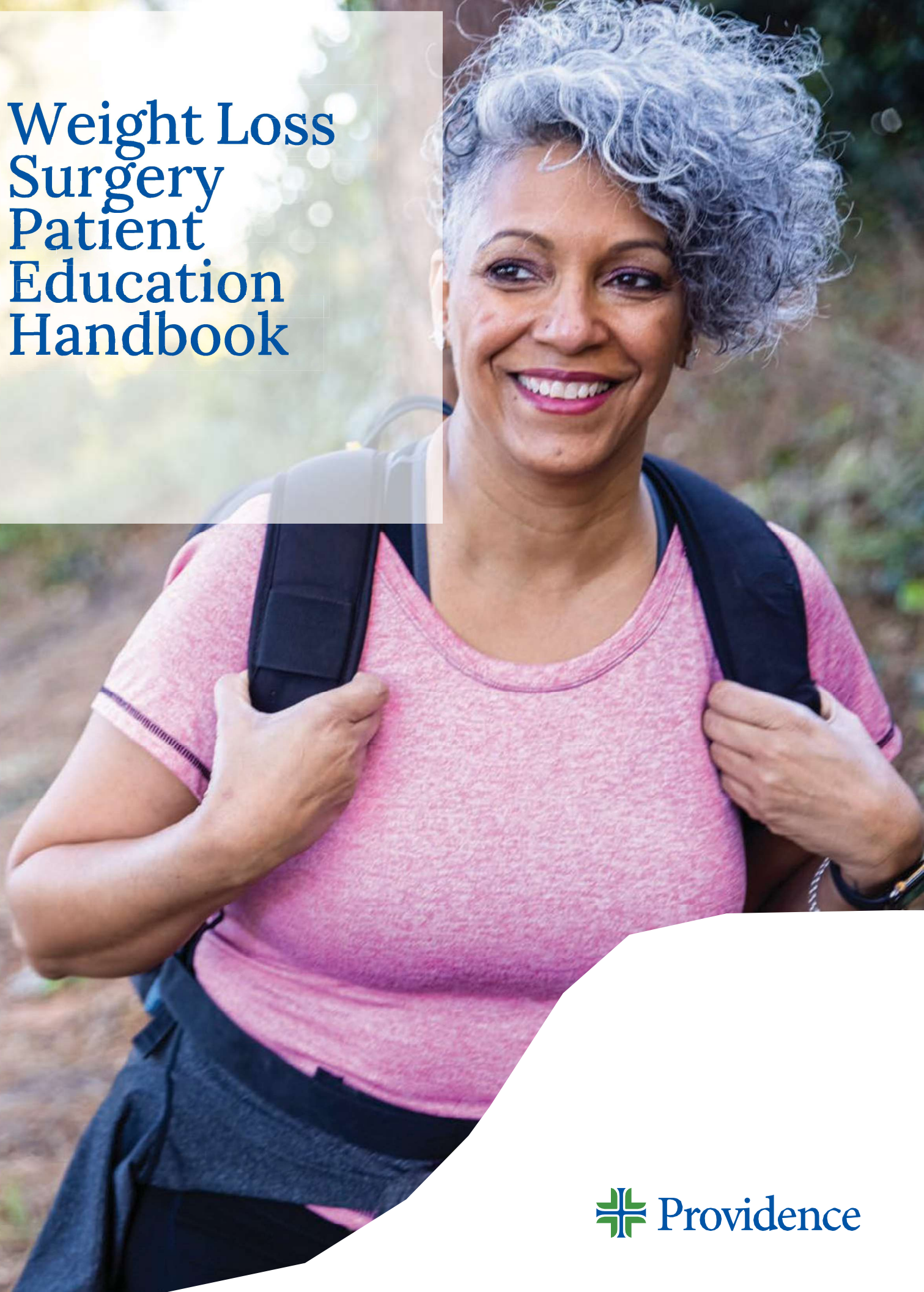


# Weight Loss Surgery Patient Education Handbook





# Welcome

Congratulations on choosing this path toward better health. Your team at Providence is here to guide you and ease your way through every step of your journey.

This booklet is your roadmap through the process. It will educate you on what to expect before and after your surgery as you prepare, recover, and continue your progress.

If you have questions or concerns, please contact us at any time.

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# Your Care Team

We understand that the decision to have weight loss surgery is an important one. Your safety and well-being are at the forefront of everything we do, and our team will work together to guide you through your journey – every step of the way.

**The following are staff who might help you on your journey:**

- **Surgeon:** specially trained in the field of weight loss surgery and has performed many bariatric procedures
- **Psychologist:** provides behavioral health support

- **Nurse Practitioner or Physician Assistant:** coordinates and explains your exams, lab tests, and medications
- **Dietitian:** develops an eating plan with you and answers your questions related to dietary changes
- **Patient Navigator:** guides you through your path to surgery
- **Bariatric Coordinator:** acts as a liaison between the hospital and the clinic
- **Financial Coordinator:** helps confirm your insurance approval

## APPOINTMENTS

Surgeon: \_\_\_\_\_

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Psychologist: \_\_\_\_\_

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Nurse Practitioner or Physician Assistant: \_\_\_\_\_

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Dietitian: \_\_\_\_\_

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Patient Navigator: \_\_\_\_\_

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Bariatric Coordinator: \_\_\_\_\_

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Financial Coordinator: \_\_\_\_\_

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## NOTES

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# Understanding Obesity

Obesity is a treatable disease that involves having an excess of body fat and increases the risk of health problems. There can be many causes of obesity, and it can be difficult to control through dieting alone.

Obesity is defined as having a body mass index (BMI) of 30 or greater and is diagnosed by a health care provider. Obesity is a common condition that affects nearly 40% of Americans.

## Obesity is:

- A disease
- A worldwide health concern
- Multi-factorial
- Treatable and manageable

## Obesity is **NOT**:

- Yours to manage alone
- Only related to diet and exercise
- Cured by miracle treatments

## Body Mass Index (BMI)

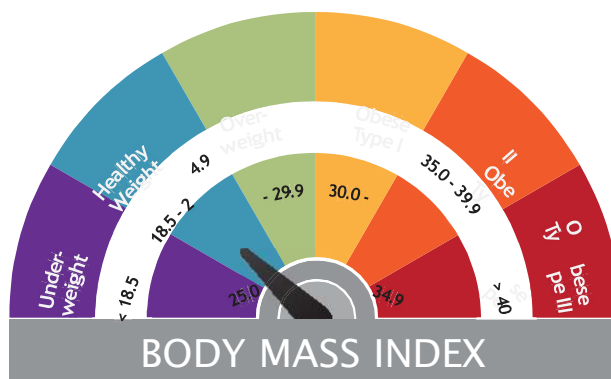
Since body fat can be difficult to measure directly, health care providers use body mass index, or BMI, when assessing obesity. Your BMI is a measure of your weight related to your height – it is not your percentage of body fat. It is one of the tools that health care providers use to assess weight status, but it is not the only factor considered when diagnosing obesity.

## How weight is categorized

**Overweight (BMI of 25.0-29.9):** Having a BMI in the overweight range can be a health concern, especially if it is associated with other health conditions. People who have a BMI in the overweight range and have other health problems (such as Type 2 diabetes or heart disease) should see a health care provider for treatment options.

**Obesity (BMI of 30.0-39.9):** A person is considered obese if their BMI is in this range. Obesity can lead to other health problems. Talk with your health care provider to better understand and treat obesity.

**Severe obesity (BMI greater than 40):** A person who weighs more than 100 pounds over their ideal body weight is considered severely obese. Those who are severely obese are at a much higher risk of developing obesity related health conditions. People with severe obesity should see a health care provider for treatment options.



Find your BMI at [bmi-calculator.net](http://bmi-calculator.net)

# The Causes of Obesity

Obesity is a complex disease in which excessive body fat increases the risk of serious health problems. It occurs when a person's body mass index is 30 or higher. Genetics are the main determinant of weight. Obesity can be influenced by many other things, including diet, lifestyle, behavior, and our environment. The more we understand the causes, the better we can treat obesity.

## DIET, ACTIVITY AND ENVIRONMENT

Examples of environmental factors that make people more likely to gain weight in modern life are:

- Frequent intake of high calorie or processed foods
- Overabundance of unhealthy foods, such as high-fat snacks and sugary drinks
- Large portion sizes
- Limited access to fresh, healthy, and affordable foods
- Limited access to parks, sidewalks, and affordable gyms
- Sedentary lifestyles
- Long commutes to work and desk jobs that limit activity

## LIFESTYLE AND BEHAVIOR

Lifestyle, sleep, and behavioral health can have an impact on weight management. This can be related to:

- Food choices and the amount of food we eat
- Psychological factors such as anxiety and depression that can lead to emotional eating
- Stress can influence the body's ability to accurately recognize and respond to hunger cues and make the body more likely to store fat
- Sleep – people that don't get enough sleep are more likely to be overweight or obese. Hormones that are released during sleep help control appetite and how the body uses energy

## MEDICAL CAUSES OF OBESITY

Prescription medications and hormone imbalances can cause some people to gain weight. Hormones are natural chemicals in our bodies that help us know when we are hungry or full

**Note:** Do not stop taking medications that you think may be causing weight gain without speaking with your health care provider.

# Treatment Options for Obesity

There are several treatment options for obesity. To determine the most effective treatment plan, you and your healthcare team should consider your lifestyle, medical history, and other health factors. Your provider will talk to you about the options below and develop a customized plan that works for you.

## DIET, ACTIVITY, AND EXERCISE

An obesity treatment plan will involve necessary lifestyle modification including healthy, balanced eating habits and regular exercise.

A registered dietitian can help assess your current eating habits and provide suggestions to improve your dietary intake. Focusing on overall nutrition rather than following a specific diet can help you learn new behaviors and improve how you relate to food.

You will learn how to incorporate healthy habits into your everyday life, rather than making extreme changes which can be difficult to sustain.

Your health coach or physical therapist may help you develop an exercise routine to start and keep you active. They can help you create a plan to gradually add exercise into your life.

## LIFESTYLE AND BEHAVIOR

Small changes in your lifestyle and behavior related to food and activity can have a significant impact on weight loss.

A therapist or mental health professional may be able to help you identify any causes for emotional or disordered eating.

## MEDICAL TREATMENT OPTIONS

- Medications, such as GLP-1s, are FDA-approved to treat obesity
- Medications, along with diet and activity can help people lose a great amount of weight
- Medication management: some medications can cause weight gain or make it hard to manage your weight. It is possible that your doctor may change the medication you take to help you lose weight.

To explore how medication may impact your weight, we encourage you to ask your provider.

**Note:** Do not stop taking medications that you think may be causing weight gain. Please speak with your health care provider about your options.

## SURGICAL TREATMENT OPTIONS

In addition to non-surgical options, your provider may recommend weight loss surgery. Surgical options restrict the size of the stomach, limit the amount of nutrients absorbed, and change hunger hormones to promote fullness.

Generally, surgery may be an option if:

- You have a BMI greater than 40
- OR**
- Your BMI is between 35-39 and you have other health conditions (e.g., type II diabetes, high blood pressure)

Many insurance companies have specific requirements. It is important to work with your insurance provider to verify that your plan will cover your surgery.

See pages 7-8 for more information and to learn about the risks and benefits of surgery.

# Understanding Your Surgical Options

Understanding the surgical options available to you allows you to make informed decisions about your health. We encourage you to visit the following websites to review all the options, and then work with your medical provider to decide which option is best for you:

- American Society for Metabolic and Bariatric Surgery: [www.asmb.org](http://www.asmb.org)
- Obesity Action Coalition: [www.obesityaction.org](http://www.obesityaction.org)

## How will I know if I am a surgical candidate?

**You might be a candidate for weight loss surgery if:**

- You have a BMI over 40, or a BMI of 35-39 with obesity-related conditions (such as Type 2 diabetes, high blood pressure, sleep apnea, GERD, or high cholesterol)
- You understand the surgery and associated risks
- Attempts at medical weight loss through lifestyle modification or medication have failed

**You might not be a candidate if:**

- You have a current drug or alcohol problem
- You have unmanaged psychological conditions
- You plan to become pregnant in the next 18 months
- Your surgeon determines that you're not healthy enough for surgery

Talk with your primary care provider and your surgeon to determine if you are a candidate for surgery. They will help to verify if you meet your insurance requirements.

## Surgical Weight Loss Options

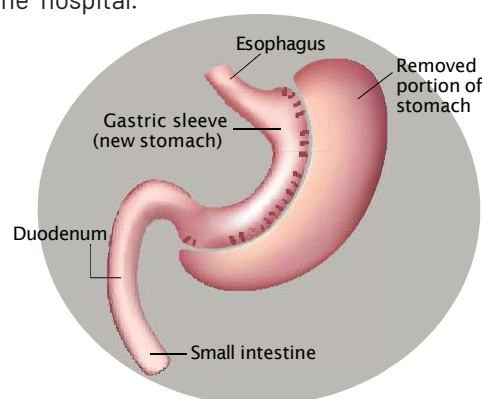
**There are two types of weight loss surgery that are most commonly performed – the sleeve gastrectomy and gastric bypass.** Both surgeries give you a smaller stomach capacity, which limits how much you can eat, leading to weight loss.

These surgeries are performed using a minimally invasive (laparoscopic or robotic) approach. This approach uses a small camera, called a laparoscope, to see inside the abdomen. This allows the surgeon to

operate through several small incisions rather than a large incision. Minimally invasive surgery is less traumatic and leads to less scarring than open surgery, and it usually promotes a faster recovery. Most patients go home the day after surgery.

## SLEEVE GASTRECTOMY

In sleeve gastrectomy, about 75% of the stomach is removed, leaving only a narrow tube, or sleeve, of stomach. No intestines are removed or bypassed. This surgery takes about 45 minutes to two hours to complete and may require an overnight stay in the hospital.



### Benefits:

- Patients feel less hungry and they feel full after eating less food.
- The need for blood pressure or diabetes medications may be reduced.
- Patients can lose 50-70% of their excess weight, on average, in the first 12-18 months.
- Patients are less likely to have "dumping" syndrome (food moving too quickly from the stomach to the intestines) which is more common with gastric bypass.

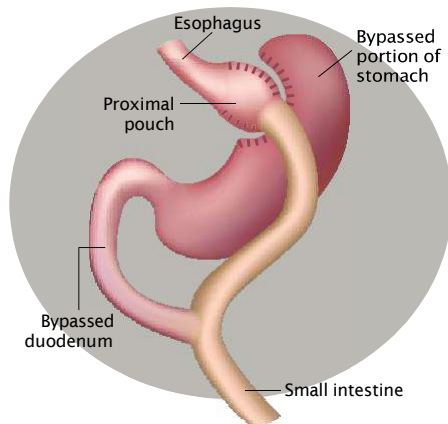
### Risks:

- The risks of surgery may include, but are not limited to, bleeding, leak at the staple line, infection, blood clots, pneumonia, need for additional surgery or death.
- Increased heartburn or worsened acid reflux, which may require medication or additional surgery.
- Potential weight regain, which is a risk with all weight loss procedures

## GASTRIC BYPASS

Gastric bypass, also called Roux-en-Y (roo-en-why) gastric bypass, involves dividing the stomach to create a small pouch (called the proximal pouch) at the top, and rerouting the small intestine so that it connects to the pouch instead of the larger stomach.

This surgery usually takes one to three hours, and patients stay in the hospital overnight.



### Benefits:

- Patients feel less hungry, and they feel full after eating less food.
- The need for blood pressure or diabetes medications may be reduced.
- More likely to reduce the severity of or eliminate your diabetes.
- Patients can lose 60-80% of their excess weight, on average, in the first 12-18 months.
- Long-term weight loss is generally greater with gastric bypass than the sleeve gastrectomy.
- The risk of acid reflux is lower with gastric bypass than the sleeve gastrectomy.

### Risks:

- The risks of surgery may include, but are not limited to, bleeding, staple-line leak, infection, blood clots, pneumonia, need for additional surgery or death.
- "Dumping" (food moving too quickly from the stomach to the intestines) may occur, especially after eating foods that are high in sugar or fat.
- Long-term complications can include strictures, ulcers, hernias, weight regain, vitamin and mineral deficiencies and malnutrition. These long-term complications apply to both sleeve and bypass.

## Less Common Surgical Procedures

- **Adjustable Gastric Band (Lap Band)**  
An adjustable band is placed around the top of the stomach to restrict the entry of food into the stomach.
- **Intragastric Balloon**  
The Intragastric Balloon is a temporary device typically in place for four months. A balloon is inserted through the esophagus and then inflated in the stomach to reduce its capacity.
- **Duodenal Switch or SADI-S**  
Combines a sleeve gastrectomy and a malabsorptive procedure with rerouting the small intestines. Limits the amount of nutrients and calories your body can absorb.
- **Revision procedures**  
Includes removal of lap band and conversion to another procedure, such as sleeve gastrectomy or gastric bypass, or conversion from sleeve gastrectomy to gastric bypass.

### WHICH SURGERY OPTION ARE YOU CONSIDERING AND WHY?

Write down your questions: \_\_\_\_\_

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# Your Patient Pathway

This is a general summary of what to expect during your pathway to surgery.

## STEP 1: ORIENTATION TO WEIGHT LOSS SURGERY

Depending on what is offered in your area, to learn about weight loss surgery, you can:

- Watch an introductory seminar available online.
- Attend an in-person seminar or surgical consultation.

In these sessions, you will learn about:

- The benefits and risks of weight loss surgery.
- The types of procedures offered.
- What to expect before, during, and after surgery.
- The surgical volumes and outcomes related to your procedure at your hospital.

## STEP 2: DETERMINING IF WEIGHT LOSS SURGERY IS RIGHT FOR YOU

Most insurers cover weight loss surgery if:

- Your body mass index (BMI) is at least 40\*
- Your BMI is at least 35 and you have significant weight-related medical problems\*

Two of the world's leading authorities on bariatric and metabolic surgery issued updated evidence-based guidelines for Bariatric Surgery Candidates in October 2022, lowering their BMI requirements for patients to be eligible for bariatric surgery. Their updated guidelines state that surgery may be right for patients with a BMI of at least 35, or of a BMI of over 30 with weight-related medical problems. Most national insurance providers **have not yet agreed** to cover patients under these updated BMI guidelines. If you qualify under these new guidelines but your insurance does not yet cover surgery for you, you are encouraged to share the new guidelines with your employer or human resources department. The consumer's voice is ALWAYS heard the loudest. Providence is continuing to advocate for expanded coverage based on the updated guidelines.

Does your insurance plan cover weight loss surgery?

- You should learn about your eligibility and additional insurance requirements at your first consultation.
- Find out if your plan covers weight loss surgery at Providence hospitals. You can call your insurance company directly, or we may be able to help guide you through the process.
- If your insurance plan does not cover Providence hospitals, talk to us about your other options.

## STEP 3: CONSULTATIONS AND PRE-SURGERY VISITS

Initial consultation. Our programs require a series of evaluations with the weight loss surgery team. The first consultation may include:

- **A comprehensive medical evaluation with a nurse practitioner, physician assistant, or surgeon to:**
  - Review medical history and perform a physical exam.
  - Order labs or imaging tests
  - Order an endoscopy
  - Order medical consults, such as cardiology clearance
- **Consultation with your surgeon to:**
  - Talk about the surgery, alternatives, potential risks, and complications.
  - Answer any questions you may have.
  - In some cases, this may be at the first visit as a part of your comprehensive medical evaluation.
- **A nutrition evaluation with a dietitian, to discuss:**
  - Nutrition recommendations to help you prepare for surgery.
  - Weight loss goals to prepare your body for surgery.
  - Your pre-surgery weight loss goal

(Continued on next page)

# Your Patient Pathway (continued)

## STEP 3: CONSULTATIONS AND PRE-SURGERY VISITS

- Behavioral health evaluation with a psychologist to discuss:
  - Any behavioral health issues that could create barriers to success and safety.
  - The time and energy needed for success.
  - Realistic expectations about behavior changes you may need to make before and after surgery.
  - Concerns about possible changes in mood, body image, or activities after surgery.
  - Other support needs and referrals, as needed, to ensure long-term success.
  - Any other tests or psychological considerations before surgery.
- Pre-surgery visit to:
  - Review your medications and lab results and to provide instructions for before and after surgery from a nurse practitioner or physician assistant.
  - Talk with a dietitian to learn how to eat and what supplements you may need after surgery.
  - Visit the pre-surgery clinic (also called the perioperative or anesthesia clinic) for medical and lab review and pre-surgery information.

## STEP 4: SURGERY

See page 14 for what to expect on your surgery day, as well as immediately before and after surgery.

## STEP 5: RECOVERY AND AFTER-SURGERY CARE

- Your team will continue to work with you to help you reach and maintain your health goals.
- For the first 30 days after surgery, your team – including the nurse practitioner or physician assistant, surgeon, dietitian, and psychologist – will keep in close contact with you regarding your recovery.
- After the first 30 days, you will have regular appointments with the team for the first year. You can plan to schedule these visits on your 3 month, 6 month, and 12 month Surg-A-Versary.
- After the first year, you should follow up with the team every year, or more often if needed. Your yearly check-ups are important to your continued success.
- Weight loss surgery support groups, frequently led by a psychologist, are an important part of your long-term success. Your team will tell you how frequently your local group meets.



# Preparing for Surgery

Your recovery and success after surgery will depend in large part on how well you prepare yourself – physically and emotionally – before surgery. The following recommendations are very important to your success.

## Stop smoking

Using tobacco and other products containing nicotine is very dangerous before and after weight loss surgery. This includes pipes, cigarettes, chewing tobacco, snuff, e-cigarettes, vaping, nicotine gum and patches. If you need help quitting, consult with your primary care doctor.

- If you have recently quit using nicotine: please speak to our team. Your blood or urine will be tested to confirm that you remain nicotine-free.
- If you are currently smoking nicotine or marijuana, you are required to quit before you can move forward in the surgical process.

## Increase physical activity

Increasing physical activity now will help you strengthen your body for surgery, ease your recovery, and establish important habits for weight loss success.

- Create a routine that includes physical activity. Wear comfortable shoes and clothing.
- Be consistent: consistency is more important than intensity right now. If you are not used to physical activity, start slowly – people with obesity are at higher risk for falls, muscle strains, and injury.
- Gradually work up to 150 minutes of activity per week.
- A physical therapy evaluation will be ordered if needed.

## Lose weight if advised

- You may be advised to lose a small amount of weight before surgery. Weight loss can reduce the size of your liver to make surgery safer. Practicing lifestyle behaviors that support a healthy body weight now will also ease your transition to life after surgery.
- Your team will work with you to determine your weight loss target.

## Practice healthy meal planning

### Choose whole foods. Avoid highly processed foods.

- Shop the perimeter of the store.
- Use fresh ingredients.
- Rely less on restaurant and take-out meals.

### Distribute calories evenly throughout the day.

- Don't skip meals. Four to six mini meals per day.
- Don't eat when you're not hungry (e.g., don't eat just because you can or you're "allowed to").
- Avoid snacking or mindless eating.
- Don't eat large portions or high-calorie foods at the end of the day.
- Eat slowly, chew food thoroughly, and enjoy each bite.

### Plan and prepare meals.

- Make a menu weekly, or for several days at a time.
- Prepare a grocery list that supports your menu.
- Make time to prepare meals.

### Balance your plate.

- Make half of your plate low carbohydrate vegetables, a quarter lean protein and a quarter other carbohydrates (see page 23 for more details on "the plate method").
- Include at least one serving of produce in each meal – more is better.
- Limit added fats (oils, butter, sauces, gravy, and salad dressing) to two servings per day.
- Avoid added sugars (candy, pastry, ice cream, fruit juice, etc.)

# Preparing for Surgery (continued)

## Practice good hydration.

- Drink 48-64 ounces of calorie-free fluids daily.
- Avoid carbonated beverages – especially those that contain calories.
- Limit caffeine to 1 serving daily.
- Practice sipping fluids slowly – your stomach won't be able to take in large gulps of liquids after your surgery.
- Avoid alcohol.
- After surgery, avoid drinking anything with meals or within 30 minutes of eating. If this sounds like it might difficult, start practicing now.

## Consider your relationship with food

Weight loss surgery changes your stomach and the ability to eat large portions of food, but it does not change your emotional connection to food. Your evaluation with the psychologist can help you understand your relationship with food.

- Start keeping a journal of your daily food intake and physical activity.
- Clear your home of foods and drinks that are unhealthy or that trigger your cravings.
- Eat at the table with no TV, computer, or books. Focus on your meal and recognize the feeling of being full.
- Practice staying on your eating plan at special events such as parties and gatherings where overeating typically occurs.
- Consider whether food is integrated into your relationships and reflect upon how this surgery may change your relationships with loved ones.

Practice the pre-surgery nutrition recommendations beginning on page 22.

## Monitor your food intake, exercise, and weight

- Keep track of your diet. Record everything you eat and drink from the time you enter the program until you have surgery.
- Use an application (such as Baritastic or another food tracking app) recommended by the surgery team.
- If you are unable to use an app, you may use a notebook to record the dates and times of day when you eat, what you eat and drink, and your portion sizes.
- Measure foods with measuring cups and spoons for accuracy. A food scale is helpful to be more precise but isn't necessary.
- Monitor your weight without becoming fixated on the number. Once a week is enough.
- Track purposeful exercise. Note the type of exercise and the duration.

## Manage your diabetes

Elevated blood sugar can impair wound healing after any surgical procedure. If your diabetes is poorly controlled, our team will work with your diabetes care provider to improve it.

- Take your diabetes medications as prescribed.
- Test your blood sugar routinely – the changes you make in your diet may increase your risk of low blood sugar.
- Know how to recognize the symptoms of low blood sugar and carry treatments with you.

### 30 DAYS BEFORE SURGERY

- Request time off work and discuss Family and Medical Leave Act paperwork with your employer.
- Out-of-town patients: make plans to stay locally after your surgery and for your post-operative appointment.
- Continue your weight loss efforts right up to your surgery date.
- Arrange for any post-surgery help that you may need at home for yourself, your family or your pets.
- Stock your kitchen with foods that support the Phase 1 post-operative diet plan developed by your dietitian (see page 27).
- Tell your provider if you are using steroids.
- Stop taking estrogen-containing birth control or hormone replacement medications and discuss alternatives with your primary care provider.
- Make sure that you have a perioperative clinic appointment.

### TWO WEEKS BEFORE SURGERY

- Stop all weight loss medications (appetite suppressants) and any non-prescription supplements.
- Purchase the vitamin, protein, and mineral supplements recommended by your team.
- Begin diet instructions for two weeks before surgery (see page 25) if advised by your dietitian.

### ONE WEEK BEFORE SURGERY

- Stop taking aspirin or blood thinners seven days before surgery or as advised by your surgeon or doctor. (Patients with cardiac stents may continue low-dose aspirin.)
- Fill all prescriptions that you'll need after surgery. You may need a new prescription for any enteric-coated or extended-release medications that you normally take. Contact your primary care provider before surgery to arrange these changes.

- Make sure that your post-surgery follow-up appointment is scheduled.
- Review all before-surgery and after-surgery instructions.
- Stop all NSAIDs – Aleve, Advil, Motrin, ibuprofen, Excedrin and other anti-inflammatory medications. You may continue taking Tylenol (acetaminophen).
- Call your doctor's office with any questions.

### THE DAY BEFORE SURGERY

- Follow the instructions that you were given in your perioperative clinic visit.
- Take ONLY the medications that your medical team instructs you to take today.
- Be available by phone in case the surgeon, hospital, or anesthesiologist needs to reach you.
- Write down your measurements on page 37 of this booklet, and/or take a photo of yourself. You may want these later as a reminder of your progress.
- Follow the diet instructions for the day before surgery that your hospital gives you. These will include details on when to stop eating or drinking the night before, as well as when you are allowed to have clear liquids (such as water, black coffee or tea, and sugar-free sports drinks or jello).

# Surgery Day

## Before you arrive at the hospital

- You may be given specific instructions by your bariatric surgeon on what you can consume leading up to surgery. It is important to follow these instructions closely.
- Take only the medications that your medical team tells you to, with a small sip of water.
- Patients with Sleep apnea: bring your CPAP machine with you to the hospital. Write your name on your machine.
- Wear comfortable clothes to the hospital. Include shoes that are supportive but easy to take on and off. Women might consider bringing a soft bra or sports bra to wear home, so it won't rub on the incisions.
- Bring your toothbrush, comb/brush, eyeglasses, lip balm, comfortable pillow, and denture container.
- Make sure you have a support person with you.
- Bring only your driver's license or government-issued ID and insurance card with you. Other items may be brought in once your room has been assigned after your surgery.
- Leave valuables, medications, credit cards, and jewelry at home or with your family.
- Please arrive ON TIME.

## At the hospital

- Go to registration to check in and get your ID band. You will need your photo ID and insurance card.
- You will be directed to the pre-operative waiting area.
- Your team will check your vital signs and place an IV line.
- We will ask you several questions about the timing of your last solid meal, liquids, and medications.
- You will change into a hospital gown and will give all removable items (such as jewelry, dentures, contact lenses, artificial limbs, and insulin pumps) to a support person.

- Your hospital will give you specific guidance on visitors and support persons. Many hospitals allow you to bring one or two support persons with you to the hospital.
- Your operating room nurse, anesthesiologist, and surgeon will talk to you before your surgery.
- You will sign consent forms for surgery and anesthesia.
- You and your support person will have an opportunity to ask questions.
- We will let your support person know how to track your progress through surgery, including how to know when your surgery is done, and when staff is ready to speak with them.

## Surgery and recovery

### Sleeve gastrectomy

This surgery usually takes about 45 minutes to two hours, followed by 45-90 minutes in the recovery room.

- Most patients are up and walking within two to four hours after surgery.
- Most patients can have water, then clear liquids within the first 12 hours.
- Most patients are discharged the next day.

### Gastric bypass

This surgery usually takes about one to three hours, followed by 45-90 minutes in recovery.

- A drain and/or urinary catheter may be in place after your surgery. If so, you will be given information on how long they may stay in place.
- Most patients are up and walking within two to four hours after surgery.
- Most patients can have water, then clear liquids within the first 12 hours.
- Most patients are discharged the day after surgery. Multiple-day stays are rare, but they may happen.

## While you're in the hospital

### Walking after surgery

You'll be asked to get up and walk during your recovery, starting on the day of your surgery. This is required and can benefit you in many important ways, including:

- Lowering your risk of complications, such as blood clots and pneumonia
- Helping to reduce nausea, pressure from the stomach, and distention (swelling of your abdomen)
- Reducing stiffness and soreness from surgery

### Monitors

You will be connected to monitors to measure your heart rate, breathing rate, and oxygen levels. These

monitors will beep sometimes and can be annoying; however, it is important not to disconnect them – they are for your safety.

### Your IV

You may have an IV in place until you are ready for discharge. It will be removed before you go home.

### Incisions

Your incision sites will be closed with dissolvable stitches inside and glue or Steri-Strips on the outside. DO NOT peel the glue or scrub or soak the incision sites until they heal completely. You may shower one day after surgery unless your surgeon indicates otherwise.

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# Recovery at Home

## WHEN TO CALL YOUR DOCTOR

If you have questions or concerns after your surgery, call your surgeon's office or the hospital. If you think it's an emergency, call no matter the time, and let us know if you are planning on going to the emergency department. In addition, call our office immediately if you experience any of the following issues:

- Fever over 101.5°
- Severe nausea and vomiting or abdominal pain
- Redness or drainage from your incision
- Swelling and/or pain in your legs or calves
- Chest pain
- Shortness of breath
- Inadequate pain control
- Bloody stools
- Severe lightheadedness

## THE FIRST TWO WEEKS: controlling pain and other symptoms

### Pain

Most patients are sore for several days and improve a little each day, particularly at the site of surgery. Shoulder pain is common and should get better each day; changing position may alleviate this pain. If shoulder pain persists, or increases, this may indicate a more serious health issue and you should call your doctor to see if you need to seek care more urgently. It is normal to experience some abdominal tenderness and discomfort. Contact your surgeon if your pain increases. Here are some tips to control pain:

- In most cases, taking over-the-counter acetaminophen (Tylenol) as directed on the package will keep pain under control. If it doesn't, use the prescription pain medication prescribed by your surgeon. Please follow the medication instructions carefully.

## Recovery at Home (continued)

Bariatric patients should NOT take NSAIDs. These include ibuprofen (Advil, Motrin), naproxen (Aleve, Naprosyn), indomethacin (Indocin), celecoxib (Celebrex), meloxicam (Mobic), and ketorolac (Toradol). Contact your surgeon's office if you have been prescribed NSAIDs.

- Maintaining the recommended physical activity will help decrease your discomfort and pain. Ensure you are following your surgeon's recommendations for physical activity.
- Always follow your surgeon's recommendations and advice first. Do not take medications without consulting them. There might be a reason your surgeon doesn't want you to take a certain medicine.

### Constipation

Opioid pain medication, along with a high protein diet, can cause constipation in some patients after surgery. If this is an issue for you:

- Your surgeon will recommend a stool softener and soluble fiber to ease constipation. It is important if you are consuming soluble fiber to maintain adequate water intake (64 ounces per day).
- If more than three days go by after surgery without a bowel movement, call your surgeon's office.

### Nausea and Gas

Use the medications that are recommended or prescribed to control nausea and gas. In addition, these measures can be helpful:

- Sip drinks slowly and be careful not to guzzle or gulp.
- Don't move to the next phase of your diet ahead of schedule.
- Make sure that the liquids you drink have no added sugar.
- Avoid caffeine and carbonated drinks.
- Contact your surgeon if symptoms persist.

### Hydration

It is important to maintain the proper level of hydration after surgery. The goal is 64 ounces of fluid per day. If you are not able to consume at least 48 ounces of water per day, call your surgery team.

## Medications and Supplements

### Post-operative medications

You may be given several post-operative prescriptions to fill before your surgery. These are the medications and how to use them:

- **Prescription pain medication:** Take every 4-6 hours as needed for pain (see "Pain," page 15).
- **Ondansetron (Zofran):** Take as needed for nausea. This medication dissolves under your tongue.
- **Simethicone (Gas-X):** Take as directed for gas pain. This is an over-the-counter medication, no prescription needed.
- **Omeprazole (Prilosec):** Take daily as directed, regardless of symptoms, to prevent ulcers and reflux. Take this medication daily for 180 days. Open capsules and mix contents with 1 ounce water to take.
- **If prescribed:** Start taking ursodiol (Actigall) if your surgeon prescribed this for your gallbladder. This may not be prescribed until six weeks after your surgery.
- **If prescribed: Hyocyanine (Levsin):** Take as needed for esophageal or stomach spasms.
- If you are taking medications to prevent blood clots (Such as Coumadin or Lovenox), then get specific instructions from your surgical team on what medications are safe and when to start or stop taking them.

### Your usual prescription medications

Resume taking your usual prescription medications unless you have been told not to. **Please note:**

- You may need to crush your pills for three to four weeks after surgery unless they are smaller than your pinky fingernail. Some medications cannot be crushed. Ask your provider before your surgery to be sure that your current medications can be crushed.

- Do not take any medication for sleep or anxiety while taking prescription pain medications.
- Do not restart estrogen-containing birth control or hormone replacement medications until 1 month after surgery. Use alternative birth control methods.
- Do not restart diuretic medications (HCTZ, Lasix, spironolactone, etc.) unless your surgical team told you to when you were discharged.
- Take your other usual medications - such as thyroid medication, antidepressants, gout medication, etc. - as directed at discharge.
- If you had gastric bypass surgery, continue to avoid NSAIDs and aspirin. Discuss the risks and benefits with your surgeon if you need to take these medicines.
- **Follow up with your primary care provider within a month of surgery to discuss medication management.** Be sure to tell any physician who prescribes medications for you that you have had weight loss surgery so that the physician can take this into consideration.

### Vitamins

Begin taking your bariatric multivitamin as instructed following surgery. You may start with half the dose and increase as you are able. You should be able to tolerate the full dose by the end of two weeks.

### Cleaning and Showering

- You will be able to shower starting the day after your surgery unless your surgeon indicates otherwise.
- Keep your wounds clean and dry.
- Light showering is usually OK, but do not scrub your wounds or peel the glue or Steri-Strips - they will come off naturally in about 5 to 10 days.
- Don't soak in a tub (including hot tubs and pools) for the first 1 month or until your incisions are healed.
- Do not use ointments, creams, or lotions.

### Exercise

Start walking right away. Try to walk six to eight times a day for 10 to 15 minutes each walk, working your way up to a mile per day. Hold off on more aerobic activity for two weeks and avoid abdominal crunches and weightlifting for six weeks.

## 10 reasons to exercise

- 1 It speeds your recovery.
- 2 It increases your rate of healing.
- 3 It helps you get in and out of bed, and up and down from chairs easily.
- 4 It improves your energy.
- 5 It helps to control your appetite.
- 6 It increases your flexibility and muscle tone.
- 7 It lowers your blood pressure.
- 8 It improves your sleep.
- 9 It enhances your heart and lung health.
- 10 It prepares you for positive, lifelong changes.

## Recovery at Home *(continued)*

### Other activity

- Incentive spirometer: Use your incentive spirometer several times after each walk. Try to use it every hour that you are awake for the first week after surgery.
- Sitting vs. lying down: Sit up most of the day and don't lie down except to sleep at night.
- Driving: Don't drive until you have stopped taking prescription pain medication.
- Stairs: You may climb stairs.
- Return to work: The general recommendation is to wait two to three weeks after gastric bypass or gastric sleeve surgery to return to work.
- Traveling: Avoid long travel for the first 30 days unless you have been told otherwise.

### Support groups and nutrition classes

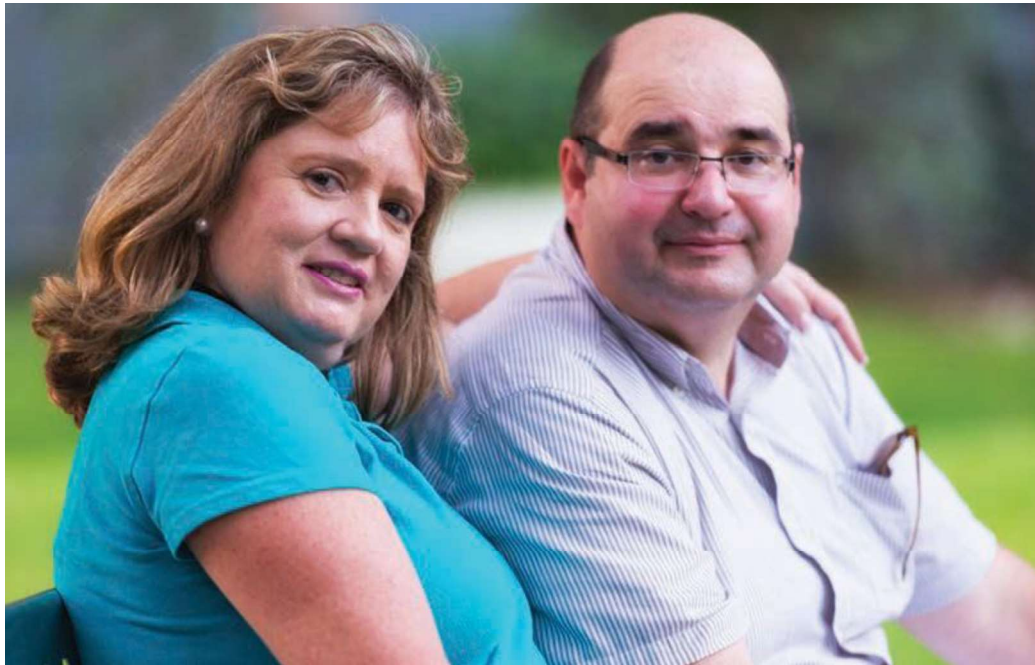
Be sure to attend post-operative support groups and classes to further your success after surgery. You can start at any time – the sooner the better! Check with your office for times and details.

### Eating

***Practice the pre-surgery nutrition recommendations beginning on page 22.***

### Standard follow-up visits

Those who come to follow-up visits have greater success throughout their lifetime. You will need to visit your surgical team regularly following the surgery to ensure you are successful. You can plan to schedule these visits on your 3 month, 6 month, and 12 month Surg-A-Versary. Your team is available in between appointments as well.



# Tips for the Long Term

## IMPORTANT: ALL HEALTH CARE PROVIDERS NEED TO KNOW ABOUT YOUR SURGERY

- Tell all your health care providers that your stomach has been surgically reduced.
- Never have a nasogastric tube placed (a tube in your nose to drain your stomach) until the doctor treating you has spoken to one of our surgeons.

## Symptoms of eating or drinking too much

- Chest fullness or pressure
- Sensation of food “getting stuck”
- Frothy sputum (saliva and mucus) or heartburn
- Vomiting food or liquid right after eating or drinking

## Tips to avoid nausea and vomiting

Make sure to take your acid-reducing medication as directed by your surgical team, and avoid the behaviors below that can cause nausea and vomiting:

- Eating or drinking too much: Stop eating when you feel content, but not full.
- Eating or drinking too fast: Take your time when eating and take at least 30 minutes to finish a meal.
- Eating and drinking at the same time: Remember to stop drinking liquids 30 minutes before your meal and wait 30 minutes after your meal before you resume drinking fluids.
- Not chewing food thoroughly: Chew each bite at least 25 times before swallowing.
- Lying flat too soon after a meal: Wait a minimum of 2 hours before laying down after eating.
- Not drinking enough water and becoming dehydrated.
- Not following your post-operative diet: Make sure you are advancing your diet slowly after surgery, week by week.

## Dumping syndrome

“Dumping syndrome” can occur after gastric bypass surgery, and less commonly after gastric sleeve surgery. This occurs when sugars, starches or fatty foods move from the stomach to the intestines too quickly. Symptoms may include:

- Nausea and vomiting
- Diarrhea
- Abdominal cramps
- Flushing
- Dizziness
- Sweating
- Significant fatigue

Fortunately, dumping is preventable by avoiding sugary and fatty foods. If you experience an episode of dumping, it is important to document what you ate and how much you ate. This will help you avoid trigger foods in the future.

## Diarrhea

Diarrhea is usually temporary, but if it occurs more than three to four times a day or lasts more than one day, contact your surgeon’s office.

## Gas and bloating

To reduce gas and bloating:

- Avoid gas-producing foods.
- Chew your food thoroughly.
- Avoid carbonated beverages.
- Avoid drinking liquids with a straw.
- Avoid chewing gum.
- Eat and drink slowly – avoid gulping when drinking liquids.
- Take simethicone (Gas-X or other brands) if excess gas is a problem.

## Tips for the Long Term (continued)

### Constipation

Constipation can occur when you are not drinking enough fluid or getting enough activity. Make sure you are meeting your fluid goals and staying active. If you experience constipation, the following may help:

- Drink plenty of fluids. Stick to non-carbonated, non-caffeinated, sugar-free fluids. Water is always best!
- Get plenty of exercise.
- Do not eat gummies of any kind.
- Take over-the-counter medicines approved by your surgeon, such as: Colace and MiraLAX as directed.
- Make sure you are getting the fiber your body needs through complex carbohydrates and vegetables. Be cautious with fiber supplements.
- If you are interested in soluble fiber supplementation, such as Benefiber, make sure to contact your surgical team first. Fiber supplements can be harmful, especially right after surgery.
- Remember, for fiber to work, it needs fluid! Make sure you are meeting your hydration goals.
- Please contact your surgical team if it has been more than three days since your last bowel movement.

### Hair loss

Anesthesia, rapid weight loss, poor protein intake, vitamin deficiencies, and the overall stress of surgery can contribute to hair loss. Hair loss typically occurs during the first 6 months after surgery and gradually tapers off.

The following may help prevent or slow hair loss:

- Meet your recommended protein goals.
- Take your recommended bariatric vitamins.

### Mood changes

- While bariatric surgery and weight loss often lead to improved mood, some patients experience anxiety, depression, irritability, and other mood changes.
- Many factors can affect your mood after weight loss surgery, including changes in your relationship with food, changes in your relationships with loved ones, and dissatisfaction with your body image.
- Changes in mood can reduce your motivation to follow your diet, exercise, and medication recommendations.
- If changes in your mood feel difficult to manage, seek support from a mental health professional.
- Support groups are also helpful as you navigate the changes associated with surgery. Contact your surgical team to find out more about bariatric patient support groups.

### Alcohol, opioids, and transfer addiction

#### Alcohol

After weight loss surgery, you should not drink alcohol for at least one year. Ideally, you should never drink alcohol again. Here's why:

- After weight loss surgery, alcohol is absorbed much faster, and even a very small amount (such as a few tablespoons) may cause your blood alcohol level to reach or exceed the legal limit in less than 15 minutes.
- Alcoholism rates are higher in people who have had weight loss surgery.
- The empty calories in alcohol can impede your weight loss efforts and cause weight re-gain.
- The high sugar content in alcoholic beverages can lead to dumping syndrome.

#### Opioids

Do not use opioids except to treat acute pain after surgery. Recent studies show that opioids are absorbed much faster in people who have had weight loss surgery.

## Smoking

Avoid smoking and nicotine products due to risk of complications and potential damage to your stomach pouch.

## Transfer addiction

Transfer addictions occur when a person replaces one vice, such as dysfunctional eating, with another, such as alcohol, opioids, smoking, or risky social behavior. If you are concerned that you might be at risk for this, talk to your weight loss team and seek counseling from the psychologist.

## Pregnancy and Fertility

It is highly recommended that women avoid pregnancy for at least 12-18 months after weight loss surgery. Birth control pills may not be as effective after your surgery, because you may not absorb them as well. Talk to your doctor about alternate options and use a backup birth control method to avoid pregnancy during this high-risk time. Here are some important things to know about fertility and pregnancy after weight loss surgery:

- Rapid weight loss and drops in estrogen levels may cause unpredictable ovulation in patients with previous infertility issues, such as polycystic ovary syndrome or perimenopause.
- Fertility for both men and women often increases quickly and significantly as weight loss occurs.
- Higher rates of miscarriage and birth defects have been seen in pregnancies that occur before a mother is able to eat enough to support the nutritional needs of her fetus and herself.

If you do become pregnant, or when you are ready to try:

- Make sure to tell your OB/GYN that you've had weight loss surgery and encourage your OB/GYN to discuss it with a bariatric expert.
- Depending on the type of surgery you had, you may not be able to absorb certain prenatal vitamins very well – higher dosages may be recommended.

- The glucose-challenge test to check for gestational diabetes may not be well tolerated after weight loss surgery, due to the sugar load and high volume.
- Talk to your surgeon or OB/GYN to discuss which alternatives can be used to evaluate your glycemic control.

## Tips for eating at restaurants

Going to a restaurant after bariatric surgery can be a very different experience. Here are some strategies to help you navigate eating out after surgery:

- Look online to view the menu before you go and choose what you'll order.
- Many restaurants list calories per meal or offer nutrition facts – take time to choose the healthiest option!
- Ask that bread or chips not be brought to the table.
- Choose dishes with lean proteins, complex carbohydrates, and vegetables.
- Ask for all dressings and condiments to be brought on the side.
- Choose foods that are baked, grilled, steamed, or roasted.
- Plan to take most of your meal home in a to-go container.

## Tips for navigating social events

- Don't go to a party hungry. This can lead to overeating.
- Bring a healthy dish to share.
- Focus on socializing and making conversation with people instead of the food being served.
- If you are attending a wedding or formal event, try to find out what food will be served before you go so you can plan your meal better.
- If the event has a buffet, scan it for the healthiest selections and keep your portion size appropriate.

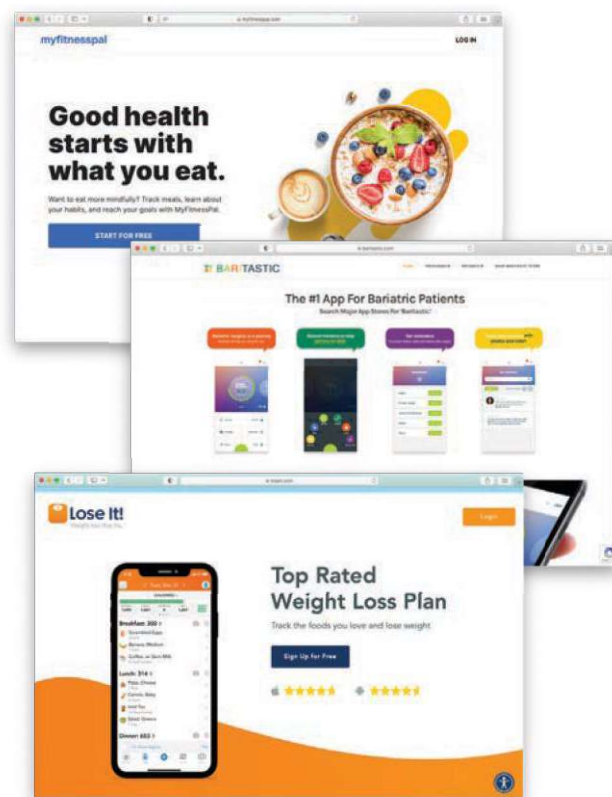
# Nutrition | Before Your Surgery

The time before surgery is a unique opportunity to practice the lifestyle behaviors that will improve your post-operative weight loss success. Practicing new behaviors now will help you build skills and confidence that will make your transition to your new, post-surgery lifestyle much easier and more successful. Embrace this time and take advantage of the support of your surgery team to prepare for a healthy future.

Rather than prescribing a specific diet, we recommend that you focus on healthy lifestyle behaviors that are relevant to you. Your dietitian will work with you at your initial visit to prioritize the weight management behaviors that will best prepare you for life after surgery. Many people find this behavioral approach effective for weight loss; however, if you prefer a more structured approach, see the “plate method” and the low-calorie eating patterns described on page 23.

## Weight management behaviors

- Track diet and exercise daily (required) – try free diet-tracking apps such as MyFitnessPal, Baritastic, Lose It!, Lifesum or MyPlate Calorie Counter.
- Attend monthly scheduled dietitian visits (required).
- Reduce and eventually eliminate sugary beverages.
- Reduce reliance on carbonated, caffeinated, and alcoholic beverages, or eliminate them prior to surgery.
- Hydrate consistently with non-caloric beverages.
- Sip liquids – don’t gulp.
- Limit dining out, takeout, and fast food. Practice making balanced, fulfilling meals at home.
- Reduce your intake of processed foods.
- Increase the variety and amount of produce you eat. Goal: three cups or pieces daily.
- Reduce fat in your diet. Goal: no more than 30% of total calories from fat.
- Reduce added sugars. Goal: no more than 10% of total calories from sugar.
- Distribute calories evenly throughout the day.
- Avoid grazing (eating small amounts of food throughout the day).
- Eat slowly! It can take your brain up to 20 minutes to realize you are feeling full.
- Use mindful eating techniques:
  - Avoid distractions when eating
  - Evaluate hunger before eating
  - Evaluate fullness and stop eating when no longer hungry
  - Use smaller plates and bowls
- Take recommended vitamin and mineral supplements consistently:
  - Multivitamin
  - Vitamin D
  - Calcium
  - Vitamin B12
- Include regular physical activity in your routine. Goal: 150 minutes per week.



## The Plate Method

The plate method is a simple way to plan meals, control portions and ensure balanced nutrition. To follow the plate method, divide your meals like this:

### Half of your meal: low carbohydrate vegetables

- Eat a variety of colors and types of low-carbohydrate vegetables for the best nutrition benefits.
- Most vegetables are low in carbohydrates, except for starchy vegetables like potatoes, corn, peas, and legumes (dried beans and lentils).

### One-quarter of your meal: other carbohydrates

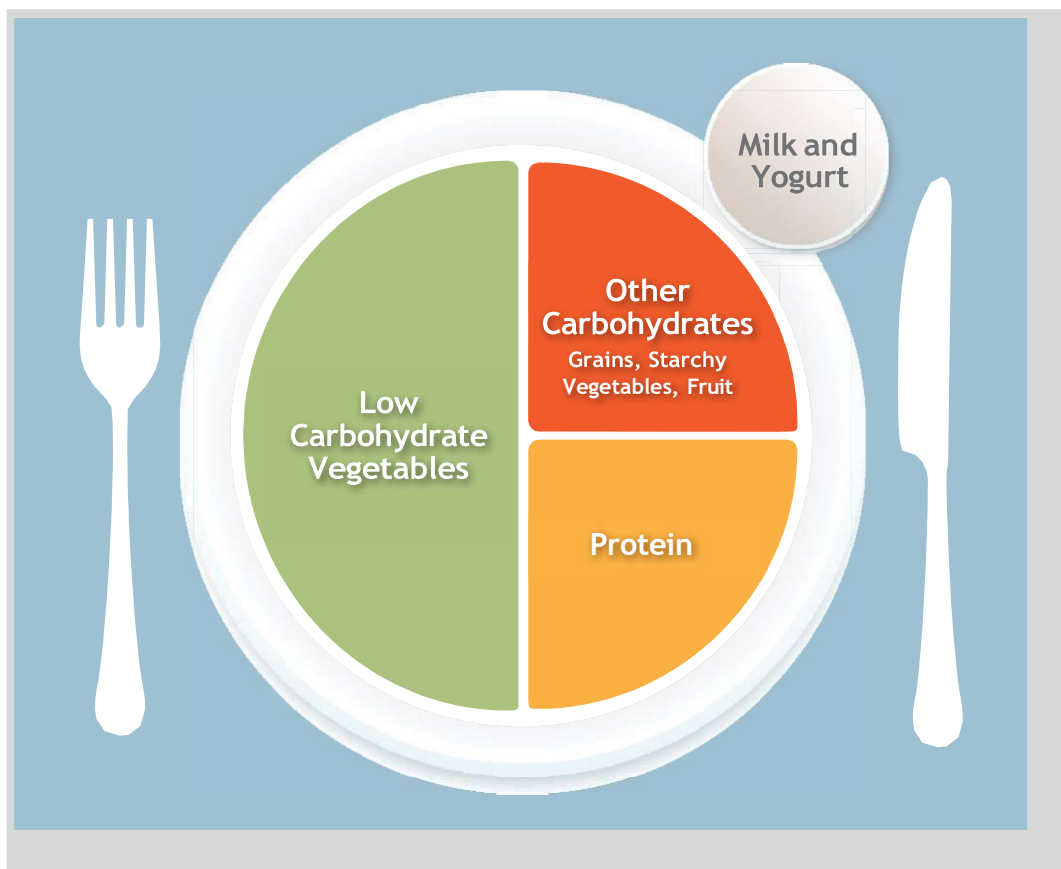
- Choose whole grains, low-fat dairy (milk, yogurt), fruit, and starchy vegetables (potatoes, corn, peas and legumes).
- Avoid fruit juice and added sugars such as dessert-type foods.

### One-quarter of your meal: proteins

- Fish, shellfish, lean poultry, lean beef, or pork tenderloin.
- Lean ground turkey breast, extra-lean ground beef, egg whites, whole eggs, tofu, meat alternatives, and tempeh are all good choices.
- Remove visible fat and poultry skins.

### Fats (not seen on diagram)

- Choose plant fats (olive oil, avocado, nuts/seeds, low-fat salad dressing).
- Limit animal fats (butter, high-fat dairy, cheese).
- Aim for less than 3 tablespoons per day.



# Nutrition | Before Your Surgery (continued)

## Reduced calorie eating pattern

This diet plan is intended to improve and limit your food choices, reduce your calorie intake, and help you practice skills that support a healthy lifestyle long term. If you eat foods from all the food groups at each meal, the diet will supply about 2,000 calories daily. Your dietitian can help you adjust the diet for your calorie and weight loss needs. You should start this nutrition plan right away to work toward losing weight before your bariatric surgery, as well as to develop healthy eating patterns that you can continue afterward.

### Guidelines:

- Eat three meals per day.
- Choose up to one serving from each food group (suggestions below) to make up your meals. You may choose to leave out a food group at a meal, but do not add servings to later meals.
- Eat slowly and chew food thoroughly. Meals should take at least 20 minutes to eat.
- Drink two protein shakes per day as snacks. Protein shakes should include:
  - 20-30 grams of protein
  - Less than 25 grams total carbohydrates
  - Less than 5 grams total sugars
  - Has 0 grams added sugars
  - Less than 170 calories
- Maximize vegetable servings to stay full. Vegetables are high in volume and low in calories.
- Prepare meals with minimal added fats. Avoid gravies, sauces, cheese, butter, etc.
- Use healthy cooking methods such as baking, grilling, broiling and steaming.
- Practice mindful eating: avoid distractions such as TV or computers so you can be present when eating and savor your meal.
- Aim for 64 ounces of hydrating fluids daily. Choose calorie-free, caffeine-free, non-carbonated beverages. Black coffee and tea are OK but they are not hydrating liquids.

### Food groups for a reduced calorie eating pattern

PROTEIN	MILK	FRUITS	VEGETABLES	STARCH
3 oz. or equivalent	1 serving	1 cup or 1 piece	1-3 cups	1 serving
<ul style="list-style-type: none"> <li>• Fish</li> <li>• Shellfish</li> <li>• Pork tenderloin or loin chops (fat trimmed)</li> <li>• Poultry, white or dark meat, skin removed</li> <li>• Lean ground turkey breast</li> <li>• Extra-lean ground beef</li> <li>• 1 egg</li> <li>• ½ c liquid egg (egg whites)</li> <li>• Tofu or tempeh</li> </ul>	<ul style="list-style-type: none"> <li>• 5-6 oz. nonfat, light yogurt (Greek or high-protein yogurt preferred)</li> <li>• 1 c nonfat or 1% low-fat milk</li> <li>• 1 c unsweetened plant-based milk</li> <li>• ½ c nonfat or low-fat cottage cheese</li> </ul>	<ul style="list-style-type: none"> <li>• All fresh fruits</li> <li>• Canned fruits in fruit juice or water only</li> <li>• Frozen fruit without added sugars</li> <li>• Avoid dried fruit</li> </ul>	<ul style="list-style-type: none"> <li>• All low carbohydrate vegetables, fresh or frozen (without added ingredients)</li> <li>• Limit canned vegetables due to high sodium</li> <li>• Does not include: potatoes, peas, corn or legumes (these are in the starch group)</li> </ul>	<ul style="list-style-type: none"> <li>• Choose whole-grain versions of the following:</li> <li>• 1 slice bread (1 oz.)</li> <li>• ½ c cold or hot cereal</li> <li>• 1/3 c pasta, rice, quinoa or other cooked grains</li> <li>• 6-inch corn tortilla</li> <li>• ½ c starchy vegetables (potatoes, peas, corn or legumes)</li> </ul>

#### FATS: 2 SERVINGS PER DAY

1 serving is: 1 Tbsp light margarine or butter, 2 Tbsp low-fat salad dressing, 10 whole nuts, 1.5 Tbsp light cream cheese, ¼ small avocado or 1 tsp oil (canola, olive, grapeseed, peanut or avocado)

## Nutrition | 2 weeks prior to surgery

What you eat two weeks before surgery is known as the liver-shrinking diet. There are two reasons why this diet is important. First, weight loss effectively shrinks the liver. The liver sits over the area of the stomach where your surgery will be performed so a smaller liver makes the surgery easier and safer.

Second, this diet gives you the opportunity to do a trial of the protein shake product that you will use after surgery. This is the time to make sure you have selected a protein shake that suits your taste.

You should start this diet in the two weeks immediately before your surgery unless your surgeon or dietitian says otherwise.

Liver Shrinking Diet - Sample Meals		
All meals listed serve one. Protein(PRO), carbohydrate(carb)& calorie (cal) are subject to change depending on the food and tracking device.		
<b>Peanut Butter Shake</b> 1 scoop protein powder (20g or more protein, 10g or less carbs) 4 oz silk soy milk, unsweetened 2 Tbsp PBfit	<b>Mediterranean Omelet</b> 2 eggs ¼ cup chopped tomato ¼ cup chopped spinach 2 tsp pesto 2 tsp grated parmesan cheese	<b>Jimmy Dean Turkey Sausage and Eggs</b> 3 turkey sausage links 2 eggs, scrambled 1 Tbsp chopped onion, cooked
<b>27g PRO, 18g carb, 268 cal</b>	<b>17g PRO, 4g carb, 200 cal</b>	<b>28g PRO, 5g carb, 270 cal</b>
<b>Seeds on a Log</b> 2 Tbsp sunflower seeds 4 Tbsp cream cheese 2, 4" long celery sticks	<b>Cheese and Meat Roll-up</b> 1 low-fat string cheese 3 slices fat-free deli turkey or chicken	<b>Blueberry Blast Smoothie</b> Blend all ingredients: 1 scoop Nectar Vanilla Protein Powder ½ cup blueberries 4 ice cubes 4 oz water
<b>6g PRO, 7g carb, 282 cal</b>	<b>17g PRO, 2g carb, 150 cal</b>	<b>23g PRO, 15g carb, 90 cal</b>
<b>Chicken Salad</b> ½ Costco can of chicken ⅓ cup slivered almonds ¼ medium apple, chopped 1 Tbsp chopped celery 2 Tbsp Skinny Girl Dijon salad dressing 1 cup packed fresh spinach	<b>Taco Lettuce Wrap</b> 3 oz ground turkey Taco seasoning 3 romaine lettuce leaves 1.5 oz shredded cheddar cheese 3 Tbsp tomato salsa	<b>Canadian Bacon Omelets</b> 4 egg whites 2 slices Canadian bacon, diced 2 Tbsp chopped spinach 1 oz shredded cheddar
<b>29g PRO, 18g carb, 315 cal</b>	<b>31g PRO, 4g carb, 235 cal</b>	<b>28g PRO, 1g carb, 192 cal</b>
<b>3 Bean Salad</b> ¼ cup kidney beans ¼ cup chickpeas ¼ cup green beans ¼ red onion diced 1 Tbsp vinegar 1 Tbsp olive oil	<b>Back to Basics</b> 2 hardboiled eggs ½ cup blueberries	<b>Gone Nutty</b> 2 Tbsp Nut butter 2, 4" long celery stick
<b>7g PRO, 16g carb, 250 cal</b>	<b>14g PRO, 14g carb, 160 cal</b>	<b>8g PRO, 9g carb, 210 cal</b>

# Nutrition | After Your Surgery

## What to expect following surgery

Both the gastric bypass and sleeve gastrectomy surgeries promote weight loss by limiting the volume of food you can eat. This is called a restrictive procedure. Imagine your stomach size changing from the size of a football to a walnut or banana! In addition, the gastric bypass procedure bypasses the first part of the small intestine, where much of your food is absorbed. Due to the nature of these surgeries, it is very important that you nourish yourself with high-quality, nutritious foods.

During your hospital stay, your nursing team will advance your diet from clear liquids to full liquids. The diet progression described here should be followed immediately after you are discharged to go home.

## Fullness signals

Because your pouch or sleeve is much smaller than your stomach was, your sensations of fullness will probably feel different. After weight loss surgery, fullness is often described as a tightness at the breastbone, but it also may be felt in the upper back or shoulders. As you adjust to your new pouch or sleeve size, these signals may change somewhat. It's important to pay attention to your new fullness signals – don't ignore them. Overfilling the pouch or sleeve with food or fluids can cause vomiting.

## Diet progression

For your safety, it's important that you follow the diet progression as recommended. Advancing your diet more quickly than advised could result in damage to the surgery site or obstruction, requiring additional surgery. As you begin to transition through the diet phases, you may find it difficult to tolerate the textures of foods in a new phase. If so, go back to the previous phase, wait two to three days and try to advance again. If you are unable to advance, contact your surgery team.

## Gastrointestinal issues

As your body adjusts to the surgical changes, you may experience nausea, gas, gurgling, lactose intolerance, constipation, diarrhea, or dumping. While most of these issues are normal and may come and go, prolonged symptoms should be reported to your surgery team.

**Dumping** is a serious condition that results in nausea, vomiting, diarrhea, rapid pulse, cold sweats, dizziness, or feeling faint after consuming high-sugar foods.

Avoid concentrated sweets and fatty foods, which can cause similar symptoms.

**Constipation**, or infrequent bowel movements, is common and typically related to a low volume of food, low fiber, poor hydration, and inactivity. To prevent constipation, make sure you're getting enough fluids, add foods with fiber as directed, and start doing physical activity.

## Hydration

Dehydration is the most dangerous nutritional risk right after surgery. Some patients find it challenging to meet their fluid needs. Here are some general guidelines for fluids:

- Take in 64 ounces (or more) of fluids per day.
- During diet phase 1, the recommendation is to consume at least 24-30 ounces of clear liquids and at least 24-30 ounces of full liquids (see page 27 for examples of full liquids).
- Avoid alcohol and carbonated beverages, and limit caffeine.

## WEEKS 1 AND 2 | Phase 1 – full liquid diet (after hospital stay)

### Goals:

- Drink 48-64 ounces of fluids per day, half from clear sources and half from protein drinks.
- Sip 1-2 ounces of fluids every 15-20 minutes during waking hours.
- Alternate water or other clear liquids with protein supplements.
- Aim for 40-60 grams of protein per day. Initially, your protein intake will be less, but it should be at 60 grams by the end of the first two weeks.
- Foods should be pourable or in liquid form when swallowed.
- Take supplements as directed.

### Protein shakes:

- Protein shakes can be purchased in powdered or ready-to-drink form.
- Whey, soy or egg white formulas are recommended to ensure complete protein.
- Look for shakes with 20-30 grams of protein and less than 25 grams of total carbohydrates, 5 grams of total sugars and 0 grams of added sugars per serving.
- See “Choosing protein supplements” on page 28 for options.

### Other options for variety:

- Fat-free or 1% milk
- Greek-style light yogurt without seeds or chunks of fruit
- Smooth soups made with milk
- Broth
- Sugar-free gelatin or pudding
- Sugar-free popsicles: chew or melt them in your mouth before swallowing
- Vegetable juice, decaffeinated tea, or calorie-free flavored water

**Tip:** alternate hot and cold, sweet and salty choices for variety.

**AVOID:** carbonation, caffeine, added sugar, and alcohol.

SAMPLE DAY		Protein
8 a.m.	8 oz. water, sip 2 oz. every 15-20 minutes 4 oz. protein shake, sip in 2-oz. servings	10 g
10 a.m.	8 oz. water, 6 oz. Greek yogurt	16 g
12 p.m.	8 oz. water, 4 oz. protein shake	10 g
2 p.m.	8 oz. water, 4 oz. 1% or fat-free milk	8 g
4 p.m.	8 oz. water, 4 oz. protein shake	10 g
6 p.m.	8 oz. water, 4 oz. chicken broth	2 g

## WEEKS 1 AND 2 | Phase 1 – full liquid diet (continued)

### Choosing protein supplements

Choose a protein supplement that meets your taste, convenience, and budget needs. There are many options available – the lists on these pages provide just a sample of choices.

- Protein supplements should have at least 20 grams of high-quality protein per 8-ounce serving and should be low in carbohydrates and sugars.
- Whey, soy, casein, and egg are complete, high-quality proteins.
- Due to the limited volume that the sleeve or pouch can hold, concentrated protein options are best during the first one to two months after surgery.

- The ready-to-drink options below are listed from highest protein concentration to lowest.
- Isolate, concentrate and hydrolyzed proteins are all good choices. Hydrolyzed whey is the most processed but may be the easiest to tolerate if you have milk or GI sensitivities. Isolate is lactose free.

#### Tips:

- You may mix powdered proteins with milk or unsweetened plant-based milks for added calories and nutrition. Read the label for mixing recommendations.

READY-TO-DRINK PROTEIN	Isolate (I) Concentrate (C) Hydrolyzed (H)	Protein grams per can/bottle	Carbohydrate grams per can/bottle	Calories per can/bottle
WHEY				
Pure Protein – can – 11 oz.	C	35	4	170
Premier Protein – 11 oz.	C	30	5	160
Pure Protein – 11 oz.	I, C	30	6	140
Unjury – 8.5 oz.	I	20	2	110
Isopure – clear protein – 20 oz.	I	40	0	160
Fairlife Core Power 26 g – 14 oz.	C	26	6	170
Orgain Clean Protein – 11 oz. (contains sugar alcohols)	C	20	10	140
Slim Fast Advanced Nutrition – 11 oz.	C	20	6	180
Muscle Milk Lite – 17 oz.	I, C	28	7	150
Bariatric Advantage Clearly Protein 16.9 oz.	I	20	0	80
Premier Protein Clear – 16.9 oz.	I	20	0	90
PLANT – please discuss plant-based protein options with your dietitian to ensure any options represent a complete protein				
OWYN – 12 oz. (plant protein blend)		20	10	180

WEEKS 1 AND 2 | Phase 1 – full liquid diet (continued)

PROTEIN POWDERS	Isolate (I) Concentrate (C) Hydrolyzed (H)	Protein grams per scoop	Carbohydrate grams per scoop	Calories per scoop
WHEY				
Premier Protein	C	30	8	180
Bariatric Advantage HMPR	I	27	11	150
Dymatize ISO100	H	25	2	110
Isopure Low Carb	I	25	1	110
Isopure Zero Carb	I	25	0	100
Optimum Nutrition Gold Standard 100% Whey	I	25	1	110
Pure Protein	C	23	6	130
Syntrax Nectar	I	23	0	100
Quest (blend of whey and casein isolate)	I	22	3	110
Unjury	I	21	0	90
Optimum Nutrition Greek Yogurt Protein Smoothie	C	20	8	130
CASEIN				
Optimum Nutrition Gold Standard 100% Casein	I	24	3	120
EGG WHITE				
Jay Robb (contains sugar alcohols)		24	4	120
Judees Paleo Protein		20	1	95
SOY				
Puritan's Pride	I	24	0	110
GNC Earth Genius (1 scoop – 8 oz.)	I	13	0	60
PLANT – these options are not complete proteins and should not be the sole source of nutrition				
Orgain (2 scoops) Pea, chia and brown rice proteins (contains sugar alcohols)		21	15	150
OWYN (2 scoops) Plant protein blend		20	8	150

## WEEKS 3 AND 4 | Phase 2 – pureed diet

### Goals:

- Aim for 60-80 grams of protein per day.
- Continue 8-12 ounces of protein shakes daily until you can meet protein needs from foods.
- When eating pureed foods, eat protein foods first. See the chart below.
- Limit portions of pureed foods to 2-4 tablespoons at a time. You may increase to half-cup portions as tolerated.
- Drink 48-64 ounces of fluids daily from non-caloric, non-carbonated drinks.
- Do not drink anything with meals. Wait for 30 minutes after meals to have your fluids.

PUREED FOODS	
Proteins	Canned tuna or chicken moistened with condiments, tofu, cottage cheese, ricotta cheese, soft cheese (such as Laughing Cow light), moist scrambled eggs, Cream of Wheat plus protein powder, refried beans with melted cheese, lentils, legumes <b>Tip: begin with moist protein choices and gradually advance to more dense proteins as tolerated.</b>
Vegetables	Fresh: remove skins, cook thoroughly until soft, and puree. Frozen or canned: puree or add to soups and blend.
Fruit	Applesauce, fruit canned in fruit juices only. Fresh: remove skin and puree.
Condiments	Light mayonnaise, salsa, light sour cream, mustard, hummus, soy sauce, ketchup, packaged gravies and similar foods (must be low fat and low sugar).
Seasonings	Herbs, salts, spices, pepper – pureed doesn't have to mean bland!

SAMPLE DAY		Protein
8 a.m.	1/4 cup Cream of Wheat with protein powder, 2 Tbsp. applesauce	6 g
	Sip 8 oz. water, 4-6 oz. protein shake	10-15 g
12 p.m.	1/4 cup pureed tuna with mayo, 1/4 cup cottage cheese	12 g
	Sip 8 oz. water	
4 p.m.	8 oz. water, 4-6 oz. protein shake	10-15 g
6 p.m.	1/4 to 1/2 cup refried beans with cheese and salsa	8 g
8 p.m.	Sip 8 oz. water, 4-6 oz. protein shake	10-15 g

## WEEKS 5 AND 6 | Phase 3 – soft foods diet

**Goals:**

- Add foods slowly. Add one new food at a time to make sure you can tolerate it.
- Moist cooked foods are more easily tolerated. Food texture should be soft, like canned green beans.
- Eat three meals per day, and one to two snacks if needed. Avoid grazing (eating small amounts of food throughout the day).
- Eat slowly. Chew food thoroughly. Chew at least 25 times before swallowing.
- You should be able to tolerate meals of about 1/4 cup in volume.
- Aim for 64+ ounces per day of non-caloric fluids between meals.
- Do not drink with meals. You can drink fluids 30 minutes before and after meals.
- Reduce use of liquid proteins as you move to solid foods.
- Aim for 60-80 grams of protein per day, or as recommended by your dietitian.

FOODS TO AVOID	
Proteins	Red meat (ground beef is OK), dry cooked meats, reheated meats, whole nuts (nut butters are OK)
Vegetables	Raw, leafy greens and salads
Fruit	Fruit juices, pie fillings, fruit canned in syrup, fruit smoothies
Grains	Dense starches: bread, rice, pasta. Small amounts of grain may be tolerated in soups or stews.
Sweets	Concentrated sweets, candy, ice cream, pastries
Fatty foods	Fried foods, cheese sauces, meat gravies

SAMPLE DAY		Protein
Breakfast	1/4 cup cottage cheese, 2 slices of peaches	12 g
Snack	4-6 oz. Greek yogurt	12-16 g
Lunch	3 oz. slow-cooked shredded chicken with salsa, 2 Tbsp. refried beans, avocado slices	27 g
Snack	1 string cheese	7 g
Dinner	1/4 cup turkey chili with beans, shredded cheese	10 g

## WEEKS 7+ | Phase 4 solid food diet – healthy eating for lifelong weight management

Long-term and successful weight loss is directly related to behaviors that support a healthy, active lifestyle. Check in with yourself routinely to evaluate how you're doing with these behaviors. If you find that you're slipping, bring corrective focus to the behavior by setting a SMART goal – that is, a goal that is specific, measurable, achievable, realistic, and timely.

You may find that there are some behaviors that need your attention – This is why it is called “weight management.”

### Meals:

- Choose more whole foods and fewer processed foods.
- Include a protein food in every meal.
- Avoid doughy or sticky foods, such as bread, bagels, and thick pizza crust.
- Avoid high-sugar foods, such as candy, chocolate, juice, and soda.
- Avoid fatty and fried foods. Limit dairy fat, sauces, butter, and fatty meats.

### Hydration:

- Drink at least 48-64 ounces of hydrating fluids daily, and more if you are active. The goal is 64+ ounces.
- Sip fluids. Gulping may overfill the pouch and cause vomiting.

- Be cautious with carbonation. It can result in gas, bloating and discomfort.
- Avoid or limit alcohol, and if you do drink, eat something with it. Alcohol is absorbed quickly through the pouch and sleeve, which can cause rapid intoxication.
- Avoid liquid calories in beverages such as sodas, juices, smoothies, alcohol and coffee drinks.

### Diet behaviors:

- Avoid fluids with meals – wait 30 minutes before and after meals to resume drinking fluids.
- Avoid grazing (eating small amounts of food throughout the day). It will result in excess calorie intake. Instead, eat structured meals, plus one to two snacks, if needed.
- Eat protein foods first.
- Chew, chew, chew! Puree food in your mouth.
- Eat slowly.
- Pay attention to signs of fullness and stop eating when you're full.

### Supplements:

Take your required supplements daily to avoid nutritional deficiencies.

## VITAMINS AND MINERALS

The gastric bypass and sleeve procedures reduce both the amount of food you can eat and your ability to absorb nutrients. Because of this, you will need to supplement your diet with vitamins and minerals after surgery to prevent nutritional deficiencies. In the first three months following surgery, chewable or liquid supplements are recommended. After that, pills are generally well tolerated.

### Required vitamin and mineral supplements after gastric bypass and sleeve gastrectomy:

- High-quality bariatric supplements are recommended. Bariatric multivitamins meet most of your vitamin and mineral needs, except for calcium. You will take fewer supplements if you choose a bariatric multivitamin.
- Avoid gummy vitamins or children’s formulas – they do not meet your body’s requirements.

SUPPLEMENT	Recommended dose
<b>START 1 WEEK AFTER SURGERY</b>	
<b>Bariatric multivitamin with iron</b> <ul style="list-style-type: none"> <li>• Bariatric formulas are recommended</li> <li>• Should include at least 18 mg iron for men or postmenopausal women, 45 mg for menstruating women</li> </ul>	Follow manufacturer’s recommendations (typically 1-2 chewables or capsules per day)
<b>START 4 WEEKS AFTER SURGERY</b>	
<b>Calcium citrate</b> <ul style="list-style-type: none"> <li>• Divide into 2-3 doses</li> <li>• Do not take with multivitamin or iron – wait two hours</li> </ul>	1200-1500 mg total (2-3 500-600-mg tablets or chews per day)
<b>IF YOU’RE NOT TAKING BARIATRIC MULTIVITAMINS</b> (The following are included in bariatric-formula multivitamins. If you are not taking a bariatric multivitamin, work with your dietitian to make sure you are meeting your needs.)	
<b>Iron</b> <ul style="list-style-type: none"> <li>• May take with vitamin C to prevent constipation and increase absorption</li> <li>• Do not take with calcium foods or calcium supplements</li> </ul>	45-60 mg total per day
<b>Vitamin D3</b>	3000 IU
<b>Vitamin B12</b>	500-1000 mcg
<b>OPTIONAL</b>	
<b>Probiotic</b> <ul style="list-style-type: none"> <li>• May help prevent constipation</li> <li>• Improves weight loss after gastric bypass</li> <li>• Improves B12 absorption</li> </ul>	5 billion CFU with at least 7 strains

## VITAMINS AND MINERALS (continued)

### Supplement shopping guide

This shopping guide provides a list of reputable bariatric supplement brands – it does not include all brands and all products. You may choose a brand that is not listed if it meets bariatric recommendations. If you need assistance, your dietitian can help you choose a supplement.

**Tip:** Most vendors will work with you to replace supplements that you can't tolerate if you purchase from them directly. This is not an option if you purchase from Amazon or other third-party distributors.

BARIATRIC MULTIVITAMINS					
mcg= micrograms    mg = milligrams    IU = international units					
Brand	Name	Serving size	Vitamin B12 (mcg)	Iron (mg)	Vitamin D3 (IU)
Bariatric Advantage	Advanced EA Multivitamin	2 chewable tablets	1000	45	3000
Bariatric Advantage	Ultra-Multivitamin with Iron	3 capsules	1000	45	3000
Celebrate	Multi-Complete 36	2 chewable or 3 capsules	1000	36	3000
Celebrate	Multi-Complete 45	2 chewable or 3 capsules	1000	45	3000
Celebrate	Multi-Complete 60	2 chewable or 3 capsules	500	60	3000
Opurity	Bypass & Sleeve Optimized - Chewable	1 chewable tablet	500	18	3000
Opurity	Complete Optimized Multivitamin Multimineral	2 capsules	500	18	3000
ProCare Health	Bariatric Multivitamin with 45 mg Iron	1 chewable tablet	1000	45	3000
ProCare Health	Bariatric Multivitamin with 45 mg Iron	1 capsule	1000	45	3000
ProCare Health	Bariatric Multivitamin with 18 mg Iron	1 capsule	1000	18	3000

**Note:**

**Iron needs:** women who have not reached menopause need 45-60 mg per day; all others need at least 18 mg per day.

**If you take blood thinners:** The Bariatric Fusion brand bariatric vitamin does not include the recommended amount of vitamin K, and therefore may be appropriate for those on anticoagulation therapy. Speak with your dietitian before purchasing.

## VITAMINS AND MINERALS (continued)

CALCIUM CITRATE mg = milligrams IU = international units					
Brand	Name	Serving size	Frequency	Calcium citrate (mg)	Vitamin D (IU)
Bariatric Advantage	Calcium Citrate Chewy Bites	1 chewy bite	1 chewy bite, 3x/day	500	500
Blue Bonnet	Liquid Calcium Magnesium Citrate + Vitamin D3	1 tablespoon	1 tablespoon, 2x/day	600	400
Celebrate	Calcium Plus 500	1 chewable tablet	1 tablet, 3x/day	500	333
Citracal	Maximum Plus Calcium Citrate + D3	2 caplets	2 caplets, 2x/day	630	500
Kirkland	Calcium citrate with Vitamin D	2 tablets	2 tablets, 3x/day	500	800
Nova Nutrition	Calcium Citrate with D3	2 tablets	2 tablets 2x/day	700	400
Opurity	Calcium Citrate Plus Chewable	4 tablets	2 tablets 2x/day	1200	800
ProCare Health	UpCal D Powdered Calcium Citrate	1 scoop or packet	1 scoop or packet, 3x/day	500	500

## VITAMINS AND MINERALS (continued)

PROBIOTICS		
Brand	Name	Serving size
Bariatric Advantage	Chewable FloraVantage Probiotic	2 chewable tablets
Celebrate	Balance Probiotic	1 capsule
Garden of Life	Primal Defense ULTRA Ultimate Probiotic Formula	1 capsule
Klaire Labs	Ther-Biotic Complete	1 capsule
Mega Food	MegaFlora	1 capsule
Nature Made	Digestive Probiotics Advanced	2 capsules
Nutrition Now	PB8 Immune Support Probiotic	1 capsule
Renew Life	Ultimate Flora Extra Care Probiotic	1 capsule

### Where to find these supplements

Please ask your dietitian about any allergen or dietary restrictions you have. They may be able to help you find an allergen-free or diet-specific (such as vegan) option.

#### ONLINE:

- [BariatricAdvantage.com](http://BariatricAdvantage.com)
- [Unjury.com](http://Unjury.com)
- [CelebrateVitamins.com](http://CelebrateVitamins.com)
- [Amazon.com](http://Amazon.com)
- [ProcareNow.com](http://ProcareNow.com)

#### STORES:

- The Vitamin Shoppe
- Rite Aid
- Walgreens
- Super Supplements

## MY WEIGHT AND MEASUREMENTS

DATE	Liver Reduction Start Day:	Surgery Day:	30 day Surg-A-Versary	3 month Surg-A-Versary	6 month Surg-A-Versary	12 month Surg-A-Versary	18 month Surg-A-Versary
Weight							
Chest							
Waist							
Hip							
Thighs							
Upper arms							

DATE							
Weight							
Chest							
Waist							
Hip							
Thighs							
Upper arms							

DATE							
Weight							
Chest							
Waist							
Hip							
Thighs							
Upper arms							







#### OUR MISSION

As expressions of God's healing love, witnessed through the ministry of Jesus, we are steadfast in serving all, especially those who are poor and vulnerable.

#### OUR VALUES

Compassion, Dignity, Justice, Excellence, Integrity