

Go Light S Bariatrics

NUTRITIONAL GUIDELINES AFTER BARIATRIC SURGERY

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Introduction

To succeed in the weight loss process and maintain the weight you are comfortable with, you will have to **change your nutritional lifestyle permanently**. The goal of bariatric surgery is to help you change your eating habits.

What is your ideal weight? It is the weight you are comfortable in and the weight you can sustain. There isn't one formula that can be applied equally to all patients, as our weight depends on many factors, such as age, sex, body shape, muscle weight, bone density, and our personal preferences. Learn more at <https://golightbariatrics.com/ideal-weight-after-bariatric-surgery/>

Surgery itself is only a part of the treatment. **Gastric Sleeve or Gastric Bypass, or any other bariatric surgery do not constitute a cure for morbid obesity; they are great tools that we need to teach you how to apply.** As with any chronic disease, obesity cannot be cured, but can be controlled. The most important part of treatment is your adherence to a healthy diet. This is what determines your ability to keep your weight under control – following a diet after the surgery as well as for the rest of your life.

This diet is different from any other diet that you might have followed in the past. It will progress through a series of stages; you will be eating much smaller portions compared to what you are probably used to, and you will have to eat and drink regularly according to the schedule. Nevertheless, you will have to learn to listen to your body as every person recovers slightly differently and new foods are tolerated at everyone's individual pace. If you overeat, it can cause stomach ache and/or vomiting. After surgery most of the patients get full by eating very small portions. Eventually you will learn when to stop to get full and not overdo it.

A permanent change of eating habits is necessary to ensure both adequate nourishment and successful weight loss in the long run. The surgery will help you make the changes. If your body does not get adequate nutrition, it becomes vulnerable to fatigue, depression, infections and other diseases that can affect your organism, compromise your health, and even put your life in danger.

It is important not to be obsessed with the calorie or nutritional value since it is not a regular diet. Food tracking apps, such as Baritastic or MyFitnessPal, can become very valuable tools at the beginning of your journey, while you are still learning and developing new eating habits as well as exercise routine.

The key is to get well-nourished through a well-balanced diet. **The surgery is going to restrict the amount of food one can eat, but not the choices you make.**

Remember that you have access to our bariatric nutritionists, therapist, and your surgeon. You can request a consultation with each of them via email through your patient coordinator as many times as needed. Utilize our Facebook support group to help you stay motivated; don't hesitate to share your progress with others, celebrate every small victory. And finally, do not compare yourself to other patients and do not expect overnight results. Live your life, keep your mind busy, and trust the process!

What to expect

Common symptoms after weight loss surgery

• Nausea

It is perfectly normal to experience nausea during the first days after surgery. It may continue for weeks or even months on and off. Pay attention to the precise timing of symptoms and try to identify the reason (they are various), thus preventing discomfort in the future.

The most common causes of nausea are:

1. Dehydration (especially during early recovery stages when the stomach swelling doesn't allow you to drink enough fluids).
2. Acid reflux (stomach acid irritates it causing pain, heartburn, and nausea, it is extremely important not to skip antacids and **take PPI medication every 12 hours for at least 2 months post-op**).
3. Taking vitamins on an empty stomach (do not take more than one pill at a time to avoid nausea, take vitamins after having a meal such as yogurt, protein shake, soup, etc.).
4. Artificial sweeteners.
5. Drinking or eating too much too quickly (it will take time to learn your new stomach preferences, no more gulping water, no large bites, chew until food becomes pureed in your mouth).
6. Progressing through the post-op diet stages too fast (it is a matter of tolerance: some can move on to the next food stage a few days sooner than others; we highly recommend to never skip or rush through the post-op diet stages, this may cause not only nausea but serious complications).

• Vomiting

Vomiting is to be expected after weight loss surgery as the stomach is reduced in size, it is traumatized, and it will take time to learn what it likes and dislikes and how many ounces of liquids or food it can take at one time. The most common reasons for vomiting are eating or drinking too much too fast; nausea (due to severe dehydration), stomach irritation by medication or certain foods. Make sure to sip fluids very slowly (especially during the first days post-op) and chew very thoroughly once you start the solid food stage. If you are experiencing discomfort while progressing from one stage to another, continue with the previous stage without progressing for 3-5 days until you feel more confident to move on. Certain foods may not be tolerated well for months post-op, everyone recovers differently.

How to prevent vomiting? When you start feeling a little pressure in your chest, you should stop eating. Burping, hiccupping, sneezing, yawning, or runny nose are signs of fullness. Listen to your body when you experience these symptoms; one more bite and you may have to vomit.

When to be alarmed? If vomiting continues for more than one day; if you are vomiting everything you consume, including water and your own saliva; if vomiting is accompanied by other symptoms such as strong abdominal pain, fever, tachycardia (fast heartbeat), dizziness – please reach out to your patient coordinator or our medical team, or go to the nearest ER.

Not able to vomit? It is very common after weight loss surgery to want to vomit but not being able to (for example, after eating something that doesn't feel right, perhaps your stomach was not ready for a certain type of food yet).

Learn about the reasons why you may no longer be able to vomit at “Can't Vomit After Weight Loss Surgery?” <https://golightbariatrics.com/cant-vomit-after-weight-loss-surgery/>

• Gastro Esophageal Reflux (acid reflux)

Cause. Reflux is a partial return of stomach content/gastric acid into the esophagus. This symptom is quite common among gastric sleeve patients in particular. Normally the lower esophageal sphincter is strong enough to prevent stomach content from traveling up the esophagus. But as the pressure inside of the stomach chamber increases significantly after sleeve gastrectomy, the sphincter no longer copes with its role and some stomach content gets pushed into the esophagus. Acid reflux may be temporary and slowly resolve as you lose weight and the pressure on your stomach decreases, or it may become permanent.

Treatment. At early recovery stages reflux appears when you eat or drink too rapidly. To prevent gastro esophageal reflux, you must drink and eat staying straight, avoid lying down immediately after eating, and wait for at least 30 – 60 minutes after your last intake. At any recovery stage avoid foods and drinks that are acidic (coffee, citrus, ketchup and tomato soup/juice, spicy, greasy, deep-fried foods.) Reflux is rare among RNY Gastric Bypass patients, but it can also appear. All patients must take antacid medications daily (Nexium or Omeprazole 20 mg every 12 hours) during the first 2 months post-op. After that it is safe to try slowly reducing the dosage and wean off the medication provided acid reflux does not persist. Otherwise, you may have to continue taking antacid medication daily or as needed for as long as symptoms persist. In severe cases, when reflux becomes unbearable and uncontrolled by PPI medications, revision from gastric sleeve to RNY bypass is the only solution.

• Dumping Syndrome

Cause. Dumping syndrome is typical for gastric bypass patients although it may develop after gastric sleeve as well. High intake of carbohydrates and simple sugars is the reason for this phenomenon that causes several unpleasant side effects. The intestine gets a load of carbohydrates that causes a cascade of hormonal changes, and this, in turn, causes diarrhea, abdominal pain, nausea, dizziness, tachycardia, fainting, sweating, and fatigue. Basically, you feel like you are going to pass out. These symptoms appear within the first 30 minutes after a high sugar intake. A small percentage of patients develop this syndrome later, up to 3 hours after ingestion. These patients tend to develop hypoglycemia, sweating, tachycardia, and fatigue.

Prevent dumping. Avoid high intake of sugars or foods high in simple carbs (white bread, pasta, tortillas, rice) at one time. Dumping is a desirable effect of malabsorptive surgeries, as it motivates patients to avoid unhealthy foods to avoid unpleasant symptoms.

• Dehydration

Besides the substantial restriction due to the decreased stomach capacity, there is an inflammatory reaction. Our body naturally reacts to any type of trauma, such as surgery, with swelling and other unpleasant symptoms. Stomach swelling reduces its volume even more. The inflammatory reaction slowly subsides during 1 – 2 months after surgery, and there is a high risk of dehydration. Patients who live in hot climates are at increased risk of getting dehydrated, and their water needs are even greater.

Dehydration symptoms include nausea, fatigue, thick saliva, low-grade fever, dizziness, fast heartbeat, and lack of energy. Consequently, patients may develop constipation, UTI's, and kidney stones.

Prevent dehydration. Put in an effort to drink lots of liquids (during the first two weeks post-op, hydration is your goal #1, not protein intake, but hydration). Regular water may not taste well. Any clear sugar-free liquids that you can tolerate will work (especially electrolytes), or fruit-infused water (slices of fruit, cucumber, and mint leaves will add some taste to it and make it more palatable). Drink small portions but frequently: carry a bottle with you wherever you go, keep track of how many ounces you drink per day, consider setting up cell phone reminders or use water bottles with volume marks to stay motivated to drink more and reach your daily goal. Consider IV hydration if you are drinking less than 42 oz of clear liquids per day during the first 2 weeks post-op. Only clear liquids count toward your daily water intake.

• Constipation

Cause. Drastic changes in your diet will affect your digestive habits; absence of bowel movements for 4-5 days post-op is perfectly normal as you are on a liquid diet and very little solid matter forms along the intestines. Dehydration contributes to further constipation, as well as a diet rich in protein and low in fiber.

Treatment. If you do not have any bowel movement for more than 5 days, take any laxative or stool softener that you like. Some may need to try several brands before they find one that works best. For example, you could try OTC medications like MiraLAX, Colace 2 in 1, Dulcolax, Senokot, Milk of Magnesia. Additionally, it is recommended to drink Smooth Move tea daily. Such laxatives can be used on a regular basis until your diet progresses to the stage where you can tolerate raw fruit and veggies with much more fiber that will produce regular bowel movements. Learn about more ways to fight constipation at [Constipation and Hemorrhoids After Bariatric Surgery](https://golightbariatrics.com/constipation-hemorrhoids-after-bariatric-surgery/).
<https://golightbariatrics.com/constipation-hemorrhoids-after-bariatric-surgery/>

• Diarrhea

Cause. You received broad-spectrum antibiotics during hospitalization and in the first week post-op (to prevent possible infections). While antibiotics kill harmful bacteria, they also kill useful bacteria that inhabit our intestinal tract. This is the most common cause of diarrhea at early recovery stages

and in worse cases (very rarely) it can lead to such serious conditions as C. Difficile infection. Taking probiotics prior and after surgery reduces the risk of diarrhea in the postoperative period.

Treatment. If you have developed diarrhea, the simplest cure is taking Loperamide 2 mg pills once every 12 hours for 2-3 days (any other OTC anti-diarrhea medication will be acceptable). Often only one or two pills is sufficient. As soon as the symptoms stop, discontinue taking medication.

Be sure to increase fluid intake if you have diarrhea, as it can dehydrate you quickly.

Other causes of diarrhea may include your body/stomach adapting to the new diet. Perhaps it wasn't ready for a certain type of food at this recovery stage. Lactose intolerance is quite common after WLS and resolves in a few months, meanwhile it can cause diarrhea, flatulence, nausea, and abdominal pain; artificial sweeteners are yet another cause of diarrhea. Also, in patients who had gallbladder removal diarrhea (or more frequent and more loose bowel movements) may be temporary or permanent while bile fluids are flowing directly into the small intestine, foods high in fat will increase the symptoms. In bypass patients, diarrhea can be part of the dumping syndrome when too much food, especially foods high in simple carbs, is consumed at one time.

• Fatigue

Cause. It is one of the most common and unavoidable symptoms after any bariatric procedure. Remember that your caloric intake has decreased significantly, therefore your body lacks energy and you will feel tired and sleepy early in the day. Dehydration, which is very common at early recovery stages and contributes to constant fatigue. This is the most difficult part of recovery; you must power through it and be patient. All patients report regaining their energy levels back to normal at 8 – 12 weeks post-op. The reward for all your suffering is rapid weight loss. This is a so-called honeymoon period after weight loss surgery when you will be losing weight relatively quickly. It will not last for a long time, usually, around 6 months post-op, weight loss slows down drastically.

Decrease fatigue. You cannot avoid it, but you can control it by taking vitamins (resume vitamins at 1 – 2 weeks post-op), staying hydrated (use IV therapy if needed), taking probiotics, sleeping well (at least 8 hours), do not resume any serious workouts until 2 months post-op, eat a well-balanced diet, meet your daily protein goal, keep track of your food/liquid intake with the help of bariatric apps (Baritastic, Fitness Pal, etc.). Take it easy, this stage will pass and pay off by producing great weight loss results. Focus on the health benefits, remember the rewards, work on your mental and emotional health during this stage, as rapid weight loss will trigger mood swings (due to drastic

hormonal changes your body is going through), feelings of regret, sudden irritation, sadness, anger. This too shall pass.

• Lactose Intolerance

This phenomenon is typical for patients undergoing bariatric surgery, especially gastric bypass: changes in bacterial flora to subsequent exposure to antibiotics produce alterations in the metabolism of lactose. **Avoid dairy products (including protein shakes with lactose) that cause symptoms such as constipation, flatulence, and abdominal pain.** Try to use Lactobacilli supplementation and consult your physician and nutritionist.

• Hunger

Although for most patients the feeling of hunger decreases significantly after surgery and does not resume for a few months, some experience a rather strong feeling of hunger right after surgery. It is mainly due to one of the following reasons:

Dehydration. It's important to reach at least 64 oz of water per day (of course once your stomach is healed and you can tolerate water comfortably).

Low protein intake. Remember that protein is the main ingredient that provides satiety in your stomach and controls your cravings and hunger. You need to consume at least 70 gr of protein a day.

An excessive production of gastric acid (it's the most common cause during the first post-op months) can also produce a false feeling of hunger. The antacid (Omeprazole or Nexium) must be taken at least during the first 2 months post-op even without symptoms of heartburn or reflux (you can take Nexium, a more powerful antacid than Omeprazole, the same dosage of 20 mg every 12 hours). It is also recommended to take Mylanta suspension, one tablespoon every 8 hours before meals to balance stomach acidity. It is especially effective within the first few weeks post-op.

• Unusual Stomach Noises

You may be experiencing unusually loud stomach noises (which naturally can cause a lot of discomfort when you are in public). These are due to the interaction between gastric gas and gastric acid, in addition to your new stomach reacting and adjusting to your new eating habits. Please don't

worry, this happens to most patients during the first few months post-op. As time passes by, the frequency with which they occur will decrease until they disappear entirely.

In many cases, this sensation can be controlled by taking an antacid and strengthening your digestive system with the use of probiotics daily.

Don't forget to wait at least 30 minutes to drink liquids before and after meals. Avoid spicy foods or foods with too many ingredients, high in fat or carbohydrates that could worsen the symptoms. Learn more about the cause and possible solutions to stomach noises at <https://golightbariatrics.com/stomach-noises-gurgling-growling-after-weight-loss-surgery/>

Dietary Evolution

STAGE 1

Clear liquids: 1 – 3 days post-op

The day after surgery (that is the day of your leak test) is your 1st day on clear liquids. The clear liquid diet is non-carbonated and sugar-free. Your first consumption will be ground ice only.

You will be encouraged to drink at least 32 to 48 oz. of fluids per day to avoid dehydration. It might be necessary to drink even more during hot weather. Drinking soon after surgery may be difficult and painful, thus we do not expect you to reach the goal of 64 oz. per day until later stages. In the first few days, drink very slowly, make tiny sips but frequently, until you determine the amount of fluid that can be tolerated.

Remember your stomach is swollen, it's capacity is very limited: about 1 to 1.5 ounces. As the swelling slowly subsides within 1-2 months, its capacity will increase to about 3-4 oz.

The amount of clear liquids you are allowed to drink is not limited. Hydration is your goal #1 at this stage (not the protein intake, but hydration) You cannot stretch your stomach by drinking too much liquid. At the beginning it will be easier to tolerate water rather than juices, however everyone is different: you will have to try and find the type of fluid you can tolerate well. If you cannot reach at

- ❖ **Runny nose.** Gustatory Rhinitis and Vasomotor Rhinitis cause our nose to run during or after eating. Certain foods, stomach fullness and stomach irritation including GERD (acid reflux) cause these conditions.
- ❖ **Hiccups.** Involuntary spasms of the diaphragm (aka hiccups) occur when we eat or drink too much or too fast, the stomach stretches and causes spasms.

STAGE 2

Full liquid diet: 3 – 17 days post-op

On average during the first two weeks after surgery, you will have to drink liquids only. Solid foods could cause pressure on the sutured line of the stomach and stretch the new stomach pouch. This might cause vomiting and pain. Liquid diet will also give enough time for the stomach tissue to heal. This stage could last a little less or a little longer, it is a matter of tolerance, which varies greatly among patients. Please do not test your stomach, do not skip diet stages. Forcing your stomach to accept solid foods too soon could cause not only stomach irritation and pain that usually lasts for days or even weeks but could lead to serious surgery complications. Some patients can move to Stage 3 (blended and pureed foods) at 14 days post-op, others recover slowly and continue Stage 2 (liquids only) up to 21 days post-op or even longer.

To ensure an adequate intake of protein, calcium and other nutrients, the liquid diet must be based on foods that contain protein. Sugar-free protein shakes are encouraged.

If you can drink fluids with little to no restriction, please do not worry. It is a great blessing, and you will be able to stay well-hydrated. There is nothing wrong with your stomach, you will get the feeling of restriction as soon as you start solid foods. If you are not able to hydrate yourself sufficiently, consider having IV therapy at least once or twice a week during this early recovery stage. Any local IV center or an ER will be able to help you with IV hydration.

Liquids & Foods Allowed

- **Liquids included in Stage 1**
- **Fish broth**

- Bone and beef broth (occasionally and measuring their tolerance, because they are more difficult to digest and contain more saturated fats)
- Greek yogurt (with or without flavor but without added sugar or chunks of fruit)
- Low fat milk and/or lactose free milk
- Sugar-free pudding
- Vegetable soup, very thin, blended, and strained (vegetables easier to digest are zucchini, squash, carrots, spinach)
- Egg drop soup
- Almond, coconut, or soy milk without added sugar.

TIP! Protein powder (unflavored) can be added to chicken broth, soups, or Jell-O. When making soups, avoid vegetables high in fiber and those that produce gas: cauliflower, broccoli, asparagus, celery, mushrooms.

Greek yogurt (flavored but sugar-free) or protein shakes can be frozen and make a nice dessert option.

Type of exercising: walking

Time: 30 minutes

Calorie expenditure with exercise: 50 – 100 Cal

MACROS

General recommendations **for the first 3 months post-op** (taking into consideration your physical activity, adjustment may be needed) are the following:

Calories: around 500-600

Protein: at least 60-70 gr

Fats: 20 gr

Carbs: no more than 30-40 gr a day

Sugar: less than 10 gr per day

Fiber: about 7-10 gr per day. Add fiber gradually, adding fiber too quickly may cause such gastrointestinal symptoms as bloating and gas.

Sodium: about 1000 mg a day.

Additional recommendations:

- Use your kitchen scales or cups to weigh and measure food portions. Utilize smaller plates and utensils (children size utensils will become handy).
- Your stomach capacity may vary due to swelling: for bypass patients between 1-2 oz., for gastric sleeve patients between 2-3 oz. As the stomach swelling subsides within 1-2 months post-op, stomach capacity will increase by 1-2 oz. Do not get discouraged if you cannot finish your liquid meal. Do the best you can, you can finish the meal later or have it as a snack.
- Your main goals are hydration and protein intake.
- Strive to consume 48 to 64 oz. of liquids per day (protein shakes and yogurt are not included in your liquid intake).
- The minimum protein goal is 60 to 70 g. per day. Calculate your ideal needs of protein by multiplying your weight in pounds by 0.36. For example, a person who weighs 200 pounds needs 72 g. of protein per day, because $200 \times 0.36 = 72$.
- Ideal chicken broth recipe. Take 100g (3.5 ounces) of chicken/fish (add a little bit of vegetables for better taste) in its own broth (120 ml or 4 liquid oz.) and blend it. After thorough blending strain it and remove the solids, consume pure liquid. This type of processing will make the nutrients contained in chicken/fish remain in its prepared broth.
- Have a minimum of 5 liquid meals per day (including the protein supplement). Ideally, keep sipping fluids all day long. Make it a habit to carry your water bottle wherever you go. Sip on water between meals. If regular water is not palatable or causes nausea, add pieces of fruit, mint leaves, crushed cucumber, or watermelon to add pleasant flavor. Be careful and strain out all the solid pieces, seeds, or skins.
- Start taking vitamins and probiotics, preferably chewable and/or liquid, but pills should be well tolerated at 2-week post-op. Do not take vitamins on an empty stomach to avoid nausea. Learn more at <https://golightbariatrics.com/vitamins/>
- Do not skip antacids! Take them twice a day 20 mg each time for a minimum of 2 months. Continue taking antacids if heartburn or acid reflux persists. Antacids will decrease stomach acid production, and thus will keep GERD (acid reflux) and stomach irritation under control.
- **Important!** Avoid spicy and acidic foods (including tomato sauce/soup, citrus juices, and coffee). Coffee may be resumed at 1.5 - 2 months post-op, only if tolerated well and ideally not on an empty stomach, as coffee irritates the stomach increasing heartburn and acid reflux.

Meal Plan Sample + Vitamins

(3 – 17 days post-op)

Breakfast

- *Greek Yogurt (2-4 oz.) or
- *Protein shake (0.5-1 bottle)
- Calcium citrate w/Vit D3 (1 chewy bite - 500 mg)
- Magnesium Citrate (500 mg)

Snack

- *Protein shake (0.5-1 bottle) or
- *Jell-O with protein added, unflavored
- Bariatric Multivitamin (2 chewable tablets)

Lunch

- *Chicken broth 3.5 oz. (100 g of solids blended and strained) or
- *Fish broth, 3.5 oz. (100 g of solids blended and strained) or
- *Squash/yellow zucchini cream soup
- Calcium citrate w/Vit D3 (1 chewy bite - 500 mg)
- B-complex (1 capsule)
- Probiotic (2 chewable tablets)

Snack

- *Protein shake (0.5-1 bottle) or
- *Jell-O with protein added, unflavored

Dinner

- *Chicken broth 3.5 oz. (100 g of solids blended and strained) or
- *Fish broth, 3.5 oz. (100 g of solids blended and strained) or
- *Spinach & zucchini cream soup or
- *Greek Yogurt (2-4 oz.)
- Calcium citrate w/Vit D3 (1 chewy bite - 500 mg)

NOTE! An asterisk * implies one option, it doesn't mean that all the offered options must be applied at the same time.

Consider our bariatric-friendly “liquid” recipes:

- ❖ Squash/Yellow Zucchini Cream Soup (<https://golightbariatrics.com/squash-yellow-zucchini-cream-soup/>)
- ❖ Spinach & Zucchini Cream Soup (<https://golightbariatrics.com/spinach-zucchini-cream-soup/>)
- ❖ Homemade Protein Shake Recipe (<https://golightbariatrics.com/homemade-protein-shake-recipes/>)

STAGE 3

Blended or pureed diet: 17 – 30 days post-op

This stage may be started at 14 days post-op, it depends on everyone`s tolerance. At this point you can start eating pureed and soft foods that require minimum chewing. Everything you eat must be chewed to the point of becoming a mousse in your mouth. Take bites the size of a dime coin. Put your utensils away between bites, wait up to 1 minute before taking a new bite.

Solid food is not allowed at this stage.

Slowly, day by day start introducing very moist and soft textured foods into your diet. A good option to start with is egg white cooked like scrambled eggs or poached, not boiled, to make it more moist and easier to swallow.

As always, preference is given to foods rich in protein, but low in sugar and fat. In a few more weeks, the capacity of the new gastric pouch will increase.

Stop eating as soon as you feel satisfied, and always eat foods rich in protein first.

Soon after surgery you may start experiencing loud and unusual stomach noises, throat gurgling. It is perfectly normal and very common. Please learn about the cause and possible solutions at “Stomach Noises, Gurgling, Growling After Weight Loss Surgery” <https://golightbariatrics.com/stomach-noises-gurgling-growling-after-weight-loss-surgery/>

Featured recipes to enjoy at this stage:

- ❖ Veggie Egg White Bites (<https://golightbariatrics.com/veggie-egg-white-bites/>)
- ❖ Zucchini Tuna Patties (<https://golightbariatrics.com/zucchini-tuna-patties/>)
- ❖ Cloud Bread (<https://golightbariatrics.com/cloud-bread/>)
- ❖ Chocolate Protein Pancakes (<https://golightbariatrics.com/chocolate-protein-pancakes/>)

Soft Foods Allowed

- Liquids from the stage 1 – 2
- Pureed salmon, tuna, tilapia
- Crab
- Lobster
- Tofu
- Any low-fat cheese (cottage cheese, ricotta, panela, mozzarella, feta)
- Vegetable cream soups (very thin, no cream added, skimmed milk is allowed)
- Apple sauce free of sugar added (thinned apple sauce)
- Scrambled eggs (egg white at first, add egg yolk only if tolerated well)
- Bean broth (do not eat solid beans, only blended and strained)
- Lentil broth (do not eat solid lentils, only blended and strained)
- Soft vegetables: steam or boil them until they are very soft and mushy (dark leafy greens, zucchini, pumpkin, squash, sweet potato*, carrots *, beetroot*, yucca *).
- *Denotes higher glycemic food, eat in moderation.

*An asterisk indicates food with higher glycemic index (high in carbs), eat in moderation.

Type of exercising: Walking, elliptical, very light weights

Time: 30 minutes

Calorie expenditure with exercise: 50 – 100 Cal.

Recommendations:

- Continue drinking liquids slowly as at stage 2. Try to reach a goal of 64 oz. of liquids per day (not including protein shakes, yogurt, and soups).
- Drink protein supplement (also as an appetizer) between meals.
- Keep taking chewable or liquid vitamins.
- Eat slowly, taking very little bites.
- Bread, rice, pasta, fruit, and raw vegetables should not be consumed during Stage 3.

- It is important to have a meal schedule to track your protein and carb intake. Keep a diary of what you eat using free bariatric apps.
- If you do not feel hungry, have only a few bites of food to keep up with your daily needs in protein and nutrients, and to keep your metabolism at a steady level.
- Do not force yourself to eat a whole dish at one time; your stomach capacity is still considerably restricted; your stomach is still healing.

Avoid at this stage and in a long-term period the following foods:

- High content carbs food (pasta, rice, bread, cookies, all kinds of potatoes, corn, macaroni with cheese and candies)
- Foods high in saturated fat
- Fried foods
- Sugary drinks like juices and soft drinks

STAGE 4

Solid food: 30 – 60 days post-op

You can start Stage 4 in four weeks after surgery assuming that you can tolerate foods from Stage 3 with no difficulty. If not, stop progressing in your diet and continue Stage 3. As you are progressing to a normal diet, you will have to make your food choices very carefully. At this point it is safe to start experimenting with solid foods that have different textures. Make sure that what you eat is very tender and chew it thoroughly; you should be able to eat regular food now.

It is important to eat slowly and chew every bite at least 20 times, until it feels pureed in your mouth. Stop eating once you feel full, as after 4 weeks post-op your stomach capacity restriction is still significant; remember that your stomach tissue is still in the healing process and can be somewhat inflamed, which causes certain restrictions also.

Continue eating small portions and always give priority to foods with high level of protein. Always drink between meals, do not drink while eating. This rule is especially important for bypass surgery patients, as drinking while eating will promote faster stomach emptying flushing food into the small intestine and you will be able to overeat. And for gastric sleeve patients drinking while

eating may fill you up too quickly, and you will not be able to finish your meal and consume enough protein and other nutrients.

Do not forget to take your multivitamins and protein supplements.

Important! If you are experiencing acid reflux (common within the first 2 months post-op), continue avoiding spicy and acidic foods (including tomato soups, ketchup, pineapple juice, citrus juices, and coffee). **Coffee may be resumed at 1.5 - 2 months post-op**, only if tolerated well and ideally not on an empty stomach, as coffee irritates the stomach increasing heartburn and acid reflux. You may want to choose low-acid coffee brands.

Foods Allowed

- All foods and liquids from previous stages
- Salmon 3.5 oz. (100 g)
- Tuna 3.5 oz. (100 g)
- Tilapia 3.5 oz. (100 g)
- Crab / Shrimp
- Beans, broad beans, lentils
- Eggs (whole)
- Chickpeas (hummus)
- Turkey breast
- Chicken breast
- Avocado
- Eggplant
- Cooked vegetables (be careful with those that ferment in the stomach and are very fibrous: cauliflower, broccoli, cabbage, asparagus, celery, and mushrooms)
- Garlic
- Onion
- Herbs (dill, cilantro, Rosemary, parsley, etc.)
- Vanilla, almond or hazelnut extracts

- Olive or avocado oil in moderation
- Oatmeal (occasionally)
- Low fat mayonnaise occasionally

Type of exercising: at 6-8 weeks post-op it is safe to start more vigorous exercising such as fast walking, walking up the hill, elliptical, bicycle, water aerobics, Zumba, other cardio exercises, light weights. You may want to avoid jogging or running as extra body weight will hurt your joints.

Time: 30 minutes

Calorie expenditure with exercise: over 100 Cal.

STAGE 5

60 – 120 days post-op

At two months after surgery, you must significantly increase your physical activity. At this stage your incisions and stomach are healed sufficiently. Depending on your health status, you will begin an exercise program focused on your cardiac training. To maintain an adequate calorie expense, you must continue exercising in the same rhythm for at least 15 minutes, preferably 30 minutes. The goal is to increase your heart rate and start sweating.

As you increase your physical activity, your nutritional needs grow as well. At this stage you can tolerate a variety of foods, now you can also increase the percentage of calories coming from carbohydrates, not forsaking though an adequate protein consumption of 70 – 100 g per day.

This stage is indispensable for your metabolic balance: gradually your body starts adjusting, and increased physical activity will promote a stable, continuous, and healthy weight loss.

In those days when you are not physically active, lower your carbohydrate intake.

Foods Allowed

- Foods from the previous stages
- Dry cranberries
- Raisins

- Dates
- Strawberries, raspberries, blackberries
- cherries
- papaya
- melon, watermelon
- apple, pear
- peach, plum
- Citrus fruits or acidic fruits start at 3 months postop (orange, pineapple, grapefruit, lemon, kiwi, etc.)
- Tomatoes (remove seeds at the beginning)
- Raw dark green leaves such as kale and spinach (if tolerated well, then you can try lettuce, it is heavier for digestion)
- Peas
- Artichoke
- Green beans
- Jicama

Calorie daily intake: 600 – 750 Cal

Type of exercising: walking, jogging, Zumba, water aerobics, swimming, walking up the stairs, rope jumping, running, riding bicycle; weightlifting can gradually increase. At this stage there is no weightlifting restriction.

Time: 30 – 45 minutes in intervals of 15 minutes

Calories expenditure with exercise: 100 – 250 Cal.

STAGE 6

4 – 12 months post-op

At this point you are entering a new stage of your long journey to a new healthy lifestyle. Your stomach has healed, and you can tolerate almost all types of food. Now you can no longer rely on your stomach to control WHAT you eat. You must make wise choices. The stomach will control HOW MUCH you eat, but not WHAT you eat.

By this time, you have already lost a significant percentage of the excess weight. The following months are indispensable for a continuous weight loss process, this is why it is so important that you continue changing your lifestyle and work on your mental attitude, your relationship with food. There is a risk of regaining weight during the very last months of this stage. Weight regains might take place only if you do not follow your diet plan and indications regarding your physical activity. During these 8 months your weight loss process will slow down, but do not get discouraged. You will notice that while you haven't lost much weight, your sizes went down, you will notice changes in your physical appearance, your neck will become thinner, your cheeks will deflate, your hips will get slimmer, and your stomach will become smaller. If you follow your diet program and continue being physically active this stage will not constitute any difficulty for you.

You will notice that your food intake ability has increased comparing to the first stages of your diet. This could make you return to your old nutritional habits that could cause a plateau in your weight loss process or even some regain. Do not get frustrated, you still have time to correct mistakes and reach the goal. Do not always expect perfection from yourself. Occasionally, you will step off track, it is normal. Do not think that you have ruined it all and do not look for comfort in food. Rather get back on track and accept mistakes as a normal part of this journey. It is a lifelong battle, thus never give up and never become too comfortable.

As you get closer to your goal weight, you will have an opportunity to increase the variety of foods and increase the amount of carbohydrates with complex sugars while always avoiding simple sugars. The consumption of carbohydrates will have to be limited and allowed only on the days of increased physical activity. You still need to continue your daily protein intake of approximately 70 – 100 g and vitamins.

If you have problems with your joints give preference to exercises that make less pressure on them, like swimming or riding bicycle; yoga can help increase your flexibility.

Note that during Stage 6 your diet includes raw fruit, greens, and seeds. Make it a habit to incorporate them in your meals daily but limit fruit and nuts intake when you are not physically active, especially fruits that contain lots of carbohydrates. Remember that the priority always belongs to the foods with high content of protein. Adding red meat to your diet is important at this stage, but you must be very careful as it can cause certain discomfort especially during the first intake. It is recommended to start with ground beef from the sixth month on, since by this time your stomach will be better prepared.

Foods Allowed

- Foods from the previous stages
- Red meat (starts at 6th month post-op: lean beef (ground, steak))
- Lean pork
- Raw seafood
- Bananas, grapes, mango, guava
- Asparagus, broccoli, lettuce, cabbage, mushrooms
- Peanuts, almonds, pecans, other nuts
- Cereal (limited and occasional)
- Quinoa
- Sunflower seeds, pumpkin seeds, hemp seeds, flaxseed, chia seeds
- Pickles (if tolerated)
- Peppers
- Edamame
- Fennel
- Radish
- Cucumber
- Brussels sprouts
- Celery
- Olives
- Peanut butter powder (PB2)
- *Nuts, seeds, and peanut butter powder should be eaten in moderation.

Type of exercising: walking, swimming, jogging, Zumba, rope jumping, spinning, running, bicycle riding, weightlifting.

Time: 30 – 60 minutes in intervals of 30 minutes

Calorie expenditure with exercise: 200 – 350 Cal.

MACROS

General recommendation **to continue losing weight** (depending on your physical activity):

Calories: 800 per day

Protein: at least 70-80 gr of protein per day

Carbs: 80 gr per day (less than 50-60 gr on days when you do not exercise)

Fat: 20-25 gr of healthy fat per day.

STAGE 7

12 - 24 months post-op

On this long path of dieting after the surgery you have come to a point when there is an ease of consuming foods that seemed to be impossible to eat before, including alcohol and some types of junk food. It is quite common that at this point the patient has returned to old habits that do not contribute to general well-being and may cause weight to regain.

At this stage you have lost enough weight. On average, bariatric patients tend to lose between 50% – 70% of excess weight by this time. It is rare that a patient loses 100% of their excess weight, this will depend on the individual characteristics of the person.

Do not compare yourself with others, every individual is different and will have different results, remember this is not a competition. The key to continuing the weight loss process (if it is still required) is in following a healthy, simple, and low carbohydrate diet, high in protein and moderate in fat. You've already lost enough weight and have been exercising for over a year. The new challenge of this stage is to increase caloric expenditure by increasing the time of your work out and by continuing the diet featured in the previous stages, considering that if your calorie expenditure is greater, the calorie intake must increase accordingly.

Remember that your stomach can and will stretch with time. It will never go back to its original size, but in about 2 years post-op, it will stretch sufficiently to allow for a small child's size food portion. It can however stretch further if you overeat constantly. In bypass patients, the anastomosis (the connection between the stomach pouch and the small intestine) can also stretch with time. Be

careful and to not overeat frequently, as once the anastomosis is stretched, the only way to make it tight again is through another surgery.

Stay away from constant grazing/snacking, avoid slider foods that do not fill you up but add unnecessary calories, such as pretzels, chips, candies, popcorn, etc., and of course always stay away from sodas, Frappuccino's, and other high calorie drinks. Consume alcohol only on occasion as it also adds a lot of extra calories.

Type of exercising: Running, walking, swimming, jogging, Zumba, rope jumping, spinning, running, bicycle riding, muscle conditioning

Time: 60 minutes in intervals of 30 minutes

Calorie Expenditure with exercise: 300 – 500 Cal.

MACROS

To maintain weight, our general recommendation is:

Calories: 1000 – 1200 per day

Protein: at least 70 – 80 gr per day

Carbs: 100 – 125 gr per day (depends on your physical activity)

Fat: around 35 gr per day.

The formula to calculate your ideal amount of protein per day is to multiply your weight in pounds by 0.36, for example a person who weighs 200 needs 72 gr of protein per day, that is $200 \times 0.36 = 72$.

Additional recommendations:

❖ Red Meat

Red meat must be avoided in the first 4 – 6 months post-op. Usually, patients make attempts to eat red meat prior to this stage. In that case it is common to have abdominal pain, nausea, and vomiting. We recommend starting with ground beef, as it is softer, easier to chew and less aggressive to the recently healed stomach.

❖ Alcohol

It is important that you **avoid alcoholic beverages until your stomach heals completely by the end of the first 6 months post-op**. You should avoid all kinds of carbonated drinks including beer. Calorie levels in distilled liqueur like whiskey, vodka and tequila are high; this type of liquor can cause upset stomach, nausea, and vomiting.

The **gastric bypass patient is highly susceptible to the effects of alcohol** after the surgery; because alcohol directly enters your intestine, absorption is almost immediate, thus increasing toxicity in your body, not to mention that the side effects appear sooner and are more intense. **The patient should be aware that the best decision is to avoid alcoholic beverages of any kind to prevent symptoms that cause discomfort.**

❖ Drugs

If you take medication for previous health-related conditions, talk to your doctor about what type of treatment you are in. There are drugs that must be stopped prior to your surgery enough time in advance to avoid complications. To maintain a low level of gastric acidity and to reduce gastritis and acid reflux symptoms after surgery, you should start with Omeprazole 20 mg every 12 hours during 2 weeks prior to the surgery and continue for at least 2 months after the surgery.

Secrets to Success

How you should eat

WHAT you are eating after the surgery is as important as HOW you are eating. The moment you sit down at the table you need to change your way of thinking: do not get distracted but focus on every bite, even in the way you chew.

Avoid

- Sugars and refined flours
- Carbonated drinks
- Alcoholic beverages

- Eating fast
- Talking while eating
- Fluid intake while eating
- Eating while doing other activities
- Skipping meals (your diet program)
- Filling up your plate with food
- Artificial sweeteners
- Sweet snacks
- GRAZING (adding snacks, nibbling, or tasting foods that are usually high in calories and fat can add hundreds of calories a day to your diet.) Eating between meals (unhealthy foods) will slow your weight loss and may lead you to gaining weight again.

New habits

- Consume 3 main meals and 2 snacks rich in protein per day.
- Drink enough fluids during the day (48-64 oz / day).
- Stop eating as soon as you feel satisfied.
- Chew 20 – 30 times per mouthful.
- Acquire small plates, forks, and spoons, this will limit the portions you can consume including child-size.
- Eat small portions and weigh them.
- Keep a record of every meal you eat in a Bariatric App; this will help to have an objective control over your nutritional goals and how to accomplish them.
- Look for foods allowed during each STAGE depending on their nutritional value, always seek sources of significant amount of protein.
- Eat only good quality and nutritious foods; avoid highly processed foods.
- Rest your body, it needs rest; sleeping from 7 to 8 hrs. daily helps to increase energy levels and promotes optimal recovery.
- Set a time each month to weigh yourself and take body measurements; do not obsess over the scales (it is not recommended to weight yourself too often as naturally our body weight fluctuates depending on how much salt we consume, it retains water, time of the months for women, and even weather, in hot climate we drink more, and our body becomes swollen). It is recommended that you weigh yourself in the morning before having breakfast but after a bowel movement. As you progress on your weight loss path and begin to maintain your weight, you can start weighing yourself once a week.

Make plans!

- Plan your meals and make food choices days in advance. Learn more at <https://golightbariatrics.com/mastering-meal-prepping-a-guide-for-bariatric-patients-on-why-and-how-to-do-it/>
- Your diet plan starts with shopping for groceries, keeping the pantry with the necessary food and having an inventory of your purchases. This will help to get a sense of nutritional choices and avoid unnecessary purchases of food without nutritional value.
- Cook your own food so that you are aware of the portions and quality of food.

“The Plateau”

The Plateau is a stage that usually occurs between the first and the second postoperative months, i.e., 30–60 days. It is characterized by the absence of weight loss, commonly lasts between 1 – 2 weeks. It is common for the patient to feel disappointed, to believe that the purpose of the procedure and nutritional education is lost. **"The Plateau" is an inevitable part of the weight loss process.** Do not get discouraged, this stage is also characterized by the loss of size as you notice changes in your body image. There will be several plateau stages during your weight loss journey, and they will vary from a few weeks to a few months as you progress further. Your body will be adjusting to the chemical and biological changes that occur during weight loss. If the plateau continues for more than a few weeks, review your nutrition plan and physical activity level.

Nutritional supplements

The amount of food you can consume will be insufficient to meet the needed nutritional requirements; therefore, it must be compensated with nutritional supplements depending on the surgical procedure. The supplementary food needs after the gastric sleeve and the gastric bypass are different. It is recommended that gastric sleeve patients continue taking their supplements for at least 2 years after the surgery, the supplementation for the gastric bypass patients is for life. Recent studies have shown that the pre- and post-op intake of lactobacilli decreases subsequent gastrointestinal symptoms, ask your doctor about the nutritional requirements, and follow the rules according to these guidelines.

Nutritional Follow Up

It is extremely important that you are aware that bariatric surgery is a tool to help you modify your eating habits; if you believe that surgery will work by itself you are making a mistake. Any patient undergoing bariatric surgery requires monitoring by a multidisciplinary team that includes the physical, nutritional, and psychological aspect, if you are not willing to work on these 3 areas, you have high chances of failure, this means that you can experience nutritional deficiencies and insufficient weight loss after the surgery.

Remember that you have access to our bariatric nutritionists, therapist, and your surgeon. You can request a consultation with each of them via email through your patient coordinator as many times as needed. Utilize our Facebook support group to help you stay motivated.

Blood Work Post-Op

Please note that a general blood test is recommended within 3, 6, 12 and 24 months after surgery to determine whether your body is lacking any vitamins, minerals, and other important elements, and if so, make necessary diet adjustments. Feel free to submit your test results by fax at 855-457-1400 or by email to your coordinator or to info@golightbariatrics.com to receive an evaluation by your surgeon.

Please request the following type of blood test with your PCP:

CBC, Cholesterol (total, HDL, LDL), Fibrinogen, Basal Insulin Level (fasting insulin), Glycosylated Hemoglobin (HbA1), A1C, Glucose, Urea, Creatinine, Vitamin Levels (B1, B12, D, folates), Minerals levels (Calcium, Magnesium, Phosphorus, Iron), total iron binding capacity (TIBC), Ferritin, TSH, Liver Function Test, Albumin, and Urinalysis.

The Go Light Bariatrics team sincerely wishes you a successful weight loss journey, and may this new tool bring lots of wonderful changes in your life, health-wise and more!