

# Weight Loss Surgery

Patient Information Guide



# Welcome

Deciding to undergo weight loss surgery takes courage and commitment. Your treatment team supports you in your decision to take care of yourself and improve your health. Throughout this program, you will encounter new challenges and opportunities as you adjust to a new method of eating and a new way of life. We are here to answer any questions or concerns you might have during this process.

Think of this booklet as an information guide. After you are finished reading, you should have a better idea of what to expect from surgery. The information should answer the many questions you have as you prepare for the operation. The manual will also serve as a reference source for you after you return home and begin dealing with the changes in your life. However, this guide was not designed to answer all questions or issues related to surgery. We encourage you to ask questions at any time.

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Please be sure to follow your insurance company’s guidelines regarding referrals. It is your responsibility to obtain the appropriate referrals mandated by your insurance company to avoid any billing issues.

# Your Weight Loss Surgery Team

## **Bariatric surgeons, nurse practitioners, and physician assistants**

Our surgeons are board certified and highly experienced in performing bariatric surgeries. Our program is accredited by the American Society for Metabolic and Bariatric Surgery, demonstrating our commitment to patient safety and high-quality care.

## **Medical weight loss doctors, nurse practitioners, and physician assistants**

You may be asked to see a medical weight loss doctor or nurse practitioner. During these appointments, they will review your weight loss history and order any labs and tests needed to evaluate your health. They will also treat any medical issues that may be contributing to your weight or that may increase your risk for complications after surgery.

## **Bariatric program coordinator/navigator**

Our coordinator and navigator will help you navigate the process of getting to surgery and work with you to make sure you complete all necessary appointments and tests.

## **Registered dietitians**

Nutrition is very important in losing weight, maintaining weight loss, and being healthy after surgery. Our dietitians will support you in making any necessary changes to your diet or eating habits, before and after surgery.

## **Behavioral health**

You will meet with a dedicated behavioral health clinician to ensure you are mentally and emotionally prepared for surgery and that you have the appropriate support to manage surgery and the lifestyle changes that come with it. If you already see a behavioral health provider, they may also have to sign off on your surgery.



# Sleeve Gastrectomy

The laparoscopic sleeve gastrectomy is shown here. In this surgery, your surgeon will staple and divide your stomach, removing about 80-85% of the stomach. The portion of your stomach left after surgery is long and narrow, like the sleeve of a shirt or a small banana.

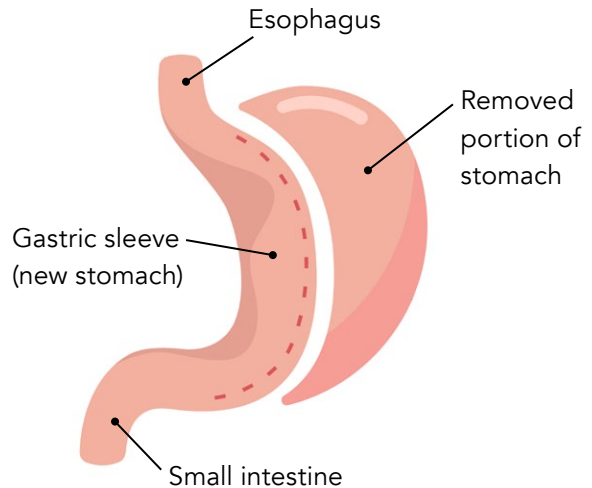
The remainder of your stomach is removed from your body completely, so this surgery is not reversible.

## How the surgery helps with weight loss

**Smaller stomach means smaller food portions.** You will only have 15-20% of your stomach left, so you will not be able to eat as much food in one sitting as you used to.

**Reduced hunger.** The part of your stomach that is removed makes a hormone called ghrelin that makes you feel hungry. Since you make less of this hormone, you may notice less hunger after surgery or that it takes longer to feel hungry.

**Feel full faster and stay full longer.** Hormones like GLP-1 and PYY are produced in your gut and can increase after your surgery. These hormones will slow down digestion, reduce hunger, and increase satiety after meals. They may also improve blood sugar control if you have type 2 diabetes.

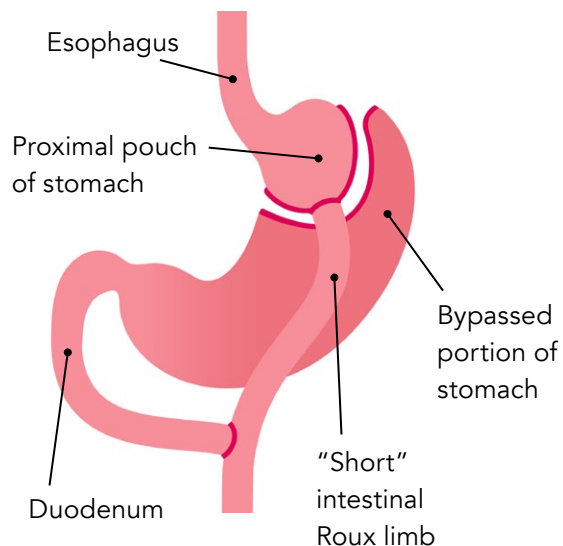


# Roux-en-Y Gastric Bypass

The Roux-en-Y gastric bypass procedure is shown here. In this surgery, your surgeon will staple and divide your stomach into two compartments. The smaller portion is about the size of a large egg and is called a pouch. The larger portion is the remnant stomach.

After your stomach is divided, the surgeon will dissect your small intestine at the jejunum and connect the bottom section to your new small pouch. The upper part of the intestine is connected to the small intestine about 3-4 feet down, creating a connection that looks like the letter "Y."

When you eat food after surgery, it will pass from your esophagus into your pouch, then into your small intestine, **BYPASSING** your remnant stomach and the upper part of your small intestine.



## How the surgery helps with weight loss

**Smaller stomach means smaller food portions.** Your new stomach pouch will only be about the size of an egg and can only fit a small amount of food at a sitting. You will only eat what can fit in your egg-sized pouch, so you will not be able to eat as much food in one sitting as you used to.

**Reduced hunger.** You will make less of a hormone called ghrelin that makes you feel hungry. Since you make less of this hormone, you may notice less hunger after surgery or that it takes longer to feel hungry.

**Feel full faster and stay full longer.** Hormones like GLP-1 and PYY are produced in your gut and can increase after your surgery. These hormones will slow down digestion, reduce hunger, and increase satiety after meals. They may also improve blood sugar control if you have type 2 diabetes.

**Malabsorption.** Since you are bypassing the top of your intestines, you will absorb less of your food, including calories, vitamins, and minerals. This means you may not absorb all the calories you eat.

**Dumping syndrome.** Dumping syndrome is a physical reaction you get after eating food high in sugar or fat, which can deter you from eating those types of foods. Symptoms can occur immediately after eating, or up to a few hours after. Symptoms include nausea, vomiting, diarrhea, heart palpitations, sweating, dizziness, and cramping. Examples of foods that can cause dumping syndrome include desserts, candy, sugary beverages, french fries, and fried dough. Not everyone has dumping syndrome after surgery, and for some, it goes away over time.

# Required Appointments Before Surgery

Following your initial consultation with your surgeon, you will need to complete a number of medical tests and appointments with members of the treatment team. The required appointments and tests are listed below; however, you may need more appointments or tests before surgery based on your team's recommendations. Missing appointments may delay your surgery, so please make every effort to attend all scheduled tests and appointments and call the clinic as soon as possible to reschedule when needed.

## Step 1: Meet with surgeon

Weight loss goal: \_\_\_\_\_lbs.

## Step 2: Complete all program requirements

Medical testing – ordered by surgeon or medical weight loss team

- Labs (CBC, vitamins, minerals, thyroid, blood sugar, etc.)
- H. pylori testing (stool sample or breath test)
- Nicotine

Nutrition evaluation and education with registered dietitian

- Nutrition class 1 – 90-minute class
- Nutrition class 2 – 90-minute class
- Nutrition evaluation – 60-minute appointment
- Nutrition follow-up – 30-minute appointment

Behavioral health (BH) evaluation with social worker

- BH evaluation – 60-minute appointment

Medical weight loss evaluation with doctor or nurse practitioner (NP)

- New patient visit – 40-minute appointment
- Follow up – 20-minute appointment

Surgical follow up with surgeon or surgical team (NP/PA)

- Follow up – 30 minute appointment

Additional appointments you may need

- Ultrasound, upper gastrointestinal x-ray, motility study, endoscopy
- Sleep study
- EKG, cardiac evaluation

## Step 3: Insurance authorization

We will submit all forms, results, and information to insurance for pre-authorization.

## Step 4: Schedule surgery

Once your insurance provides the clinic with a pre-authorization, we will contact you to schedule surgery, your required pre-surgery and initial post surgery appointments.

# Surgery Process

You will be in the hospital for at least two nights. You can help your recovery go faster by following all instructions and participating in your care.

## Pre-surgery surgeon appointment

You will meet with your surgeon to answer any last questions you might still have about surgery and sign all consent forms.

## Pre-operative assessment

You will go to the pre-procedure clinic, where you will get instructions on how to prepare for the day of surgery and learn what to expect pre- and post-surgery. You will have labs drawn and may speak with a member of the anesthesia team.

## One week before surgery

**DO NOT TAKE** any aspirin products or aspirin-containing products, appetite suppressants, herbal supplements or fish oils for one week before surgery.

## Day of surgery

You will be asked to arrive at the hospital at a specific time, usually two hours before the scheduled time of your operation. You will be taken to the prep room, where our nursing team will help get you ready and take care of your personal belongings. The anesthesiologist will explain the procedure and answer any questions.

You will be given medication to help you relax before going into the operating room.

## After surgery – Post-op day 0

You will be taken to the recovery room where you will spend a few hours recovering from anesthesia. You will then be taken to a room where your family or friends can see you. We will monitor your oxygen saturation and provide oxygen as needed. You will be wearing compression boots, which protect you from blood clots in your legs called deep venous thrombosis or DVTs.

You should start taking walks as soon as you are given permission. This will help prevent blood clots and help with any gas pain from the surgery.

**Diet:** No food or drink. You will receive intravenous (IV) fluids during this time.

## After surgery – Post-op day 1

You will start a clear liquid diet. You will be provided a tray of different options you can have. Use a medicine cup and aim to drink one medicine cup over one hour, sipping slowly.

**Diet:** Start bariatric stage 1 diet – refer to your nutrition packet for more information.

## After surgery – Post-op day 2

**Diet:** Start bariatric stage 2 diet – refer to your nutrition packet for more information.

**Discharge medications:** Your team will review all medications with you before going home.

# Post-Surgery Aftercare

If you have any of the following symptoms, call the clinic right away at 617-414-8052.

- Fever
- Difficulty breathing
- Pain or swelling in your arms or legs
- Increased pain or tenderness near the incision
- Opening of your incision
- Signs of infection including:
  - > Draining of pus or fluid from incisions
  - > Increased swelling
  - > Redness
  - > Increased warmth
  - > Foul smell

## Commonly asked questions

### ***How soon after surgery can I return to work?***

This will depend on what type of job you have and your recovery course. Most people take four weeks off from work, although this can vary between one to six weeks. You should discuss this with your surgeon before surgery.

### ***How soon after surgery can I drive?***

You may drive when you are no longer taking the prescribed narcotic pain medication.

### ***How soon after surgery can I shower?***

You may shower after surgery. Clean your incisions with soap and water unless otherwise instructed. Do not soak in the bath until all the scabs have fallen off and the wounds are completely healed (about four weeks).

### ***How soon after surgery can I go swimming?***

You can swim after six weeks, once your surgeon has given you clearance.

### ***How soon after surgery can I exercise?***

You can engage in light activity like walking immediately after surgery, but avoid lifting anything over 10-15 pounds for at least six weeks after surgery.

### ***How soon after surgery can I get pregnant?***

If you are a woman of childbearing age, you may have an increased chance of becoming pregnant after surgery. It is difficult to maintain a healthy pregnancy during the first year or two after weight loss surgery, so we recommend postponing any plans for pregnancy until at least 18 months after surgery.

### ***How soon after surgery can I have sexual intercourse?***

You should wait at least two weeks after surgery to have sexual intercourse.



# Follow-Up Appointment Schedule

Below are your follow up appointments and tests. Please note, based on your progress and needs, you may be asked to have additional tests or appointments to keep you healthy. You are welcome to request additional appointments with the registered dietitian or social worker as needed.

## 2-week Post-op

- Surgeon or surgical NP/PA visit
- Dietitian visit

## 6-week Post-op

- Surgeon or physician assistant (PA) visit
- Dietitian visit

## 3-month Post-op

- Medical weight loss doctor or nurse practitioner (NP) visit
- Dietitian visit
- Labs

## 6-month Post-op

- Surgical NP/PA visit
- Dietitian visit

## 12-month Post-op

- Surgeon or PA visit
- Medical weight loss doctor or NP visit
- Dietitian visit
- Labs

## 18-month Post-op

- Dietitian visit

## Annual – Every year

- Surgeon or surgical NP/PA visit
- Dietitian visit
- Labs

## Recommended labs

Below is the standard list of labs.

Your doctor may recommend additional labs depending on your condition or concerns with deficiencies.

- Vitamin A - retinol
- Vitamin D – 25-hydroxy vitamin D
- Copper
- Vitamin B1-thiamin
- Parathyroid hormone (PTH)
- Complete blood count (CBC)
- Vitamin B9 – folate
- Iron panel (iron, ferritin, TIBC)
- Comprehensive metabolic panel (CMP)
- Vitamin B12- cobalamin
- Zinc

## Recommended testing

- Bone density screening

# Risks and Benefits of Bariatric Surgery

## The following are risks of Roux-en-Y gastric bypass and sleeve gastrectomy procedures:

Leaking of pouch, sleeve or anastomosis	1-2%
Deep vein thrombosis/pulmonary embolism	1%
Bleeding (requiring transfusion)	1%
Infection of wounds	1%
Incisional hernias	1%
Stricture of sleeve or anastomosis	1-2%
Dehydration	5-10%
Nutrient deficiencies	25%
Prolonged nausea	1%
Failure to lose weight	1%
Reflux/heartburn	1%

## Gastric bypass only:

Marginal ulcer	5%
Internal hernia	1-2%
Fistula between stomach and pouch	1-2%

Mortality from bariatric surgery is about **0.2%**

These complications may require additional surgery.

Factors that increase risk include a higher weight or body mass index (BMI) and older age. Men are also at higher risk compared to females.

## Health benefits from surgery

Everyone's results are different, but you may see improvements in:

- Joint or arthritis pain
- Sleep apnea
- Blood sugar control
- Cholesterol
- Blood pressure
- Quality of life

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Date

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Patient

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Physician's Signature

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Responsible Relative or Guardian

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Print Name

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Relationship

# Patient Pre-Operative Compliance Agreement

- \_\_\_\_\_ I understand that I play an essential role in the treatment of my obesity and that my continuous active participation in my treatment is essential.
- \_\_\_\_\_ I will inform Boston Medical Center of any changes in my address, telephone number, and health insurance.
- \_\_\_\_\_ I understand the importance of attending all scheduled appointments (including clinical appointments and dietitian visits) and that I need to call in advance if I need to re-schedule an appointment.
- \_\_\_\_\_ I understand that it is crucial to the success of my operation that I follow all my treatment team's written and verbal instruction and inform them if I am having any problems.
- \_\_\_\_\_ I understand that this surgery requires long-term follow-up care for optimal health and success with weight loss.
- \_\_\_\_\_ I understand that smoking after surgery increases my risk of severe complications including gastric ulcers, and that I must quit smoking at least two months prior to surgery and avoid smoking after surgery.
- \_\_\_\_\_ I understand that weight loss surgeries impact my nutrition and may increase my risk of developing malnutrition or nutrient deficiencies. I understand I will have to take vitamin and mineral supplements as directed by my clinical team every day for the rest of my life. I understand that these supplements are not covered by my insurance, and it is my responsibility to purchase them.
- \_\_\_\_\_ I understand that after my surgery I cannot take non-steroidal anti-inflammatory medications including, but not limited to, aspirin, ibuprofen, or naproxen sodium as this may increase my risk of stomach ulcers.
- \_\_\_\_\_ I understand there may be a change in how my body processes alcohol, and I may be at increased risk of developing a dependence on alcohol after surgery. I understand it is recommended that I not drink alcohol on a regular basis after surgery.
- \_\_\_\_\_ I understand it is against medical recommendations to become pregnant within 18 months of my weight loss surgery, and getting pregnant during this time period may increase risks of complications.

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Patient's Signature

Date

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# Common Side Effects and Solutions

## Constipation

Constipation can occur easily after surgery since your fiber and fluid intake goes down when you eat less. The surgery can also slow down digestion, so it is important to identify the difference between having to poop and being unable to, or not having to move your bowels as often. Follow these tips to help manage constipation after surgery:

- Drink at least 48 oz. fluids every day.
- Be active, try to get at least 30 minutes of movement every day.
- If on diet stage 4 or later, add fiber by eating fruit, vegetables, and whole grains.
- Speak to your doctor about taking an over-the-counter fiber supplement (Metamucil, Benefiber), or a stool softener.

## Diarrhea

You may have diarrhea initially after surgery while on a liquid diet. However, excessive diarrhea or long-term diarrhea may increase your risk of malnutrition. Before taking anti-diarrheal medications, please check with the medical team. Here are some tips to try to minimize your risk of diarrhea:

- Eat slowly and stop when full.
- Avoid drinking with meals and wait at least 30 minutes after eating before drinking.
- Avoid alcohol, spicy foods, and foods high in sugar and fat.
- Consider reverting to your prior diet stage for a few days until symptoms resolve.
- Avoid foods high in lactose (milk, cottage cheese, yogurt, and ice cream).
- Limit the amount of sugar alcohols like sorbitol or mannitol (sugar-free candy, sugar-free ice cream, and sugar free gum).
- Limit caffeine-containing beverages to two cups a day.

If you follow all recommendations and are still having diarrhea, please consult with the medical team. You may need additional follow up to rule out infection.

## Nausea or vomiting

You may have nausea and vomiting during the first few months after weight loss surgery if you do not follow eating recommendations. Below are some tips to try, but if you are doing all of the following and still vomiting, or are unable to keep any food or beverage down, please call the clinic immediately.

- Eat slowly over 20-30 minutes.
- Chew each bite of food to applesauce consistency.
- Avoid eating beyond full, stop when about 80% full.
- Avoid dry or stringy foods.
- Avoid drinking with meals or too soon after meals.
- Avoid lying down immediately after eating.
- Drink plenty of beverages between meals.
- Keep track of what you are eating to identify specific foods that might be triggering issues.

## Gas and bloating

- Avoid chewing gum or using straws – these may increase swallowing air.
- Keep a food diary and monitor your symptoms, identifying any foods that may cause bloating.
- Avoid or limit foods with added fiber or sugar alcohols (sugar-free candy or sugar-free ice cream).

## **Frothing, sliming, or too much saliva in mouth**

Frothing or excess mucus production occurs when your new stomach is healing, and your stomach is struggling to process what you just ate. This may be due to how you are eating (too fast or not chewing well enough) or due to the type of food you are eating (too tough or too dry). Frothing will stop on its own after a bit of time, but to avoid this side effect, follow the tips below. There may be some foods you will not tolerate and may cause this reaction no matter what you do.

- Eat slowly over 20-30 minutes.
- Chew each bite of food to applesauce consistency.
- Make sure food is moist – if it is dry, take a sip of water before swallowing to moisten.

## **Hair loss**

Most people have some hair loss, usually starting about three to six months after surgery. Typically, hair begins to grow back about six months to a year after surgery, or when weight loss slows down.

Doing the following will minimize hair loss:

- Eat enough protein. Discuss with your dietitian if you are unsure how much to eat or if you are eating enough.
- Take all vitamins recommended. Iron, vitamin A, and zinc are a few nutrients that are key to hair growth, and not getting enough of them can lead to excess hair loss.

## **Dizziness or lightheadedness**

It is not uncommon after surgery to have a small amount of dizziness when standing up. However, you should not have frequent dizziness, feel faint, or pass out. Let your team know right away if you are having these problems. Here are some ways to reduce dizziness:

- Make sure to drink at least 48 oz. of fluids a day
- Add one serving of an electrolyte beverage a day.
- Add salt, broth, or soy sauce to your food (if you have heart failure or renal disease, please discuss with your dietitian first).
- Eat a meal or snack every three to four hours.

## **Lactose intolerance**

Some patients struggle with digesting dairy foods that contain lactose sugar after surgery. Foods high in lactose include milk, cottage cheese, and yogurt, although Greek- or Icelandic-style yogurts have lower amounts). If you have bloating, gas, cramping, or diarrhea after eating milk products, you can try the following:

- Avoid or remove these foods from diet.
- Switch to Lactaid brand or lactose-free milk or cottage cheese.
- Take Lactaid tablets before eating dairy-containing food.
- Take a probiotic or kefir regularly.

## **Dumping syndrome**

Dumping syndrome occurs when food passes too quickly from the stomach into the small intestine, resulting in nausea, weakness, sweating, increased heart rate, lightheadedness, and diarrhea. To avoid or stop incidents of dumping syndrome try the following:

- Avoid foods high in sugar.
- Avoid fried foods or foods with heavy cream.
- Eat more protein at meals
- Avoid drinking during meals.
- Avoid foods that are too hot or too cold.

**For any additional questions or concerns, please contact the clinic at 617-414-8052.**





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