remission of chronic conditions
5. Potential for weight regain
6. Commitment to lifelong lifestyle changes

Duodenal Switch

Somewhat lies a combination of a gastric sleeve and a gastric bypass. 80% of the stomach is removed, restricting food intake. The intestine is rerouted to the bottom of the smaller stomach, bypassing part of the intestine to decrease calorie and nutrient absorption.



1. Restriction of food intake and malabsorption
2. Nutritional supplements required to rebalance malabsorption
3. Average 85% excess weight loss
4. Improvement or remission of chronic conditions
5. Potential for weight regain
6. Commitment to lifelong lifestyle changes



Frequently Asked Questions

- **When can I get pregnant after surgery?** It is strongly recommended you wait at least 18 months after surgery before trying to conceive. Approximately 18 months post-op, your body will be relatively stable from a weight and nutrition standpoint. You should also know that fertility usually increases with weight loss, so be sure to take extra precautions.
- **What do I do about gas?** Walk, walk, walk! Most gas pains are from the carbon dioxide used during surgery and absorbed over the first 2-3 days. Excess gas is also standard in the first few weeks after surgery.
- **What do I do about constipation?** Pain medication or dehydration can cause you to become constipated. If constipation becomes a problem, you may try MiraLax, which is available over the counter. You may also need to increase your fluid intake. Constipation can also be relieved through insoluble fiber supplements such as Fiber-con/Benefiber or Metamucil. We recommend starting with about $\frac{1}{4}$ to $\frac{1}{2}$ the recommended amount. Half a cup of warm prune juice will also help with constipation. Call our office if constipation persists for more than 2-3 days.
- **What do I do about diarrhea?** For the first few weeks after surgery, it is normal to feel cramping or diarrhea. You may take Imodium AD or try some yogurt. Diarrhea is a more frequent problem with patients undergoing the Duodenal Switch procedure and can lead to dehydration. Make sure to increase your water consumption beyond the standard recommendations. Call our office if diarrhea persists past 2-3 days.
- **What do I do if I am feeling nauseous or vomiting?** You can expect nausea in the first few weeks after surgery. Watch your eating behavior. Are you overeating, eating too fast, or eating foods high in sugar or fat? Are you drinking with your meals? You may also be dealing with food intolerances. If you feel nauseous or vomiting, wait about two hours until symptoms subside, then go back to full liquids again. If vomiting continues for more than 24 hours, call our office.
- **Why do I need to drink so much water?** Proper hydration is critical during recovery from surgery. When food intake is low, it becomes even more important to drink fluids to meet your body's needs. Dehydration is one of the most common reasons for re-hospitalization. It can cause weakness, fatigue, lightheadedness, dizziness, and constipation. Shrinking cells are buoyed by water, which plumps the skin and leaves it clear, healthy, and resilient. It would help if you frequently sipped on water between meals. Your goal is to get up to 64 ounces of water a day.
- **Why do I sometimes feel tightness in my chest area after eating?** Tightness in your chest can be caused by eating too fast, not chewing well enough, taking too big of a bite, or drinking with meals. Stop what you are doing, stand up, and pace the floor; this may help tightness to go away sooner.



What to Expect After Surgery?

Diet:

- Please follow the guideline in the NUTRITION part of this booklet for dietary progression. If your surgeon advances you at your one-week post-op appointment and you don't feel good after advancing, you may go back to what your manual instructs you to do.

Fluids:

- Please work up to 64 ounces of liquid intake/water. You may add in Gatorade ZERO or Powerade ZERO as well. Crystal light is OK to add to your water for flavor.
- If you are not getting your fluids in and are feeling dehydrated, you may want to visit a hydration station, urgent care, or ER (if you have no access to a hydration facility). We have VidaFlo in the Atlanta area and then Cleansing Waters in Peachtree City, Fayetteville, and Stockbridge for IV hydration. Please be aware these facilities are NOT doctor's offices. You will pick which hydration package you want, and then they may choose to give you additional medications for things such as nausea, as needed.

Exercise:

- Please make sure you are walking regularly at home to keep the blood flowing in your legs and help further protect against blood clot formation.
- Do not lift more than 10-15 pounds for 3-4 weeks following surgery.
- You may start an exercise routine once cleared at your post-op appointment.

Incisions:

- Your incisions have dissolvable sutures in addition to surgical glue on the outside. The glue will peel off naturally over time. If you feel like you are reacting to the glue (i.e., red itchy rash around the glue sites), please call the office.

Showering:

- You may shower when you get home from the hospital. Do not submerge in water (i.e., NO hot tub, pool, or bathtub) for at least two weeks after surgery.

Vitamins:

- Start your vitamins two weeks after getting home from the hospital. Please make sure you are taking a bariatric multivitamin plus iron and calcium. DO NOT TAKE ANY OTC VITAMINS (such as Flintstone or Centrum). You are to be on a bariatric multivitamin for one year if you had a sleeve gastrectomy. If you had a gastric bypass, duodenal switch, or you are a revisional patient, you will be on bariatric multivitamins for a LIFETIME. We want to make sure you do not experience any nutritional deficiencies after your surgery.

Medications:

- If your surgery takes place at Piedmont Atlanta Hospital, you can take advantage of the Bedside delivery of your discharge medications to make your discharge and journey home more manageable.
- Please take your Lovenox injections for ten days after getting home from the hospital as ordered by your surgeon. If you are on a blood thinner, please let your surgeon know before or at your pre-op appointment. If you experience any heavy bleeding after starting your Lovenox shots, please call the office.
- Please take your omeprazole daily for three months after surgery. Even if you are not experiencing heartburn, you still need to take the medication while your stomach is healing to prevent excess acid and the development of ulcers. If you are already on medication for heartburn, such as Nexium or Prilosec, you may take that instead.
- Please start a stool softener or Miralax right after surgery if you have an issue with constipation. Even if you do not have constipation, you may experience it immediately post-op or in the first month related to the high protein diet. DO NOT wait until five days of not having a bowel movement to start these meds.
- Continue previous medications. However, if you are on an NSAID(Advil, naproxen, ibuprofen, diclofenac, Mobic, or any other), please stop these for at least the first six weeks after surgery. If you are on blood pressure or blood sugar medications, PLEASE check your pressure and sugar levels frequently after surgery, as you may have variable readings. If



you start having low/high blood pressure or blood sugar readings, please call your PCP as you may need frequent adjustments in your medications postoperatively.

- If you are taking the narcotic pain medication after surgery, please be aware any refills **MUST** be handwritten and picked up at the office. These medications cannot be called in. Please call during business hours regarding refills on narcotic pain medications if needed.
- If you feel like you can't take the narcotic pain medication or do not need it, you may take Tylenol. Please also be aware narcotic pain medications can also cause constipation, so being on a stool softener is advisable.

Sex:

- You may resume sexual activity when you are comfortable.
- Females: Please be aware that during your weight loss this year, your hormones will be variable. Please take appropriate measures to prevent pregnancy. We do not recommend getting pregnant for at least 18 months after surgery.
- Females: Your menstrual cycle may be abnormal as well. If you are experiencing menstrual problems such as heavy bleeding, please call your PCP or OBGYN for guidance.

Other:

- **DO NOT SMOKE** under any circumstances. It is **NOT OK** to resume or start smoking **AT ANY TIME** after Surgery. Smoking greatly impairs wound healing and puts you at risk for life-threatening complications. Please let us and your primary care doctor know what we can do to help you STOP and STAY STOPPED.
- Please make an appointment with your Primary care doctor or other healthcare providers to let them know you had your surgery and are doing well. Please call them for any problems you usually call them for or adjustments in medications they have prescribed you.



Bedside Discharge Medication Delivery Piedmont Atlanta Hospital ONLY

This service is independent of Beltline Health, and it is the patient's responsibility to activate this service if they wish to use it by contacting Walgreens Pharmacy at Piedmont Hospital.

To help make your discharge from the hospital as smooth as possible, you can choose to have your discharge medications delivered to your bedside. Only available at Piedmont Atlanta Hospital at this time.

Walgreens Pharmacy at Piedmont Hospital
35 Collier Road, Suite 100
Atlanta
GA 30309

Phone: 404-350-9650
Fax: 404-350-9871 / 404-351-9336

Frequently Asked Questions

What if I am not a current Walgreens customer?

No problem. If you want to take advantage of this service but are not a Walgreens customer, let us know where you get your prescriptions filled, and Walgreens will transfer it.

Do you need my insurance information?

We need your insurance information for prescription billing and prior authorization purposes only. Neither you nor your insurance will be charged for the bedside delivery service.

How do I pay for my medication through this service?

Your copay (or full payment if you do not have prescription insurance) can be paid by credit card, check, or cash.

For more information or to take advantage of this service, contact Walgreens Pharmacy at Piedmont Hospital, 404-350-9650



What to Expect After Surgery?

Problem	Reason	What to do...
Gas Pains	Standard in the immediate post-op period due to the gas used during surgery. Later on, it may be caused by eating too fast, drinking carbonated beverages, or eating gas-producing foods such as beans, broccoli, cabbage.	Immediately after surgery, start frequently walking as this helps with gas pain. Later on, slow down. Do not eat fast. Avoid all carbonated beverages. Temporarily avoid gas-producing vegetables. You may also take anti-gas medications such as Beano, Mylicon, or Gas-X.
Nausea	Nausea is a common occurrence after surgery due to the alteration of your gastric anatomy and the effects of anesthesia. This feeling is not permanent – and will improve as time passes. Changing food preferences, dehydration, or sensory changes may also cause feelings of nausea.	Medications prescribed for you will help immediately after surgery. Drinking and eating SLOWLY help. Stay well hydrated. Fluid intake should be at least 64 ounces per day. Avoid extreme temperatures of hot and cold, as this may trigger nausea. Avoid any certain foods you notice make you nauseous.
Vomiting	Immediately after surgery, this is often due to the effects of anesthesia. Later, this may be caused by eating too fast, not chewing well, swallowing large pieces of food, food intolerance or food-borne illness, or overeating. If vomiting persists, it may be due to a stricture or stenosis, and you should call the office despite making dietary changes as described here.	The medications prescribed can help. DO NOT advance your diet faster than described in the nutrition section. Cut food into small pieces and chew at least 20 times before swallowing. Swallow food only after it is "mushy" in your mouth. Stop eating the food which makes you vomit. Don't overeat – when you START to feel full – stop eating! If vomiting persists, contact your physician.
Constipation	Having a bowel movement every 2-3 days after surgery is a regular occurrence. Narcotic pain meds can cause constipation. Other causes are less total food intake, inadequate fluid intake, high protein, low fiber intake, and inactivity.	Stay hydrated. Remember at least 64oz of water daily. If constipated, increase your fluid intake until resolved. Keep active and walk regularly. Please do NOT wait until five days of no bowel movement to start a bowel regimen. You may use over-the-counter laxatives, fiber, or stool softeners such as Milk of Magnesia, Miralax, Benefiber, Metamucil, Senokot, Colace if constipation persists. We recommend Miralax or Colace daily until constipation resolves. If it persists, contact your physician.
Fatigue	Expect to be tired after surgery as your body recovers. You are not taking in as many calories and fluids, so it will take some time to regain your strength. Your energy should improve as time passes. Persistent fatigue is often due to dehydration or inactivity and later on can be due to vitamin or nutritional deficiencies or anemia.	Stay hydrated! Try adding in a Gatorade or Powerade ZERO for extra hydration and electrolytes. Build up your exercise routine slowly. You need to walk multiple times each day when you get home and keep active, improving your energy. You may take frequent rests/naps but do not remain sedentary the entire day. Take your multivitamins as recommended. We will check your vitamin levels at your six-month visit and the first annual visit to ensure adequate levels.



Problem	Reason	What to do...
Difficulty Sleeping	Surgery, being in the hospital, and pain medication can throw off your sleep cycle. It is temporary and will improve.	Ensure that you are active throughout the day and awake for most of it. Naps are OK, but reserve long periods of sleep for nighttime only. Ensure curtains are open during the day to see the sun and lights off at night so that your body gets back into rhythm.
Heartburn	You may experience heartburn or acid reflux after surgery, especially after the gastric sleeve or duodenal switch. It can be due to the narrower anatomy of your stomach. As you lose weight, it should improve, but sometimes it can be persistent.	Please continue to take your Protonix or other heartburn medication every day for at least three months after your surgery or as directed by your surgeon. If your symptoms are worsening, please call the office for advice.
Sensory Changes	Your sense of taste and smell can often change after surgery. What once was a favorite food may now be disliked and vice versa. Although the physiological mechanism for this is unknown, sensory changes may be exacerbated by strong food odors or spicy foods.	If the sensory change causes discomfort, avoid foods that aggravate it. Do not skip meals. Stay well hydrated.
Food Aversion	Reduced appetite is normal after surgery, and food aversion can happen at different times postoperatively, and it should pass.	Each day you should try to take in a little bit more. You will eventually get to the goals we want for you. Remember you need to still consume 1200-1500 calories per day for proper health and continued weight loss. If you are struggling with food aversion and not eating for a prolonged period, please call the office.
Dumping Syndrome	It may be caused by a high sugar or fat intake after the Roux en Y Gastric Bypass procedure.	Avoid sugars. Avoid fried foods and high-fat foods.
Lactose Intolerance	It can happen to a patient who has had bariatric surgery. Lactose intolerance means that you cannot digest the lactose found in milk and dairy products.	Note when first eating dairy products after surgery if you develop abdominal pains or increased gas. If so, use lactose-free milk such as Lactaid®. Be aware that fermented dairy products such as cheese and yogurt have very little lactose.
Incisional Pain/Swelling	Some slight swelling, numbness, or minor pain around your incisions is not unusual. These symptoms will disappear with time.	If you notice an increase in these symptoms or yellow, foul-smelling drainage or fever, immediately call the office.



When to call the office?

- Redness increased swelling or severe pain from your incisions
- Incisional drainage that has a foul smell or yellow discharge
- Severe abdominal pain or back pain
- Severe nausea and vomiting
- No bowel movement with the use of laxatives with or without nausea and vomiting
- Chills or fever greater than 101 F
- Shortness of breath
- Sudden numbness or weakness in your arms or legs
- Fainting spells, dizziness, or altered mental status
- Severe weakness
- Any other symptom affecting you or your well-being



Vitamin Protocol

Start your vitamins two weeks after getting home from the hospital. Please make sure you are taking a bariatric multivitamin plus iron and calcium. **DO NOT TAKE ANY OTC VITAMINS** (such as Flintstone or Centrum). You are to be on a bariatric multivitamin for one year if you had a sleeve gastrectomy. And for a LIFETIME if you had a gastric bypass, duodenal switch, or revisional patient. We want to make sure you do not experience any nutritional deficiencies after your surgery.

Why is it important to take supplements?

- Consuming mainly protein after surgery and a limited variety of fruits/vegetables decreases nutrient intake from foods.
- A decrease in the overall volume of food/ calorie intake does not allow adequate nutrient intake from food sources alone.
- Removing part of the stomach decreases the gastric acids that are released. It reduces how many nutrients you can absorb from foods.

Do I need a multivitamin before surgery?

- Yes! Taking a multivitamin regularly before surgery can improve health before surgery and decrease the risk for nutrient deficiencies before surgery.
- If you have vitamins at home that are not expired, continue taking them regularly. If you do not have them at home, you may purchase them from us in preparation for your upcoming surgery.
- Continue any prescription vitamins your doctor has prescribed, and make sure you inform your dietitian of any supplements that you are taking before surgery. It may need adjusting after surgery.

What Vitamins do I need to take?

You will need a chewable bariatric specific multivitamin, calcium, and an iron supplement

- For the first month, you will need to use a chewable or liquid vitamin.
- After one month, you can switch to a capsule.

Popular vitamin brands

- Bariatric Advantage, Bariatric Fusion, and Celebrate (we sell these brands in the office!)
- BariActive and Barimelts are other brands you can purchase online
- We do NOT recommend vitamin patches

Where to buy Bariatric vitamins?

We sell all the vitamins and supplements you need in our offices and on our website.



When should I take my vitamins?

- You need to take your calcium and iron supplements at least 2 hours apart
- Take calcium supplements with meals will allow for better absorption
- Calcium doses should be 500-600 mg per dose
- Calcium with vitamin D is better absorbed

What are the daily amounts I need of each vitamin?

Nutrients	Daily Dosage
Vitamin B1	12 mg
Vitamin B12	350 – 500 ug
Folate	400 – 800 mcg
Calcium	1,200 – 1,500 mg*
Vitamin A	5,000 – 10,000 IU**
Vitamin E	15 mg
Vitamin K	90 – 120 ug***
Vitamin D	3,000 IU
Iron	45 – 60 mg
Zinc	8 – 16 mg****
Copper	1 – 2 mg*****
* Duodenal Switch: 1,800 – 2,400 mg ** Duodenal Switch: 10,000 IU *** Duodenal Switch: 300 ug **** Duodenal Switch: 16 – 22 mg ***** Duodenal Switch: 2 mg	

Managing Nausea with Vitamins

- Try taking your vitamins with food.
- It can be challenging immediately post-op as there generally is not enough room (i.e., space in your new smaller stomach) for both food and vitamins. Many patients report feeling full with just taking their chewable vitamins. If that is the case, consider taking them after drinking a liquid protein shake or meal replacement.
- There are also products available that combine the multivitamin supplement with fiber in a liquid consistency that may decrease nausea. Other products combine the multivitamin supplement with fiber and protein, which may further reduce the effect of nausea.
- Consider splitting up your dose.
- Cut your chewable tablet in half and increase the number of supplement sessions further to decrease the risk of nausea during this short-term period.

Shop online at www.beltlinebariatric.com and in our clinics!

Side Effects of NOT Taking Bariatric Vitamins

Not following your physician's recommendations to take the appropriate vitamin and mineral supplements can lead to severe consequences, including death. It is also imperative to follow-up with your physician to have your nutritional laboratory studies completed as recommended. Getting your labs done can help your physician to make adjustments to your supplement plan, decreasing the risk of dietary deficiencies. Below are some of the more common potential nutritional deficiencies and the possible side effects of not achieving proper dietary balance.

Vitamin A. Vitamin A plays a role in vision, immunity, and many other processes. Deficiencies of vitamin A may lead to the inability to adapt to darkness, night blindness, and blindness. Patients suffering from vitamin A deficiency may also experience increased susceptibility to infectious diseases and diarrhea. Past studies have shown that a vitamin A deficiency may worsen iron deficiency anemia. Low levels of zinc may alter vitamin A metabolism.

Vitamin C. Vitamin C cannot be made by humans and must be obtained from the diet or supplements. A deficiency of vitamin C may lead to scurvy resulting in weakness, fatigue, curly hair, and sore arms and legs. Patients may also experience bleeding gums with a vitamin C deficiency.

Vitamin D. A deficiency in vitamin D causes the body not to absorb calcium effectively. Also, it may lead to liver and kidney disorders and softening of the bones. The softening of the bones may increase the risk of bone fractures.

Vitamin E. Vitamin E deficiency is rare, but it does affect the ability to use other fat-soluble vitamins (vitamins A, D, and K). It may also lead to sterility in males and spontaneous abortions in females.

Vitamin K. A deficiency of vitamin K increases the risk of osteoporosis and heart disease. It also causes you to bruise more easily. Also, it lengthens the time it takes for your blood to clot (after a cut, for example, or a more significant internal injury).

Thiamin. A thiamin deficiency affects the heart, digestive system, and nervous system and can result in severe consequences, including death. If this deficiency is not detected and quickly treated, learning and memory can be permanently altered. Coma and death can be the result if treatment is not initiated.

- ❑ The initial stages of thiamin deficiency include indigestion, constipation, malaise, heaviness and weakness of the legs, tender calf muscles, "pins and needles," feeling and numbness in the legs, increased pulse rate, and heart palpitations.
- ❑ Wet beriberi leads to edema, tense calf muscles, a fast pulse, distended neck veins, increased blood pressure, and decreased urine output.
- ❑ Dry beriberi leads to worsening of the early stage symptoms, such as the weakness and numbness of the hands and feet, difficulty walking, and Wernicke-Korsakoff syndrome (WKS). WKS leads to a loss of immediate memory, disorientation, jerky movement of the eyes, and a staggering gait.
 - While this condition is relatively rare among bariatric surgery patients, it is possible after surgery due to eating habits and a potential reduction in nutrient absorption. This risk of WKS is increased if the patient is experiencing frequent vomiting.
- ❑ Ultimately, if not caught and left untreated, a thiamin deficiency can lead to cardiac failure and death.

Keep in mind this nutrient is not stored in large amounts in the body and MUST be replenished daily through either food or supplementation (or a combination of the two).



Riboflavin. A riboflavin deficiency may lead to tearing, burning, or itching of the eyes; soreness and burning of the lips, mouth, or tongue; inflammation or swelling at the corner(s) of the mouth; a purple and swollen tongue; and peripheral neuropathy. Peripheral neuropathy results in damage to the peripheral nerves that often causes weakness, numbness, and pain in the hands and feet.

Niacin. A niacin deficiency may lead to muscular weakness, indigestion, tremors, a sore tongue, confusion, disorientation, and pellagra. Pellagra is characterized by the 4 D's - dermatitis (a condition related to the skin), diarrhea, dementia, and death).

Vitamin B6. A deficiency in vitamin B6 may lead to a type of anemia, peripheral neuropathy (results in damage to the peripheral nerves that often causes weakness, numbness, and pain generally in the hands and feet), convulsions, and irritability.

Folate. A folate deficiency may also lead to a type of anemia. If a deficiency occurs during pregnancy, this may result in neural tube defects of the child.

Vitamin B12. A deficiency in vitamin B12 may lead to fatigue, pale skin, tingling in the hands, and eventually lead to anemia and neurological disorders. Other symptoms of vitamin B12 deficiency include heart palpitations, shortness of breath, lightheadedness, diarrhea, vision loss, memory loss, and depression.

Iron. Iron deficiency may cause anemia (when the body does not have enough red blood cells and cannot carry enough oxygen throughout the body). It results in fatigue, pallor (unhealthy pale appearance), hair loss, and an inability to be physically active to your full potential (i.e., you feel winded doing things that were relatively easy previously).

Calcium. Calcium deficiency may lead to osteoporosis or an increased risk of bone fracture.

Magnesium. A magnesium deficiency may lead to muscle tremors, convulsions, irritability, and tetany (a condition marked by intermittent muscle spasms). This deficiency may also lead to hyperreflexia which involves overactive or overresponsive reflexes. Another possibility is hyporeflexia which involves below normal or absent reflexes.

Zinc. A zinc deficiency may lead to brittle nails, hair loss, and skin changes. A zinc deficiency also makes it take longer for wounds to heal and may lead to hypogonadism (when the sex glands produce too little or no sex hormones). Mild anemia may also occur due to low levels of zinc. Patients may experience a change in taste acuity (tastes are not strong) with a zinc deficiency. Another possible symptom related to zinc deficiency is diarrhea.

Selenium. A selenium deficiency can lead to muscle pain and tenderness, and more importantly, cardiomyopathy (a condition that causes heart muscle weakness that can lead to an increased risk of death). Also, a selenium deficiency may lead to the pancreas not functioning at 100%, meaning that it is not as effective at secreting enzymes that help in digestion and hormones that help regulate the metabolism of sugars.

Copper. A copper deficiency may lead to an unhealthy appearance, edema, an increased risk of osteoporosis, testicular failure, changes in eye health, and cardiomyopathy (a condition that causes heart muscle weakness that can lead to an increased risk of death). A copper deficiency may also reduce your immune function.

The only way to find out if you have some of the above deficiencies is regular nutritional laboratory testing. Some symptoms from nutritional deficiencies will look like other side effects associated with bariatric surgery, and a physical exam may not be enough to diagnose some of these deficiencies. Keep in mind, if you are not seeing your bariatric surgeon for post-operative care, it is essential to see a physician that understands your post-operative needs. The standard yearly physical labs that your family doctor (or primary care physician) may complete DO NOT cover the nutritional laboratory tests necessary following bariatric surgery.

Pre-Op Bariatric Surgery Diet

Notes:

- Start two weeks before surgery
- **Nutrition Goals:**
 - **Calories: 1000-1200 per day**
 - **Protein: 80-100 gm per day**
 - **Fiber: 25 gm per day**
 - **Carbs: < 50 gm per day**
 - **Water: 64+ oz per day**

FOOD LIST

- During the **12 days**, you may substitute a protein shake for two meals each day
- For the other meal, consume 3-4 ounces lean protein (seafood, poultry, egg whites, low-fat dairy), 2-3 servings of non-starchy vegetables, ½ cup starch, and 1-2 tbsp oil.
- No alcohol
- No sweets/sugars,
- No fruit or fruit juice of starchy carbohydrates.
- On **week 2** of the pre-op diet, substitute a protein shake for two meals each day
- For the other meal, consume lean protein (seafood, poultry, egg whites, low-fat dairy) and salad.
- **Two days** before surgery, switch to a clear and full liquid diet, 3 protein shakes per day plus clear liquid and some other full liquids such as light yogurt, sugar-free pudding.
- You may have clear liquids in between the shakes throughout the day on both week 1 and 2

2 Week Pre-Op Diet

- **Following a High Protein – Low Calorie diet in this phase will allow the body to use stored energy, such as fat stored in the liver. The goal of this diet is to help shrink the liver, which will aid in lowering surgical risks.**

Medication Instructions

Pre-op medications (Before surgery)

- Stop taking all vitamins and mineral supplements because some may affect your blood clotting time and cause an increased risk of bleeding during surgery.
- Stop taking all aspirin, aspirin products, and NSAIDs such as Advil®, Motrin®, and Aleve®. These too can increase your bleeding risk during surgery and also irritate the stomach lining.
- If you are taking Coumadin® or Plavix®, please notify us and your PCP to make special arrangements or how to manage these medications around the time of surgery.
- If you have diabetes, please discuss the pre-op and post-op diet plans with your Primary Care Physician or Endocrinologist so that they can assess if any of your medications require dosage changes. Should you experience low blood sugars while on the pre-op diet, you may drink orange juice to restore your blood glucose levels. However, if this occurs after surgery, please call the dietitian to help you choose the right food and notify your PCP (primary care physician), as they may need to lower your medication dosage.
- Ensure that you have your pre-op appointment scheduled with us at the office and with the hospital (the hospital should call you to schedule this) – if you have not heard from them up to the time of your pre-op appointment with us, please let us know.



Exercise Instructions

Exercise is critical after bariatric surgery and must become part of your routine! Do not rely only on bariatric surgery alone to achieve your weight loss.

- Establish an exercise routine BEFORE surgery! It will help in the recovery phase and allow you to get a head start on a healthier life.
- After surgery, start light cardio and physical activity AS SOON as you can tolerate it. We want you up walking the day of surgery and continuing to walk from the time you get home.

Establish your fitness program by following these steps:

1. Choose an exercise from each of the following categories:
 - **Cardiovascular Exercise:** Walking, Treadmill, Elliptical, Biking, Dancing.
 - **Strength exercises:** Resistance bands, Yoga
 - **Flexibility:** Stretching before and after exercise, Yoga, Chair stretches.
2. **Schedule timing of exercise:** If your fitness level is low, then start with 5–10 minutes 3 times per day and increase it as tolerated. The goal is 45 minutes daily.
3. **Set up the frequency of exercise:** Number of exercise sessions per week.
The goal is 5-6 times per week.
Start slow, with three times per week, and increase as your fitness improves.
4. **Increase the intensity of the exercise as tolerated:**

For instance, start walking on the treadmill at 3.0 mph and increase the speed to 3.3 mph, then to 3.5 mph as your fitness level improves.

- Implement your fitness plan as soon as you can. **Start now!**
- Be consistent and monitor your progress by keeping an exercise log.
- Never be ashamed. It is the path to a healthier and happier YOU!



Day of Surgery

- Please arrive at the hospital early.
- Proceed to the Admissions Desk. Remember to bring your insurance card and a picture ID. It is essential to leave all your valuables at home. A list of all your medications with the name, dose, time that you take them, and the last dose you took would benefit the hospital staff.
- When your name is called or the pager rings, you will be escorted into the pre-operative area. Please give the pager to your family member, as that will be how the hospital personnel will be able to communicate with them about your progress. (This device does not work outside the hospital.)
- Once in the pre-operative area, a nurse will greet you. She will ask you to change into a gown and place your personal belongings in a bag. The hospital does provide storage for your items; however, you may wish to give them to your family member for safekeeping instead.
- A nursing assessment including blood pressure, temperature and heart rate will be done.
- An IV will be inserted for IV fluids at that time, and you will be given pre-operative antibiotics to decrease infection risk and a blood thinner to reduce the risk of blood clots.
- The physician, anesthesiologist, and the operating room nurse will also see you while in pre-op - This is an excellent time to ask any last-minute questions that you may have.
- When this is complete, your family members will be able to stay with you until your surgery
- You will wake up in a hospital bed with a blood pressure cuff on your arm, oxygen in your nose, and have a heart monitor on so that we can measure your heart rate.
- You may or may not have a bladder catheter and drains.
- You will communicate with your nurse any discomfort you are experiencing, including pain and nausea – the nurse will administer your medications according to physician orders.
- Your surgeon will meet and speak with your family about your surgery and your progress.
- Once your room is assigned, your family members will be paged and informed of your room number. They will be able to see you once you reach your room.

Note that the first night is always the worst.

You may experience nausea, dry heaving, abdominal pain due to incisional or gas pains, abdominal cramping, and headaches. These are all normal post-surgery, and you will have medications available to treat them. They should begin to improve throughout the night and the following day.

- It is imperative to walk the evening of surgery and the morning after.
- You will also be provided an incentive spirometer, and the nurse will demonstrate how to use it - PLEASE remember to use it ten times per hour while awake to improve your breathing.

On the first day after surgery, you may undergo a **Gastrografin Swallow Study** at the discretion of your surgeon. If all else is well, you should begin to-

- Drink 1 ounce (30 ccs) of room temperature water every hour
- Sip slowly, DO NOT GULP
- No ice chips
- Do not use a straw
- Avoid extreme temperatures of the water (no hot or ice-water)

If you tolerate water with no nausea or vomiting – BEGIN Phase I of the Bariatric Diet Plan

Remember to walk around the hospital floor 2–3 times a day

Post-op medications (After surgery)

- Stop taking all vitamins and mineral supplements because some may affect your blood clotting time and cause an increased risk of bleeding during surgery.
- Stop taking all aspirin, aspirin products, and NSAIDs such as Advil®, Motrin®, and Aleve®. These too can increase your bleeding risk during surgery and also irritate the stomach lining.
- If you are taking Coumadin® or Plavix®, please notify us and your PCP to make special arrangements or how to manage these medications around the time of surgery.
- If you have diabetes, please discuss the pre-op and post-op diet plans with your Primary Care Physician or Endocrinologist so that they can assess if any of your medications require dosage changes. Should you experience low blood sugars while on the pre-op diet, you may drink orange juice to restore your blood glucose levels. However, if this occurs after surgery, please call the dietitian to help you choose the right food and notify your PCP (primary care physician), as they may need to lower your medication dosage.



Example of Exercise Regimen –

Post Op, Week 1 and 2

Exercise / Week 1	Time	Frequency	Intensity	Strength Exercise
Cardio exercises: Walking, stair climbing	15 minutes	3 times per week with 1 day of rest in between Week 2 increase to 4 times per week	Increase the time by 5 minutes every day until you work continuously for 45 minutes a session	Alternate cardio with strength exercises as able and tolerated
Exercise / Week 3	Time	Frequency	Intensity	Strength Exercise
Cardio exercises: Walking, stair climbing	15 -30 minutes	4 times per week	Increase the time by 5 minutes every day until you work continuously for 45 minutes a session	May begin weight training with the doctor's approval. Add 2 days of weight training, with light weights

Week 4 Onwards

Exercise	Time	Frequency	Intensity	Strength Exercise
Cardio exercises: Walking, stair climbing, or start another cardio exercise with the surgeon's approval	30 - 45 minutes	5-6 times per week	If starting at 30 minutes, increase by 5 minutes every other session until you are at 45 minutes a session	Add 3 days of weight training, alternating upper and lower body. 15-30 minutes as tolerated.

Post-Op Bariatric Surgery Diet Day 1 and 2

Notes:

- **Limit Caffeine to 1 serving per day!**
- **No Carbonation!**
- **No Alcohol!**
- **No Straws!**
- **Sip-sip-sip!**
 - Sip fluids slowly towards the goal of 32-64 oz daily
- **Protein Goals:**
 - 60-80 grams per day

Foods List!

- Water (You may add crystal light and other sugar free-calorie free flavorings)
- Powerade zero
- Low-fat, low-sodium broths
- Vitamin water zero
- Propel Zero
- Sugar-free popsicle
- Sugar-free Jello
- Clear protein drinks, i.e., premier protein clear, Isopure
- Protein powders mixed in the above liquids are OK
- Decaf tea or coffee

Stop drinking if you feel full, pain or discomfort.

Clear Liquids (Day 1 and 2 Post-Op)

- **Begin right after surgery.**
- Will be on clear liquid diet in the hospital.
- Stay on **clear liquids for no longer than 48 hours** but you may advance to full liquids at 24 hours after surgery.
- **Begin bariatric multivitamin regimen once you start full liquids.**
- **Try to drink 1 - 4 oz every hour.**

Week 1 and 2

Notes:

- **Fluid Goals: At least 64oz each day**
 - Consume half clear and half full liquids
 - Limit fluids to 4oz or ½ cup at one time
- **Protein Goals: 60-80 grams per day**
 - Aim for 10-15 grams every 2-4 hours
 - Do not exceed more than 30 grams at one time

- **Exercise goal: walk 5 minutes every 1-2 hours will help prevent blood clots.**

Foods List!

- Continue with Clear Liquids
- Protein shakes
- Protein powder
- Skim or 1% milk
- Dairy-free kinds of milk (unsweetened)
- Greek yogurt
- Sugar-free pudding
- Sugar-free hot chocolate

You still need about 64 oz of fluid each day

Try to consume half of your fluid clears and the other half full.

You need **60-80 grams of protein per day.**

Full liquids (Week 1 and 2)

Helpful tips for nausea:

- Avoid overeating.

- Drink plenty of fluids (nausea is often triggered due to dehydration)

- Avoid carbonated beverages of any kind!

- Avoid eating and drinking at the same time!

- Avoid foods that are high in sugar as they may cause dumping syndrome.

- You may be sensitive to lactose (gas/bloating/nausea/upset stomach)

Week 3 to 5

Notes:

- Start your vitamins now!
- Fluid Goal: 64oz per day
 - Do NOT drink liquids with meals.
- Protein Goal: 60-80 grams per day
- As you start trying new foods, try them SLOWLY and make sure to CHEW WELL
- NOTHING RAW YET, NO STARCH

Foods List!

Pureed foods Ideas:

- Protein shakes
- Greek yogurt – 4 oz
- Soft scrambled eggs or egg beaters
- Soft and smooth tuna salad, egg salad, chicken salad
 - Add extra low-fat mayonnaise or plain Greek yogurt to make it smooth
- Any pureed vegetables- they should be soft and well-cooked and should be non-starchy
- Any soft fruit is OK
 - It can be fresh or canned. If canned, make sure it is in water
 - Unsweetened applesauce
 - Ripe banana
- Pureed soups that are low fat, low sodium
- Unsweetened baby foods
- You can continue to have anything in the clear or full liquid weeks
- Avoid stringy vegetables like celery and asparagus

Soft Solid Foods Ideas:

- Tofu- 2 oz
- Soft or ground meats- 2 oz
 - Chicken, fish, turkey, thin deli meats, lean beef
- Eggs: 2 boiled eggs, ½ cup egg substitute, 4 egg whites
- Creamy peanut or almond butter- 2 teaspoons
- Low fat cottage cheese- ½ cup
- Fat-free ricotta cheese- ½ cup
- Low-fat string cheese- 1 stick
- Fat-free cheese- ¼ cup or 1 oz
- Vegetables: soft or overcooked non-starchy vegetables
- Fruit without seeds, peels or thick membranes
- Soup that is pureed or with soft vegetables

Soft & Moist Proteins (Week 3 & 5)

Stay on this phase for 2 weeks!

Begin with the more pureed foods and as you tolerate these you may progress to soft pieces.

Everybody will tolerate foods differently during this time.

Take your time with your diet progression.

If something does not settle well with your stomach that is your body telling you that it needs more time and to progress more slowly, so **go back** to smoother and softer texture

Do **NOT** have starchy vegetables—potatoes, corn, peas

Do **NOT** have grits, mashed potatoes, oatmeal

Eat every 3-4 hours, if not sooner

Eat ½ cup to ¾ cup at a time

Week 6 to FOREVER!

Notes:

- Continue your vitamins now!
- Fluid Goal: 64oz per day
- Protein Goals: 4-5 3oz servings per day
- It is your forever diet.
- Do not expect to be able to eat this much, specifically at week 6 --- it might be too much.

Foods List!

Meat/Protein, 2-3oz serving size:

- Poultry
 - Skinless Chicken
 - Skinless Turkey
- Fish/Seafood
 - Clam
 - Cod
 - Haddock
 - Oysters
 - Salmon
 - Shellfish (Crab, Scallops, Shrimp)
 - Snapper
 - Tilapia
 - Tuna, in water
- Red Meat
 - Beef
 - Bacon
 - Flank Steak
 - Lean Ham
 - Pork Tenderloin
 - Sirloin
 - Veal
- Other
 - Egg substitutes
 - Egg Whites (2 egg whites per serving)
 - Veggie Burger (1/2 patty per serving)

Dairy, 2-3 servings per day

- Skim/Fat-free milk (1 cup per serving)
- Fat-free, low sugar yogurts (6oz)
- Fat-free/low-fat cheese (1 oz)
- Fat-free/low-fat cottage cheese (1/4 cup)
- Fat-free/low-fat ricotta cheese (1/4 cup)
- Fat-free evaporated milk (1/2 cup)

Quick Reminders!

Take your time with eating and drinking.

Take your vitamins daily.

Eat with 1-2 hours of waking and every 3-4 hours.

DO NOT SKIP MEALS!

Eat your protein first, then your vegetables

Do not drink 30 minutes before a meal, with a meal or 30 minutes after a meal.

Week 6 to FOREVER!

Continued

Notes:

- Continue your vitamins now!
- Fluid Goal: 64oz per day
- Protein Goals: 4-5 3oz servings per day
- This is your forever diet.
- Do not expect to eat this much, specifically at week 6 --- it might be too much.

Foods List!

Vegetables, 2-3 servings per day:

- Any NON-STARCHY vegetables
 - Cooked vegetables (1/2 cup)
 - Raw vegetables (1/2 cup)
 - Leafy greens (1 cup)
 - *corn, peas, potatoes* are starchy

Fruit, 1-2 servings per day

- Apple (1 small)
- Orange (1 small)
- Peach (1 small)
- Pear (1 small)
- Plum (1 small)
- Banana (½ medium)
- Berries (3/4 cup)
- Applesauce, unsweetened (1/2 cup)
- Grapes (17)
- Melon (1 cup)

Starch/Grains

- Brown rice, cooked (1/3 cup)
- Beans, cooked (1/3 cup)
- Oatmeal or cream of wheat, cooked (1/2 cup)
- Quinoa, cooked (1/2 cup)
- Whole wheat pasta, cooked (1/2 cup)
- Whole wheat bread (1 slice)
- Rice cakes (2)
- Olive oil (1 teaspoon)
- Trans-fat free margarine (1 teaspoon)
- Reduced-fat salad dressing (2 tablespoons)
- Avocado (1/8)

Quick Reminders!

Take your time with eating and drinking.

Take your vitamins daily.

Eat with 1-2 hours of waking and every 3-4 hours.

DO NOT SKIP MEALS!

Eat your protein first, then your vegetables

Do not drink 30 minutes before a meal, with a meal or 30 minutes after a meal.



Diet Progression Summary

Diet Stage	How Long to Follow	Notes
Pre-surgery diet	2 weeks BEFORE Surgery	2 protein shakes and 1 healthy meal. Use 2-3 healthy snacks if you need them
Stage 1- Clear liquids	Day 1 and Day 2	Get your fluids up!
Stage 2- Full liquids	Day 3- Day 14	Focus on getting 60-80 grams of protein
Stage 3- Pureed foods/Soft solids	Day 15-Day 36	Start trying new foods. Progress slowly, chew well. <u>Start your vitamins!</u>
Stage 4- Bariatric Regular Diet	Day 37- forever	Eat every 3-4 hours, put your protein first



Pre-Op and Post-Op Meal Ideas

Pre-Op Diet Examples:

This diet is for 2 weeks before surgery. Select 1 meal option from the following, for one meal for each day. 2-3 snacks from the snack list each day. Supplement your other 2 meals with a Protein Shake.

Breakfast	
Example 1	2 scrambled eggs, 1 slice of cheese, and 1-2 cups of cooked veggies (spinach, peppers, onions), ½ cup oatmeal
Example 2	2 links of turkey sausage, 1-2 cups cooked veggies, 1 piece of whole-grain bread
Lunch	
Example 1	1-2 cups salad mix, topped with ½ cup mixed veggies (carrots, broccoli, mushroom, peppers, onion, tomato), 3-4 ounces grilled chicken
Example 2	½ sandwich of 1 slice of whole wheat bread, 3-4 ounces of deli turkey, topped with vegetables (lettuce, tomato, onion) and ½ - 1 cup salad mix on the side
Dinner	
Example 1	½ cup brown rice, 3-4 ounces salmon, 1-2 cups cooked zucchini/squash
Example 2	½ cup whole wheat pasta, 3-4 (about ½ cup) cooked ground turkey, ½ cup tomato sauce with ½-1 cup mixed veggies (broccoli, mushrooms, onions)
Snacks	
	Choose 1 serving of fruit. 1 small apple, 1 banana, 1 cup of grapes
	Choose 1 serving of dairy. 1 cheese-stick, 1 cup yogurt, 1 cup cottage cheese
	Choose 1 serving non-starchy vegetable. 1 cup raw/cooked broccoli, 1 cup raw carrots, 1 cup raw red or green pepper



Post-Op Diet Examples:

The first two weeks will consist of Clear Liquids and Full Liquids. The following are examples of meal options for the Pureed/Soft Solids stage of your diet. These are just examples to help you with food and meal ideas. The most important thing is consuming adequate protein and fluids. These Day Meal Plan examples include 60-80 grams of protein.

Pureed example:

- 1 protein shake (30g)
- ½ ripe banana
- 2 scrambled eggs (12 g)
- Pureed broccoli
- ½ cup Greek yogurt (10 g)
- ½ cup unsweetened applesauce
- ½ cup cottage cheese (14 g)

Pureed example:

- 1 cup regular yogurt (14 g)
- ½ cup berry puree
- 1 cup canned tuna with 1 tbsp mayonnaise (25 g)
- Pureed tomato soup
- 1 cup milk (8 g)
- ½ cup pureed carrots
- ½ cup ground turkey (moist) (17 g)

Soft solid example:

- ½ cup cottage cheese (14 g)
- ½ cup canned peaches in water
- Protein shake (30 g)
- ½ cup vegetable soup (soft/overcooked vegetables)
- 2 ounces ground chicken (12 g)
- ½ cup soft or overcooked zucchini/squash
- 1 stick low-fat string cheese (7 g)
- ½ cup soft or overcooked broccoli
- ½ cup canned tuna with 1 tbsp mayonnaise (12 g)
- ½ cup vegetable soup (soft/overcooked vegetables)

Soft solid example:

- ½ cup Greek yogurt (10 g)
- 2 boiled eggs (12 g)
- ½ cup soft or overcooked spinach
- ½ cup canned chicken with 1 tbsp mayonnaise (25 g)
- 1 cup milk (8 g)
- 2 ounces thin-sliced turkey (9 g)
- ½ cup soft or overcooked carrots
- 2 tbsp creamy peanut butter (8 g)



Protein Shakes

Protein powder and pre-made shakes should contain:

- 20 grams of protein per 8 oz servings
- 8 grams of sugar or less
- 3 grams of fat or less
- Under 200 calories

Examples:

- **Unjury** – Comes in powder or pre-made form. Flavors include chicken broth, vanilla, chocolate, strawberry, unflavored. Can be found at Unjury.com
- **Premier Protein** – Comes in pre-made form. Found at most grocery stores and specialty stores.
- **Ensure Max**—Comes in pre-made form. Chocolate. Found at most grocery stores.
- **Boost Max**—Comes in pre-made form. Chocolate and vanilla. Found at most grocery stores
- **Pure Protein** – Comes in powder and pre-made form. Strawberry, Vanilla, and Chocolate. You can find it at most grocery stores or pureprotein.com
- **Slim Fast Advanced Nutrition** – Comes in pre-made and powder. Vanilla, chocolate, and strawberry. Found at most grocery stores.
- **IsoPure**— Comes in powder form and clear liquid drink form. 11 flavors. You can find it at most grocery stores and vitamin shops or on their website: theisopurecompany.com.
- **EAS AdvantEdge Carb Control** – Comes in powder and pre-made form. Strawberry, vanilla, and Chocolate flavors. You can find it at most grocery stores.
- **GNC Pro Performance 100% Whey Protein** – Comes in powder form. Strawberry, vanilla, and Chocolate flavors. You can find it at GNC stores.
- **Muscle Milk Genuine or 100 Calorie or Organic**- Comes in pre-made form. Found at most grocery stores and specialty stores.
- **Orgain**- Vegetarian or vegan option. It comes in pre-made or powder form, and you can find it at grocery stores, specialty stores, and online.
- **Core Power by Fairlife**- Lactose-free. Either Fairlife Nutrition Plan High Protein or Fairlife Core Power. Found at most grocery stores and online.

Look for whey protein, soy protein, pea protein, rice protein, or hemp protein

When mixing powders:

Mix with either water or milk (skim, 1%, unsweetened almond, unsweetened soy).



Weight Chart

Name:					
Height:			Weight before Surgery:		
BMI:			Weight Goal:		
Nutrition Consultation					
Date:			Time:		
Pre-op Visits:					
Post-op Visit, two weeks			Date:		Time:
Post-op Visit, 2-3 Months			Date:		Time:
Post-Op Visit, 6 Months			Date:		Time:
Post-Op Visit, 1 Year			Date:		Time:
Track Your Weight					
<i>Weigh yourself at least once each week and record it here</i>					
	Date	Weight		Date	Weight
Week 1 Post-Op					
Week 2					
Week 3					
Month 1					
Week 5					
Week 6					
Week 7					
Month 2					
Week 9					
Week 10					
Week 11					
Month 3					
Week 13					
Week 14					
Week 15					
Month 4					
Week 17					
Week 18					
Week 19					
Month 5					
Week 21					
Week 22					
Week 23					
Month 6					
Week 25					
Week 26					
Week 27					
Month 7					
Maintaining your weight loss is just as important!					

- Always eat your protein first. Everything else after.



- When you feel full, stop eating! DO NOT over-eat.
- Always follow the "30-Minute Rule" to fluid intake: Stop drinking 30 minutes before you eat and wait 30 minutes after you have eaten to resume fluid intake. Do not drink with meals.
- Consume at least 60–80 grams of protein per day.
- Consume at least 64 ounces (8 cups) of non-carbonated, sugar-free, caffeine-free fluid per day. Do not wait until you feel thirsty before you drink.
- Take your vitamin every day unless otherwise instructed by the doctor or dietitian.
- Keep your scheduled follow-up appointments.
- Avoid sugar! Have no more than 5 grams of sugar per serving.
- Avoid caffeine. Although some patients may tolerate caffeine after three months, we recommended that you either decrease your caffeine intake or eliminate it.
- Avoid alcohol for at least one year following your surgery.
- Do not skip meals. Have three meals per day: breakfast, lunch, and dinner.
- Sip fluids slowly throughout the day.
 - Do not gulp.
 - Do not use a straw.
 - Sip, sip, sip all day long.
- Take small bites of food and chew properly (20 times) before swallowing. Food should be "mushy" before you swallow.
- Be physically active every day. Build up your fitness and exercise regimen with a goal of 45 mins daily, 5-6 times per week.
- Participate in support group meetings because this will help keep you on track.

***Remember, Bariatric Surgery is not the cure for obesity.
It is a tool that can assist you with weight loss and weight management***