

When to call the office:

If you have excessive pain after surgery or are not tolerating the liquid diet, please call the office first thing in the morning & if necessary, we will have you come in and be evaluated.

When to seek medical attention:

If you have a fever, increased heart rate over 120 beats per minute, significant nausea and/or vomiting, difficulty breathing, increase in pain, swelling in your legs or other concerns that you don't feel well, call your surgeon's office, or go the Emergency Department.

Do not stay at home without speaking with a physician.

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Bariatric Surgery: Use of Laxative to Prevent Constipation:

Constipation is very common following bariatric surgery. In an effort to minimize post-operative constipation, we are recommending a pre-operative bowel cleansing.

Polyethylene glycol (PEG) (Brand names: MiraLAX, GlycoLax) is effective in improving stool frequency and consistency. This laxative is widely used to treat chronic constipation. PEG is generally preferred over other laxatives since it does not cause gas or bloating and is available in the United States without a prescription.



Before Surgery

Starting **3 days before surgery** begin use of one of the above PEG products once daily. Continue once a day for 3 days. To use, follow the instructions below:

1. Fill cap to top of white section with PEG powder. Cap is marked to indicate the correct dose (17 g).
2. Dissolve the powder in any 4 to 8 ounces of the approved pre-op liquid beverages (cold, hot or room temperature) and stir.
3. Fully dissolve powder before drinking. Do not drink if there are any clumps. Drink once a day for three days.
4. You may increase the dose to a maximum of 34 g daily to achieve at least one bowel movement a day.

After Surgery

Continue with once daily PEG use as above. Keep up with your water intake (a minimum of 64 oz. of liquids daily)

- If you have not had a bowel movement by day 3 post-op with once daily PEG use, increase PEG use to 2 times per day and also add a stool softener (Colace) 2 times per day.
- If you have not had a bowel movement by day 5 post-op, continue with the above and add a suppository (Ducolax).
- If you have not had a bowel movement by day 7 post-op with the above, add a Fleet enema. If after two hours, you have not had a bowel movement, repeat the enema. Please contact the office if this does not result in a bowel movement.

Once your bowel movements become regular you can stop using PEG and the stool softener. If you experience severe or cramping abdominal pain, please contact our office for further instructions.

Bowel Movement General Information

Your bowel movement is the last stop in the movement of food through the digestive tract. Stool consists of what remains after your digestive system absorbs nutrients and fluids from what you eat and drink. This means that you will make stool even if you are eating or drinking less than usual.

“Normal” bowel movements can vary but in general, normal bowel patterns can range from 1-3 bowel movements per day to one bowel movement every three days.

After bariatric surgery, there may be a change in the frequency, consistency and size of your bowel movements due to the changes in your diet.

It is possible after any type of abdominal surgery for your bowels to take a few days to get back to “normal”.

Constipation

- High protein diets, use of narcotic pain medication and iron supplements can contribute to constipation.
- Constipation is defined medically as fewer than three bowel movements per week and severe constipation is less than one stool per week. On an individual basis, constipation is defined as a decrease in your normal/typical number of, or consistency of, bowel movements and straining to have a bowel movement.
- If you have issues with constipation before surgery, or you use laxatives or medication to treat constipation, it is important that you discuss this with your provider at your clinic visits.
- Common treatment for constipation includes adequate hydration, exercise, dietary fiber and medications. The goal might not be to have a bowel movement every day, but to have bowel movements without straining.
- Polyethylene glycol (PEG) (Brand names: MiraLAX, GlycoLax, Purelax, SmoothLAX) is effective in improving stool frequency and consistency. This laxative is widely used to treat chronic constipation. PEG is generally preferred over other laxatives since it does not cause gas or bloating and is available in the United States without a prescription.
- In general, during the post- surgery period you should avoid the use of fiber containing laxatives because without adequate hydration they can make constipation worse.

Pre-op Diet (before surgery)

Start date: _____

Goal of this diet is to reduce the size of the liver to allow the surgeons to have more room during the operation. Please *only* consume the items listed below:

Breakfast, Lunch & Dinner will be protein shakes. Please refer to the approved protein shake list

- You can choose to have either ready-to-drink protein shakes, or mix an acceptable protein powder mixed with either water, milk, or unsweetened milk alternatives (you can add ½ banana and 1 Tbsp. natural peanut butter per shake)

Snacks: have 3-4 of the following throughout the day in 1 cup portions:

- Low-sodium pureed and strained lentil, tomato, carrot ginger, or butternut squash soup
- Low-sodium chicken, beef or vegetable broth
- Milk (1%, skim, skim plus, unsweetened almond, rice, coconut, or soy)
- 100% fruit juices diluted 50% with water (white grape, apple, and cranberry)
- Low-fat Greek yogurt without chunks (Ex: Triple Zero Oikos, or refer to Greek yogurt handout)
- Decaffeinated tea/coffee (no sugar added)
- Sugar-free/fat-free pudding
- Cream of wheat
- Items allowed on the clear liquid diet can be consumed during the full liquid diet. See below.

You should aim to get 80 grams of protein throughout the day while on the pre-op liquid diet.

Surgery Date: _____

Day before your surgery, date: _____

Full Liquid Diet Day before surgery (see approved items for Full Liquid Diet p.5)

Follow the Full Liquid Diet. In the evening before surgery also drink 1 bottle of Clear Fast Pre-Operative Drink*, consume bottle within 10-15 minutes (patients without diabetes only*). (*Pre-op drink will be provided to you at your Pre-Op Services visit.*)

Stop the Full Liquid Diet at least 8 hours before surgery; drink only clear liquids after this time.

Morning of your surgery, date: _____

Clear Liquids Morning of Surgery

2 hours before arrival to hospital drink 1 bottle of Clear Fast Pre-Operative Drink* as above.

You may have clear liquids up until 2 hours before surgery; after this, nothing by mouth until after your procedure.

*Patients with diabetes will not include the Clear Fast Pre-Operative drink and will continue with bariatric full and clear liquids.

Clear beverages include:

- Water or Crystal Light
- Low-sodium clear chicken, beef or vegetable broth
- 100% fruit juices diluted 50% with water (white grape, apple, and cranberry)
- Decaffeinated tea/coffee- **no milk added**
- Sugar-free Jell-O
- Sugar-free or no-sugar-added clear popsicles and Italian ices

Full Liquid Diet

Approved protein shake, and acceptable fluids include: water, sugar-free flavored water, unsweetened decaf tea or decaf coffee, unsweetened soy/nut/coconut milk, non-fat milk, low-sodium broth, low-sodium tomato juice, clear fruit juices diluted 50% with water, low sodium creamy soups without chunks (examples: tomato, carrot-ginger, roasted red pepper, butternut squash, etc.), sugar-free Kool Aid, Vitamin Water Zero, Crystal Light, Fruit₂O, Propel, Powerade Zero, Hint water, Protein₂O, sugar-free hot cocoa made with non-fat milk, sugar-free popsicles

Full Liquid Diet begins the day before surgery, and stops at least 8 hours before your surgery time.

Post- Surgery Diet Directions:

Follow the Full Liquid Diet after surgery for the first 3 weeks. Your goal is to consume a minimum of 64 oz. of fluid daily and a minimum of 60-80 grams of protein daily.

Every hour on the hour drink 2 oz. of an approved protein shake

You can use any protein shake listed in the packet titled, *Protein Shake Options* (clear protein supplements, ready-to-drink protein shakes, or protein powders mixed with water, milk or unsweetened milk alternatives)

Every 15 minutes within the hour drink 2 oz. of an acceptable liquid

Example:

- | | | |
|----------|--------------------------------|--------------------------------------|
| | 9:00am: 2 oz. Premier protein | 10:00 am: 2 oz. Orgain protein shake |
| ○ Do not | 9:15 am: 2 oz. water | 10:15 am: 2 oz. water |
| while on | 9:30 am: 2 oz. decaf green tea | 10:30 am: 2 oz. crystal light |
| ○ Do not | 9:45 am: 2 oz. decaf green tea | 10:45 am: 2 oz. crystal light |

- Take temperature or warm beverages; these can be m... .. u
- Start your bariatric-specific multivitamin as directed by your dietitian, and take Colace 2-3x/day to help prevent constipation.
- Keep track of your fluid and protein intake daily and work towards reaching your goals (listed above).
- Contact your dietitian if you have any issues or questions about your diet.

Tracking Intake

In the hospital you will be given a packet of information about your Full Liquid Diet and a tracking sheet to

help you keep track of your protein and fluid intake. You will find a sample tracking sheet below.

Please use the table below to track your fluid and protein intake.

Work towards consuming 2 oz. every 15 minutes; remember to begin gradually and sip slowly.

- Consume protein every hour on the hour
- Consume water or an acceptable fluid every 15 minutes within the hour

At the end of the day calculate your intake of total protein (in grams) and fluid.

- This will help track your progress in reaching your goals of 60-80g of protein and 64 oz. of fluid daily.

12:00 am		8:00 am		4:00 pm	
12:15 am		8:15 am		4:15 pm	
12:30 am		8:30 am		4:30 pm	
12:45 am		8:45 am		4:45 pm	
1:00 am		9:00 am		5:00 pm	
1:15 am		9:15 am		5:15 pm	
1:30 am		9:30 am		5:30 pm	
1:45 am		9:45 am		5:45 pm	
2:00 am		10:00 am		6:00 pm	
2:15 am		10:15 am		6:15 pm	
2:30 am		10:30 am		6:30 pm	
2:45 am		10:45 am		6:45 pm	
3:00 am		11:00 am		7:00 pm	
3:15 am		11:15 am		7:15 pm	
3:30 am		11:30 am		7:30 pm	
3:45 am		11:45 am		7:45 pm	
4:00 am		12:00 pm		8:00 pm	
4:15 am		12:15 pm		8:15 pm	
4:30 am		12:30 pm		8:30 pm	
4:45 am		12:45 pm		8:45 pm	
5:00 am		1:00 pm		9:00 pm	
5:15 am		1:15 pm		9:15 pm	
5:30 am		1:30 pm		9:30 pm	
5:45 am		1:45 pm		9:45 pm	
6:00 am		2:00 pm		10:00 pm	
6:15 am		2:15 pm		10:15 pm	
6:30 am		2:30 pm		10:30 pm	
6:45 am		2:45 pm		10:45 pm	
7:00 am		3:00 pm		11:00 pm	
7:15 am		3:15 am		11:15 pm	
7:30 am		3:30 am		11:30 pm	
7:45 am		3:45 am		12:00 pm	

After Surgery: Next Diet Stages

You will have an appointment approximately 3 weeks after surgery to meet with your healthcare team. At this point you will be advanced to the Soft Food Diet (details at the end of this packet).

Approximately 3 months after surgery, you will have an appointment with the nurse practitioner or the physician's assistant to be advanced to a Regular (high protein) Diet.

Please do not advance your diet without meeting without speaking with a member of your bariatric surgery healthcare team.

Additional Important Information

Protein

Protein helps with wound healing, and helps you lose fat and maintain muscle mass to keep your metabolism going. We recommend getting a *minimum* of 60-80 grams of protein daily after surgery.

Vitamins & Minerals

Supplements

Type/serving size: Multivitamin soft chews

Dosing: 2 daily, separate by at least 2 hours

Details: These contain all vitamins & minerals needed, except iron & calcium (you will need to take an iron supplement; you will start taking calcium 3 weeks after surgery).

After surgery you not only eat smaller **Type/serving size of foods**, but you also don't absorb as many nutrients from these foods, making it difficult to get enough vitamins and minerals. You will need to take **bariatric-specific vitamins** daily for the rest of your life and should start taking your supplements **immediately after surgery**.

Dosing: 1 daily
Details: These contain all vitamins & minerals needed, except calcium (you will start taking calcium 3 weeks after surgery).
Take with protein shake to avoid nausea.

Type: Iron soft chews

Serving size: 1 daily

Details: Can take at the same time as multivitamin soft chew

SEPARATE IRON AND CALCIUM SUPPLEMENTS – DO NOT TAKE AT SAME TIME

Exercise: first month after surgery

Exercise may be the most important factor that can help you achieve long-term weight loss.

Below are exercise guidelines for the first month after surgery:

- Do not lift anything over 20 pounds
- Do not do sit-ups, crunches, or other activities that use your stomach muscles.
- Walking will be your main mode of exercise in the first few weeks after surgery.

- Week 1:

Be sure to get up and walk around for a few minutes at least once per hour and walk to keep your blood flowing and help prevent blood clots from forming. This will also help reduce gas pain and burn calories!

- Week 2, 3 & 4:
 - Be sure to engage in at least 30 minutes of moderate-paced, planned walking, progressing to brisk walking or jogging daily to help facilitate healthy weight loss.
 - You may increase the time spent exercising or the intensity of exercise as tolerated.
 - You may include light weightlifting
 - Your incisions must be healed before going swimming or submerging your body in water (approx. 2 weeks after surgery).

Exercise: second month & beyond:

- You may begin to lift heavier weights and engage in other types of activity, such as dancing, workout classes, swimming, bicycle riding, hiking, etc.
- We recommended you increase the time spent exercising to 45 minutes or more per session, *at least* 5 times per week, including a mix of cardiovascular activity and strength training.
 - For overall health improvement, the exercise recommendation is 150 minutes weekly of moderately intense exercise, including two strength training sessions.
 - For continued weight loss, the exercise recommendation is 250-300 minutes weekly of moderately intense exercise, including two strength training sessions.

Possible Side Effects of Surgery

Nausea and vomiting

- Might occur with eating/drinking too fast, drinking liquids while eating, and or trying new foods.
- To avoid these symptoms, eat very slowly and chew foods thoroughly.
- Notify a physician if frequent vomiting becomes a problem.

Dehydration

- May occur if you do not drink enough fluids daily.
- Your goal is 64 oz. water daily (unless otherwise directed by your healthcare team).
- After surgery you should not eat and drink at the same time; be sure to wait 30 minutes after eating before drinking liquids.

Dumping syndrome

- May occur if you consume items high in sugar, carbohydrates or fat.
- Symptoms include nausea, cramping and diarrhea, weakness, sweating and/or fast heart rate.
- To help prevent this, be sure to limit sugar to less than 15 grams per serving and avoid high fat and fried foods.

Alcohol Consumption

We *strongly* recommend avoiding drinking alcohol for the first year after bariatric surgery for a few reasons:

- Alcohol is high in calories and can slow down your weight loss.
- Bariatric patients tend to absorb alcohol into the bloodstream much more quickly and can feel the effects of alcohol after drinking a very small amount.
- Alcohol can increase the chance of ulcer formation.

Pregnancy after Surgery

We encourage preventing pregnancy after surgery for the first 12-18 months.

- If you do get pregnant within this time frame there is a risk that both the mother and the baby could develop nutrient deficiencies and or complications. If you become pregnant, make an appointment with your surgeon to optimize your nutrition.
- Note: as you lose weight you can become more fertile, and bariatric surgery can decrease the effectiveness of oral birth control pills.

Pre-Surgery Shopping List

We recommend getting the below items before surgery to minimize stress afterwards and allow yourself to focus on healing!

- Multivitamin - bariatric specific recommended
- Miralax or other PEG products (see page 2), and Colace (stool softener)
- Protein powder or ready-to-drink protein shakes
- Small cups, plates, bowls, utensils, etc.
- Ice pop mold
- Protein shaker cup
- Food scale
- Reusable water bottles (32 oz. or larger)
- Snack items from the pre-op diet
- Liquids from the 3 week post-op full liquid diet
- Notebook or diary (used for tracking intake of fluids and protein while on the 3 week post-op diet)
- Blender (do not use immediately after surgery; this will create air bubbles and cause gas pain)
- Vanilla, almond, mint, coconut, or other extracts to vary flavor of protein shakes

Soft Food Diet

You may read this section to help you prepare for the next diet stage. This diet will start 3 weeks after surgery and will last for 8 weeks. Your daily goal is to consume at least 64 oz. of fluid, at least 60-80 grams of protein, and to work up to consuming 1,000-1,200 calories.

Diet Directions:

- Meals/snacks should be every 3 - 4 hours, even if you are not hungry
 - You may need to set alarms on your phone to remind you to eat on a schedule.
- Portions should be ~ 2 - 4 ounces or ¼ - ½ cup at each meal and snack.
 - *Note:* your whole meal/snack might be a protein source in the beginning. As time passes you will be able to eat slightly larger portions and will be able to add in other items, such as cooked vegetables, canned fruits, etc.
 - When you do start to add in other items be sure to always eat your protein source first.

- Allow 20 - 30 minutes for eating; remember to eat slowly, put your utensil down in between bites, and avoid distractions while eating to prevent over eating or getting sick.
 - Stop eating if you feel like you might be full - one extra bite can make you sick!
- Introduce one new food at a time.
 - If you experience a food intolerance, allow a few days to pass before re trying the item, and try to have it prepared differently.
 - For example: if you did not tolerate a scrambled egg, try having egg salad next time instead.
- 1 cup of a caffeinated beverage is allowed each day, as long as you are drinking 64 oz. of water or other acceptable fluids.
- Keep a daily food log to help make sure you are getting enough calories, protein & nutrients daily.
 - *Not consuming enough can slow your weight loss.*
- Make a schedule for yourself to help you remember when to drink, when to eat, and when you need to wait 30 minutes before you can drink again.

Example:

 - 7:00am: wake up
 - 7:00am - 8:00am: slowly drink water or another acceptable fluid
 - 8:00am - 8:30am: eat breakfast (take 30 minutes to eat)
 - 8:30 - 9:00am: wait period (30 minutes before drinking fluids)
 - 9:00am - 10:30am: slowly drink water or another acceptable fluid
 - 10:30am - 11:00am: snack (take 30 minutes to eat)
 - 11:00am - 11:30am: wait period (30 minutes before drinking fluids)
 - 11:30am - 1:00pm: slowly drink water or another acceptable fluid

Reminders:

- Do not eat and drink at the same time; wait 30 minutes after eating before drinking fluids
 - This will prevent filling up on water during mealtimes.
 - Over time, eating and drinking immediately after can lead to weight regain.
- Avoid using straws
 - This can cause you to take in extra air and/or drink liquids too quickly and lead to discomfort.
- Do not consume carbonated beverages or alcohol.
- Avoid mindless eating.

Acceptable, high protein foods:

(include one of these at all meals/snacks)

Other foods:

(these are not high in protein; have in moderation)

- Eggs or egg beaters cooked with minimal fat
- 2% or Total Greek yogurt
- 2% or 4% cottage cheese
- 2% cheeses (cheese stick or shredded)
- Low-fat/low-sodium deli meats (thinly sliced turkey, chicken breast, roast beef)
- Soft fish - salmon, white fish, tuna
- Tuna/chicken/egg salad made with olive oil mayo.
- Small or baby shrimp
- Minced clams
- Bean and lentil soups (high in fiber; reintroduce slowly)
- Fat-free refried beans (high in fiber; reintroduce slowly)
- Protein shakes
- Tofu
- Tender cooked or ground poultry, beef or pork
- Natural peanut butter or almond butter
- Oatmeal or cream of wheat
- Cooked, soft/mushy vegetables
- Canned fruit in juice (drained)
- Sweet potatoes, baked no skin
- Lettuce (used for lettuce wrap with low sodium cold cuts, tuna salad, etc., not for a salad)
- Whole wheat crackers (Triscuits) or pretzels, chewed well
- Unsweetened apple sauce
- Very dry whole wheat toast (max. 1 slice/meal)

****Items should be soft enough to cut with a plastic fork, wet and moist ****

Do not consume foods other than the items listed above, especially the following items:

- Fresh bread, rice, pasta, mac & cheese
- Popcorn, chips, nuts & seeds
- Tough/rubbery items, such as:
steak, ham steak, hot dogs, pork chops
- Junk food and foods high in sugar
- Raw fruits and vegetables
- Fried & high fat or greasy foods

If you have any questions, please call the office at 516-482-8657

