



# Surgical Weight Loss Guide





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Dear Patient,

Thank you for choosing Intermountain Health's Surgical Weight Loss Program as part of your long-term weight loss journey. This book is intended to guide you both before and after surgery. Please refer to it often.

We understand that your relationship with your care team is important to your long-term success. We encourage you to be committed and responsible for your overall well-being. To achieve and maintain good health, it is important to go to all appointments with your healthcare providers, seek and participate in related educational opportunities, and maintain healthy lifestyle changes.

In the months to come, it will be important to have the support of others. Our Intermountain Bariatric Support Group is a safe space where you can get suggestions, encouragement, and education from healthcare professionals and people who share common experiences. Research shows that taking part in a support group like this helps people reach their goals. To register for a group near you, visit: [intermountainhealth.org/classes-and-events](https://intermountainhealth.org/classes-and-events)

We wish you the best as you begin your journey. Please remember that we are here and ready to help.

Sincerely,

**Your Surgical Weight Loss Team**





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# Medical Questions or Concerns

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Our surgeon's offices have an on-call answering service that is 24-hours a day and 7 days a week (all day every day). Please call the corresponding number if you have any medical questions or concerns. **If you are having an emergency, call 911 or go to the Emergency Department nearest you.**

## Surgeons' office phone numbers

**Cassia Regional Hospital:** 208-878-5568

**Rocky Mountain Associated Physicians (LDS):** 801-268-3800

**BMI Bariatric Medicine Institute (LDS):** 801-746-2885

**Sevier Valley Specialty Clinic:** 435-893-4100

**Utah Surgical Associates (Provo):** 801-852-3460

**Utah Surgical Associates (St. George):** 435-628-1641

## Preventing readmissions to the hospital

It is a team effort and we need your help.

- Call your surgeon's office early with any concerns.
- Follow diet and medication instructions.
- Refer to the "Staying Healthy After Weight Loss Surgery" handout you received at your presurgery education class or when you were discharged from the hospital. This information is also found on pages 27 through 29.



Cassia Regional Hospital  
LDS Hospital  
Sevier Valley Hospital  
St. George Regional Hospital  
Utah Valley Hospital



# About Obesity

Obesity is a common and costly chronic disease that can put strain on individuals and families. About 1 in 3 adults in the United States suffer from chronic obesity.

Having obesity can impact your medical expenses and overall health, and increase your risk for weight-related disease in the future.

Some of these diseases include:

- High blood pressure
- Some cancers
- Diabetes
- Osteoarthritis
- Sleep apnea
- Acid reflux
- Stroke
- Heart disease
- High cholesterol
- Depression

To reduce the health risks and impact of disease, it is essential to maintain a healthy lifestyle. Studies tell us how difficult it can be to get rid of excess weight. A balanced approach to health is vital and essential to life before and after bariatric surgery.

## How is obesity measured?

Body mass index (BMI) is a formula that uses your height and weight to assess risk for related diseases. Studies show that this formula is a good way to predict body fat. It's not perfect, however, and may not be the only measure considered. For example, someone with a high amount of muscle (such as an athlete) may be perfectly healthy at a higher BMI.

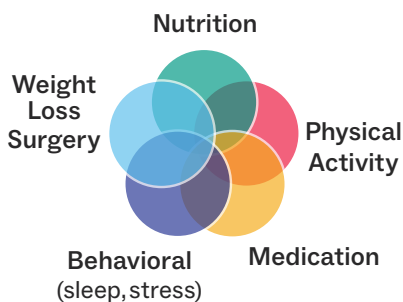
Your BMI is categorized according to the following categories: underweight, normal weight, overweight, obese, and morbid obesity. Your primary care physician and insurance will consider your BMI when determining your eligibility for surgery. In order to calculate your BMI, visit this website: [BMI Calculator](#).

## How is health measured?

Being healthy is a term that people use to define themselves. Most people think of "healthy" as being disease free. However, it also includes what a person does to prevent disease and maintain personal health. This includes physical, nutritional, mental, and social health and well-being. Someone can have obesity and still be healthy, just as someone else can be normal weight and be unhealthy.

Defining what health means to you can be helpful in seeing the bigger picture on how surgical weight loss can fit into your journey toward improved health.

### The 5 principles of Weight Loss





# What Can Weight Loss Surgery Do for Me?

Weight loss surgery may help improve weight-related conditions such as diabetes, sleep apnea, and high blood pressure. Weight loss surgery is not risk free. You will need to evaluate the risks and benefits to see if surgery is right for you.

Change can be difficult and requires commitment and effort to make lifestyle and behavioral improvements. You can best prepare by learning about the benefits and risks of surgery, and by closely following your doctor's instructions.

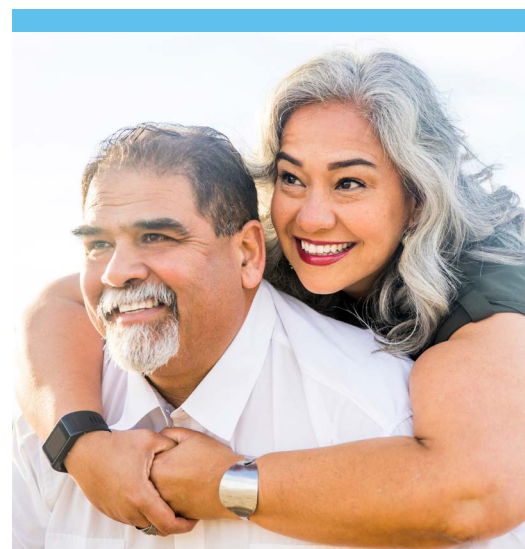
## Weight loss surgery results

Clinical studies show that most patients lose weight rapidly and continue to do so until 18 to 24 months after their procedure. Patients may lose 30 to 50% of their excess weight in their first 6 months, and 77% of excess weight as early as 12 months after surgery. Another study shows that patients can maintain 50 to 60% loss of excess weight 10 to 14 years after surgery. Patients with higher initial BMI's tend to lose more total weight. Patients with lower initial BMI's will lose a greater percentage of their excess weight and will more likely come closer to their ideal body weight.

Most weight-loss surgery patients will lose about 60 to 80% of their excess body weight with the bariatric surgery procedures. Substantial weight loss occurs within 18 to 24 months of surgery. Some weight regain is normal and can be expected 2 to 5 years after surgery.

The actual weight a patient will lose after the procedure is dependent on several things, including:

- Age
- Weight before surgery
- Ability to exercise
- Surgical procedure
- Overall health
- Willingness to change their behavior
- Mindset
- Motivation
- Support system
- Commitment to maintaining dietary guidelines and follow-up care



## Other Potential Improvements

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>• Fewer prescription medications</li><li>• Improved quality of life</li><li>• Ability to be physically active</li></ul> | <ul style="list-style-type: none"><li>• Improved mood</li><li>• Length of life</li><li>• Improved fertility</li></ul> |
|---|---|



# Understanding the Requirements

## OBESITY-RELATED CONDITIONS

- Hypertension
- Chronic venous insufficiency
- Coronary artery disease or chronic heart failure
- Obstructive sleep apnea
- Polycystic ovary syndrome (PCOS)
- Obesity hyperventilation syndrome
- Degenerative joint or disc disease
- Chronic high cholesterol
- Gastroesophageal reflux disease (GERD)
- Asthma
- Non-alcoholic fatty liver disease (NAFLD)
- Severe urinary incontinence
- Obesity hypoventilation syndrome

The eligibility requirements vary depending on your insurance, the surgeon, and the specific hospital requirements. If you are outside of the age and BMI requirements, it is best to contact your center directly.

Please check with your selected hospital to determine if these requirements apply:

- **Age.** Must be at least 18 years old and younger than 65.
- **BMI.** Males must be no higher than 55 and females no higher than 60.
- **Health conditions.** Cannot have a history of:
  - Organ failure (For example: severe heart failure, end stage kidney disease, severe liver disease)
  - Organ transplant or on the transplant list
  - Significant heart or lung problems



# Working with Your Insurance

Weight loss surgery may help improve weight-related conditions such as diabetes, sleep apnea, and high blood pressure. You will need to evaluate the risks and benefits to see if surgery is right for you.

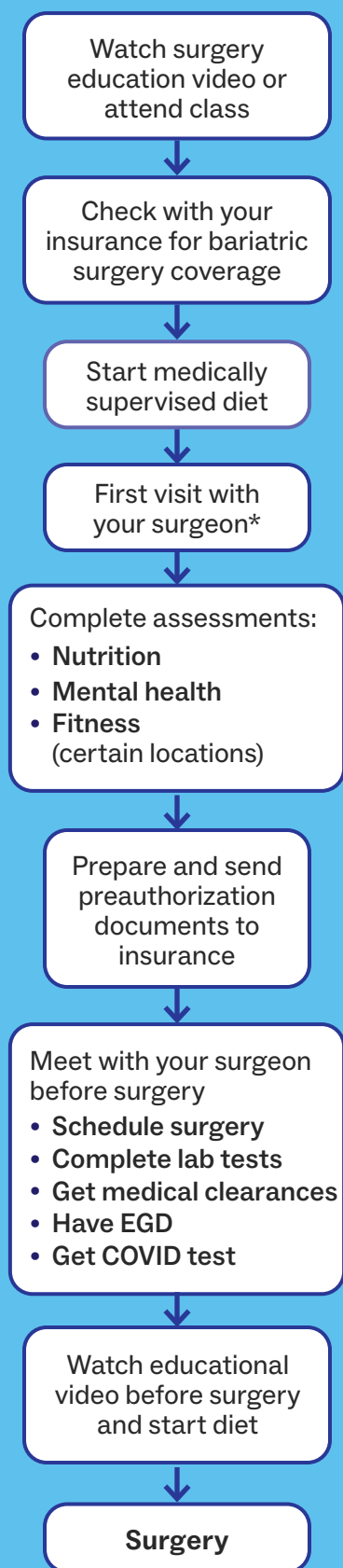
- 1 Call the customer service number on your insurance card.** Ask if you have bariatric benefits. They may ask for procedural codes (CPT codes):

Procedure	Code
Sleeve Gastrectomy	43775
Roux-en-y Gastric Bypass	43644
Duodenal Switch	43659, 43845
Lap Band Removal	43744

- 2 Ask for a copy of your policy to be emailed to you.** You will want to have them specifically send you the part of your policy that outlines bariatric or obesity guidelines.
- 3 Review covered services, expenses, and inclusions.** You want to see something like this example: “Treatment or surgery for obesity weight reduction or weight control...”
- 4 Review services or expenses not covered under your policy (exclusions).** Some insurance plans will not cover weight control services, assessments, and bariatric surgery. Check with your insurance to see what is and is not covered.
- 5 If covered, see what your insurance criteria is.** Look for the definition of “morbidly obese.” (For example: “Body Mass Index (BMI) greater than 40 within a year of surgery.”)
- 6 Check to see if the policy requires a MBSAQIP-accredited center, a facility working towards accreditation, or a Center of Excellence specified by insurance.** Ask if the facility you have chosen (example: St. George Regional Hospital) meets the criteria. If not, ask for the closest facility to you that meets the criteria. If there isn't a facility within 50 to 100 miles, you may be able to apply for an exception.
- 7 Check to see if the policy has specification or guidelines for a medically-supervised diet.** For example: “Member must participate in a health and nutrition program under the supervision of a licensed healthcare professional for 3 months.”
- 8 Check to see if your policy requires a behavioral health clearance.** Your insurance may only require clearance if you have a history. However, we require all patients to have this clearance, regardless of your specific insurance requirements.







## Beginning the Process

The following are steps that must be completed before your surgery. It can be helpful to check the boxes as you complete the step to view your progress.

### ☐ Watch the surgeon education video

This video (seminar) is a brief introduction to bariatric surgery and the program at your facility.

### ☐ Check with your insurance for coverage

Please refer to the “**Working With Your Insurance**” section on page 9 for additional information.

### ☐ Start a medically-supervised diet

Medically-supervised diets before surgery may vary. These diets are based on your current health status, your BMI, insurance requirements, and your surgeon. Please be sure to follow your insurance criteria for specifics regarding appointment frequency and time frame as well as who can provide this service (dietitian, physician, weight loss programs, etc.). This step is recommended, but not required if you are paying for the surgery yourself.

### ☐ First visit with your surgeon

You will meet with the surgeon to review your medical history and determine if you qualify for surgery. You will discuss surgical procedures and have an opportunity to ask questions and get clarification. You may have pre-operative testing and medical clearance ordered during this visit if deemed necessary.

**\*Depending on your surgery location, this appointment may be after all assessment requirements are fulfilled.**

### ☐ Dietitian assessment

You will spend approximately 60 to 90 minutes with the dietitian. This will include an assessment and discussion of the diet progression after surgery.

### ☐ Mental health assessment

This assessment generally includes psychological testing and an appointment (scheduled later) with a behavioral health professional. Each appointment will take about 1 hour to complete. Time requirements and visits may vary based on your provider and facility.

## ☐ **Exercise assessment (certain locations)**

You will need about 1 hour for this assessment. You will perform fitness tests, make an appropriate exercise action plan, and discuss post-operative physical activity progression. This visit is typically not covered by insurance and you may need to be prepared to pay for this out of pocket. This may vary by facility.

## ☐ **Additional clearances**

You may be required to get additional clearances from specialty doctors such as a cardiologist (heart doctor) or pulmonologist (lung doctor).

## ☐ **Prepare and send preauthorization documents to insurance**

Patients are responsible for providing all of the documents to the surgeon's office for this step. The surgeon's office will submit your documents to insurance to get preauthorization (clearance) for your bariatric surgery.

## ☐ **Meet with your surgeon before surgery**

You will meet with your surgeon to get any additional medical clearances necessary. Your surgeon will answer any additional questions that you have. Your surgery will be scheduled at this time.

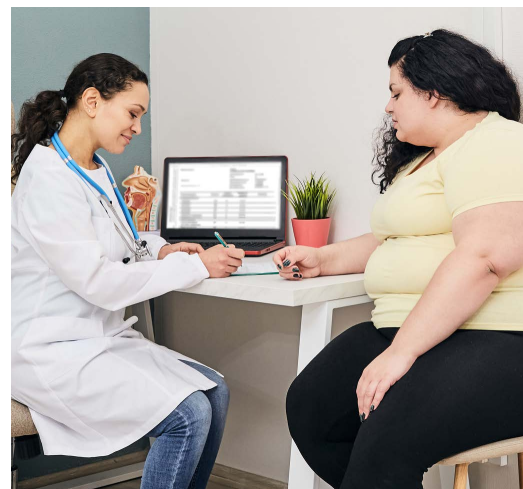
Your surgeon may order lab tests and a COVID test (if necessary) before surgery. You may also need a test called an upper endoscopy (EGD) before surgery. This is done to check the health of your throat, stomach, and small intestine.

## ☐ **Watch the educational video and start your diet**

You will be required to watch an educational video before surgery. Your surgeon's office will let you know when it is time for you to watch this presentation. Follow your surgeon's instructions on when to start your diet before surgery.

## ☐ **Surgery**

Surgery requirements may vary per hospital and surgeon. If you are outside the age or BMI requirements, contact your center directly for instructions.



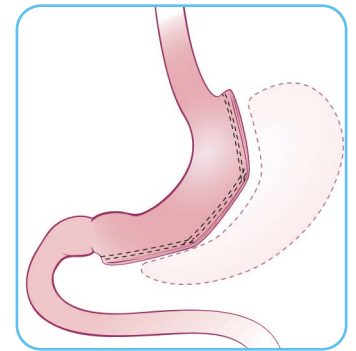


# Surgical Procedures

The patient and the bariatric surgeon decide together on the most appropriate procedure. The decision will depend on the patient's BMI, eating habits, health conditions, previous stomach surgeries, and discussion of the risks and benefits of surgery.

## Sleeve Gastrectomy

In a sleeve gastrectomy, a portion of the stomach is cut out and removed. This turns your stomach into a long tube. This limits the amount of food you can comfortably eat. Those who have had this surgery tend to report feeling full and satisfied after a small amount of food and do not feel overly hungry most of the time.



### Advantages

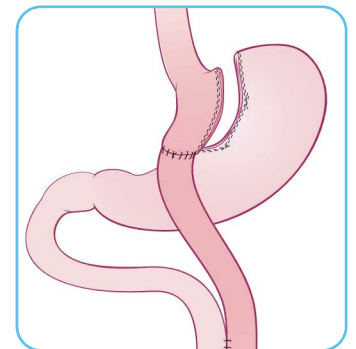
- Intestine is left alone
- No difficulty absorbing calcium and iron.
- No “dumping syndrome” or food moving too quickly from stomach to your intestine.
- Less risk of having ulcers, hernia, and bowel obstructions

### Disadvantages

- Risk of bleeding and leakage complications
- Slightly less weight loss compared to gastric bypass
- Increases acid reflux in some patients
- Cannot be reversed

## Gastric Bypass (Roux-en-Y)

The surgeon creates a small stomach pouch to restrict food intake. Next, a portion of the small intestine is attached to the stomach. This allows food to bypass most of the stomach and part of the intestine. Fewer calories are eaten and fewer nutrients are absorbed by the body. A large meal or foods high in fat or sugar creates a high risk of “dumping syndrome.”



## Advantages

- Faster weight loss in the beginning.
- Typically results in greater weight loss.
- This bariatric procedure has been performed the longest amount of time.
- Potential decrease in acid reflux.

## Disadvantages

- More stapling is required during surgery.
- More risk for surgery complications.
- Potential iron and calcium absorption problems.
- “Dumping syndrome” or food moving too quickly from stomach to your intestine.

## Duodenal Switch (Biliopancreatic diversion with duodenal switch or BPD-DS)

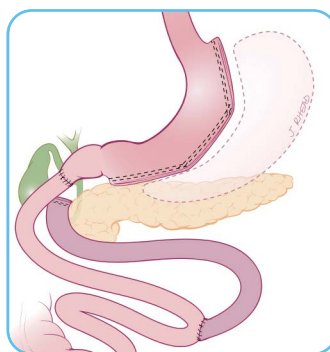
A portion of the stomach is removed, and a greater amount of the small intestine is bypassed (than with gastric bypass). A part of the small intestine will remain in place to collect and transport bile, a liquid that helps with digestion. Because most of the small intestine is bypassed, this limits food absorption.

## Advantages

- More weight loss than other bariatric surgeries.
- Higher amount of improvement in disease conditions such as diabetes and high blood pressure.

## Disadvantages

- Higher risk for not being able to absorb vitamins and minerals
- Greater risk for bone weakening and kidney stones
- May have diarrhea, smelly stool (poop), or gas
- More risk of complications after surgery than the other bariatric procedures.



## 2 Ways Surgical Procedures Promote Weight Loss

### Restrictive

Gastric bypass, sleeve gastrectomy, and duodenal switch are all restrictive surgeries that limit the amount of food the stomach can hold.

### Malabsorptive

Gastric bypass and duodenal switch surgeries alter the way that your body normally breaks down food. This can result in increased weight loss but can also increase your risk for not absorbing enough of certain vitamins and minerals.



# Lifestyle Choices Before and After Bariatric Surgery

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Weight loss surgery can be a good way to lose body fat and keep it off longer. This is especially true if the person makes healthy lifestyle choices at the same time. And, those who make healthy lifestyle choices before weight loss surgery have better success in reaching their goals after surgery.

## Behavior and exercise

- Stop smoking or using tobacco products for at least 6 weeks before your surgery (a year before is preferred). Tobacco affects your body's ability to heal after surgery and increases your risk for:
  - Internal leaks at the stapling site
  - Ulcers in stomach or GI tract
  - Bleeding after surgery
  - Wound infections
  - Pneumonia
  - Heart attack
- Start an exercise routine. Walk daily. Plan to exercise 5 to 6 times a week. Include strength training at least 2 days a week. Be active throughout your day.
- Remember time management. Staying on schedule can help you meet your goals.
- Establish healthy eating habits. Pay attention to your triggers — those moments that make you want to eat. Avoid eating for emotional support or distraction.
- Set SMART goals (Specific, Measurable, Achievable, Relevant, Timely).





## Nutrition

- Take a daily multivitamin.
- Take calcium and vitamin D supplements daily.
- Drink 64 ounces of water a day.
- Be sure to meet your protein goals.
- Focus on portion control.
- Limit caffeine, alcohol, and soda consumption.
- Meal planning is essential.
- Low fat, high protein foods.
- Non-starchy vegetables.
- Small amounts of fruit and complex carbohydrates.

## Mindful eating practices

Develop habits that help you build a positive relationship with your body and with food. These habits will provide benefits for the rest of your life. Use the hunger-fullness scale below 20 to 30 minutes after meals to help determine if you have eaten enough, too little, or too much.

Hunger to fullness scale									
1	2	3	4	5	6	7	8	9	10
Starving, weak, dizzy	Very hungry, low energy, stomach growling a lot	Pretty hungry, stomach is growling a little	Starting to feel a little hungry	Satisfied, neither hungry or full	A little full, pleasantly full	A little uncomfortable	Feeling stuffed	Very uncomfortable, stomach hurts	So full I feel sick



### WHAT IS THE PURPOSE OF THE PRE-SURGERY DIET?

- Weight loss before surgery
- Reduce liver size
- Protect muscle mass
- Safer surgery with better outcomes



## Pre-surgery Eating Plan

Approximately 1 to 3 weeks before surgery, you will be required to start a liquid diet. Your surgeon's office will tell you when to start this diet. Please follow their instructions. This diet has different guidelines according to each facility.

Check with your prescribing physician and let them know when you will be starting the diet. Your physician may want to change your insulin, blood glucose (sugar) medications, or blood pressure pills. They may also have instructions for you about when to change or stop certain medications. Also, talk to them about how to take your medication after surgery. You will want to know how much to take, when to take it, and what form to take (chewable, liquid, etc.).

It is strongly recommended that you take a multivitamin during the pre-surgery diet, unless your doctor tells you to also drink meal replacement shakes (example: Ensure).

Each surgeon has a preferred meal replacement or protein shake to meet the guidelines listed in the tables below. As a general guideline, when selecting a liquid protein supplement for before and after surgery, it should meet the following requirements:

Pre-surgery Liquid Diet Guidelines	
<b>Days to start before the surgery</b>	1 to 2 weeks (per surgeon instruction)
<b>Calories a day</b>	900 to 1200
<b>Protein (grams a day)</b>	70 to 100
<b>Water or clear liquid (ounces per day)</b>	Minimum of 64

Example: Pre-surgery Liquid Diet Options		
<b>Protein shakes</b>	Sugar-free drinks	Broth
<b>Meal replacement shakes</b>		Sugar-free sport drinks
<b>Decaffeinated coffee</b>	HMR shakes and meals (Utah Valley Hospital only)	4 ounces of fruit juice and 4 ounces of water (Sevier Hospital only)

Protein Supplement Guidelines	
<b>Calories</b>	150 to 200 per serving
<b>Protein</b>	15 to 20 grams per serving
<b>Carbohydrates</b>	Less than 15 grams per serving
<b>Sugar</b>	5 grams or less per serving
<b>Fat</b>	5 grams or less per serving

### WHAT CAN I EXPECT WHILE FOLLOWING THE PRE-SURGERY DIET?

A change in your diet can change the way you feel physically. This is because your body is getting used to a change in the food it is using as fuel. You may notice symptoms such as headaches, extreme tiredness (fatigue), and nausea. To reduce these symptoms:

- Make sure you are getting your minimum calories, protein, and water.
- Add electrolytes to about 1 out of every 3 glasses of water or other clear liquids.



### 1 TO 3 DAYS BEFORE SURGERY

- The hospital will call you by the afternoon before your scheduled surgery day to tell you what time to arrive. If your surgery is Monday, they will call Friday evening.
- You will be sent a form that will ask you questions about your personal health history and medications.
- You will be given specific instructions on which medications to take the morning of your surgery, as well as what times to stop eating and drinking.

Be sure to follow all instructions from the pre-screening team, or your surgery may be canceled.

## Preparing for Surgery

### Planning ahead

- Have enough liquids on hand to cover your first 2 weeks after surgery. Refer to the “Nutrition” section on page 28 for ideas.
- Make sure you have measuring cups and spoons to help measure your food and liquids. You will start drinking or eating  $\frac{1}{4}$  cup at a time. This is the same as 2 fluid ounces or 4 tablespoons.
- Organize your home so that you can easily find and reach things while you are healing.
- Arrange transportation to and from the hospital and your doctor appointments. You are not allowed to drive while taking opioid pain medication.
- If possible, have someone stay with you for the first few days after surgery.
- If you take insulin, ask your diabetes provider for specific instructions about insulin dosing the night before and the morning of surgery. Create a plan for adjusting your doses at home. Please confirm this plan with your surgeon.

### What to bring to the hospital

- Slippers and robe
- Personal hygiene items (if you prefer your own)
- Lip balm (like Chapstick)
- Hearing aids
- Eyeglasses
- Comfortable, loose-fitting clothing to wear home. (We recommend a shirt that buttons or zips. You may be too sore for a pull over.)
- List of all current medications you are taking. Include all prescriptions, over-the-counter pills or liquids, vitamins, and herbal remedies, inhalers, patches, and injections.
- CPAP machine and mask (if you have sleep apnea).

### What to leave home

- Money, jewelry, and other valuables
- All medications (you will be provided with what you need)



## THE DAY OF SURGERY

- You will be admitted to the same day surgery area even if you will be staying overnight.
- Nurses will check your weight and vital signs and draw blood as needed.
- An IV will be placed in your hand or arm to give you fluids and medications.
- Compression devices will be placed on your legs and feet to help prevent blood clots. You may be asked to take anti-clot medications and walk. See picture at right.
- You will meet your anesthesiologist and review and sign the consent forms. Please ask any questions or raise concerns you have about anesthesia such as allergies to medicine, past reactions to anesthesia, and pain control or nausea problems.

## DURING SURGERY

- Those who came with you to the hospital will go to the waiting area.
- You will be taken to the operating room and given medication to put you to sleep.
- Surgeons will perform your surgery using a laparoscope. A laparoscope is a long, narrow, metal tube that contains a camera and surgical instruments. This type of surgery uses 5 to 6 small incisions in your abdomen (belly) instead of a large, open incision.
- Heavy bleeding is unusual. You will only be given blood products if necessary.
- Surgery usually takes 1½ to 2 hours to complete.
- In some cases, a drain may be placed on the left side of your belly. It will be removed the next day or at your 1-week appointment at your surgeon's office.
- The surgeon may switch to open surgery in the event of complications or scarring.

## AFTER SURGERY

- You will be moved to the recovery area.
- You will stay in the recovery area until you are awake and stable.
- If you have been approved for an outpatient procedure, you may go home after resting for 2 to 4 hours in the recovery area.
- If you are staying overnight, you will be moved to the inpatient unit at your facility.



# Your Hospital Stay

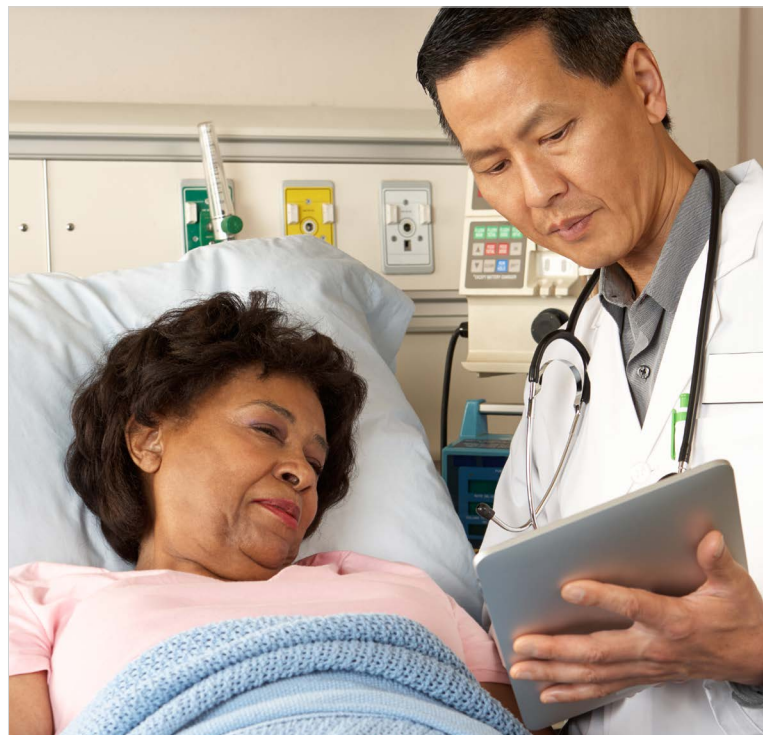
While you are in the hospital, your care team will watch your vital signs, make sure you are comfortable, and ensure you are able to take care of yourself when you go home.

You can expect the following:

- You will be given fluids and pain medications through your IV. Be sure to tell your nurse if your pain increases.
- Once you can tolerate fluids, you will be given pain medication to take by mouth.
- You will be given clear liquids to sip. Aim to sip 1 ounce of fluid every 15 minutes while you are awake.
- Walking is encouraged to help reduce pain and complications. Try to move hourly and walk at least 4 to 5 times per day while you are awake. Getting up and walking for short periods more often is better than taking longer walks less often.



You will be given an incentive spirometer to help you take deep breaths (see picture above). Take 10 deep breaths every hour you are awake to prevent breathing problems. Take this device home with you.



## Pain management

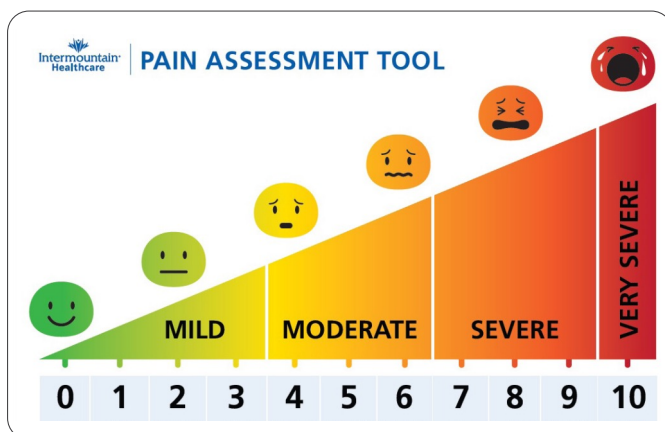
It's important to remember that the goal of pain management is not to get rid of pain completely. It is to manage pain so that you can do the activities you need to heal — like walking, eating, sleeping, and physical therapy.

Your care team will control your pain with different types of medications. Non-opioid medications will be your primary source of pain relief as they help control pain with less risk of nausea, constipation, and addiction. Depending on how well you are feeling, pain medication will be given by IV or by mouth. When your pain begins to increase, be sure to tell your nurse.

Once they know you can keep fluids down, you will be placed on a liquid or oral pain medication to help control the pain. Remember, you heal faster when your pain is under control.

### HOW DO I TALK ABOUT PAIN TO MY NURSE?

It's not always easy to describe pain. Your care providers will likely use some type of a pain rating scale — a tool to help you describe how much pain you're feeling.



### Other ways to control pain

There are other ways to control pain that don't use medication:

- Cold therapy (ice)
- Massage or therapeutic touch
- Spiritual or emotional counseling
- Walking
- Distraction (music, TV, games)
- Relaxation or meditation techniques
- Bracing your abdomen with a pillow when moving

## Opioids and constipation

Opioid pain medications are generally safe when used exactly as ordered by your doctor, but they do come with some side effects, including constipation. Follow your doctor's recommendations for avoiding constipation, including drinking plenty of fluids, regular walks, and taking laxatives or stool softeners as needed.



## Activity

You will start walking the afternoon of surgery to prevent deep vein thrombosis (DVTs or blood clots). We will encourage you to walk at least 4 times each day (more if you can) while you are in the hospital. The more active you are, the less risk you have for complications; thus walking and moving is extremely important.

## Breathing exercises

Use your incentive spirometer as directed. This is a breathing device to help you in take deep breaths. You will be instructed to take 10 deep breath using your incentive spirometer every hour you are awake. To prevent breathing problems and lung infection:

- Use your incentive spirometer.
- Cough and take deep breaths.
- Do not take sedating medications unless they are approved by your doctor.
- Report any difficulty with breathing or waking from sleep.
- Use your CPAP (if prescribed) for sleep apnea.
- If you are sent home with oxygen, it is important to use it as prescribed.

## Staying hydrated

Right after surgery, your goal will be to drink 32 to 64 ounces (1 to 2 liters) every day. Eventually, your goal will be to drink a minimum of 64 ounces, but that will take time. Start with 1 ounce every 15 minutes or 2 to 4 ounces sipped over 1 hour, every hour while awake. When you begin to exercise, try drinking more water and increasing your electrolytes.



## Going home

It is best to have someone help look after you for at least 72 hours (3 days) after surgery. You will need to walk frequently. Avoid lifting more than 10 to 15 pounds (similar to a large cat or a gallon of milk) for 4 to 6 weeks after surgery. It's important to avoid constipation in the first 4 weeks after surgery. Don't "push" while on the toilet. Follow the recommendations for avoiding constipation. Contact your surgeon's office if you have not had a bowel movement in 4 days.

**If you had laparoscopic surgery,** you may go back to your normal non-strenuous activities as soon as you are up to it. Your doctor will guide you on increasing your activity level. You will see your surgeon for your follow up appointment within 2 to 4 weeks after surgery.

**If you had open surgery,** you will need to limit your activity for as much as 4 to 6 weeks. It is still very important that you walk 5 times per day for 5 minutes each walk, and you may do some stairs and light activity. More intense exercise is permitted once your surgeon releases you to do so. You may wear an abdominal binder for comfort if needed.



### GOING BACK TO WORK

Going back to work and pre-surgery activities depends on many things:

- Your physical condition
- The nature of the activity
- The type of weight loss surgery you had

Most people are able to go back to work 1 to 3 weeks after surgery with approval from their surgeon.

# What to Watch for After Surgery

Follow these tips to stay healthy after your surgery. If you have any questions, please call your surgeon's office.

## Wound care

- Keep your incisions dry for 48 hours after surgery.
- Do not take a bath, go swimming, or sit in a hot tub for 2 to 3 weeks, or until your incisions are healed and your surgeon tells you it's okay to do these activities.
- Look for signs of infection at the surgical site:
  - Swelling
  - Drainage
  - Heat
  - Foul odor
  - Redness
  - Fever of 101.5° F (38.6° C) or higher
- Refer to the pain management guide given to you before your surgery. If your pain is above your pain goal, use the prescribed opioid medication.

## Gas pain

CO<sub>2</sub> (carbon dioxide) is used to inflate the abdominal cavity (belly) during surgery. The CO<sub>2</sub> may rise and settle in your shoulders, chest, or back, causing aches or pains.

- **Walking or movement will help** get rid of the CO<sub>2</sub>.  
Note: Pain will lessen as you expel air (burp or pass gas).
- **Try placing a heating pad on your upper back and shoulders.**
- **Use the incentive spirometer hourly** to help keep your lungs clear.
- **Try chewable simethicone (Gas-X, others) to relieve pain.**  
Opioid pain medications don't treat gas pain and may make it worse by causing constipation.
- **Pay attention to other symptoms** associated with the pain and how you feel so you can tell your surgeon.

Call your surgeon's office if gas pain worsens or becomes too severe.





## Nausea and vomiting

If you feel nauseous or sick to your stomach when eating meals, you may need to use a prescription nausea medication or an over-the-counter antacid like chewable Tums or Maalox at least 30 minutes before you eat. Other options to try include:

- Introducing one new food at a time
- Drinking liquids at room temperature
- Sipping liquids slowly
- Keeping water and food separate
- Avoiding water 30 minutes before and after meals
- Chewing each bite 20 to 30 times before swallowing
- Avoiding foods high in acid and those not on the permitted list (orange juice, tomato, others.)
- Making note of the food or medicines that upset your stomach in your food journal. Reintroduce the food 2 to 3 weeks later.
- Applying a cold cloth to the base of your neck and forehead

Call your surgeon's office if you continue to feel nausea or can't stop vomiting.

## Feeling dizzy or out of breath

Feeling dizzy or out of breath may be caused by anesthesia, pain medications, dehydration, low blood pressure, or low blood sugar. If you are feeling dizzy or out of breath, take short walks. Walk for 3 to 5 minutes at least 4 to 5 times daily. Walking will help prevent blood clots and help you heal better.

## GERD or acid reflux

You may experience heartburn, indigestion, pain, or burning in the throat. You could also have a difficult time swallowing. If this happens:

- Take an over-the-counter proton pump inhibitor (Prilosec, Prevacid, Nexium)
- Avoid acidic foods and drinks such as onions, chocolate, tomato juice or tomato products, alcohol, caffeine, and citrus.
- Avoid greasy foods, such as fried chicken or potatoes, pizza, or fatty meats.

If these options do not work, call your surgeon's office.



### WHEN TO GET HELP

Call your surgeon's office if you have a fever of 101.5° F (38.6° C) or higher or if you have any of the problems listed on the left. Seek immediate medical attention if you have chest pain or shortness of breath.

# Follow-up Appointment Schedule



It is important to follow up with your surgeon regularly after surgery. Your visits allow you to ask questions, make adjustments to your diet or recovery plan, and ensure you are healing well.

Below is an expected after-surgery appointment schedule. Please note that individual hospital program schedules may vary, and some patients may need more frequent visits.

You will receive automated email reminders to schedule your follow up appointments. If you have already done so, please disregard.

## Lifetime follow up

Regular visits with your surgeon and care team are a good time to review your exercise, nutrition, and hydration plans. Regular visits can help you manage your weight and any other related health problems.

It's important to remember that the way your body works was changed. You will need to have regular visits with a surgeon who knows the details of your procedure for at least the first year.

### Appointment Schedule After Surgery

<b>30 Days</b>	Required with surgeon. At this appointment and each visit below: assess for weight loss, diet, physical activity, psychological well-being, and evidence of complications; adjust medications.
<b>6 Months</b>	With surgeon.
<b>1 Year</b>	With surgeon.
<b>Yearly Thereafter</b>	Yearly, with surgeon (preferred), PCP, or other; more frequent visits if patient is failing to lose weight or is regaining weight.

Each facility may have additional appointment requirements depending on your procedure and surgeon recommendations.

# Weight Loss Expectations after Surgery

After surgery, you will notice physical and metabolic changes in your body, including signs of fullness and hunger. These changes can help with weight loss.

To improve weight loss follow program guidelines such as:

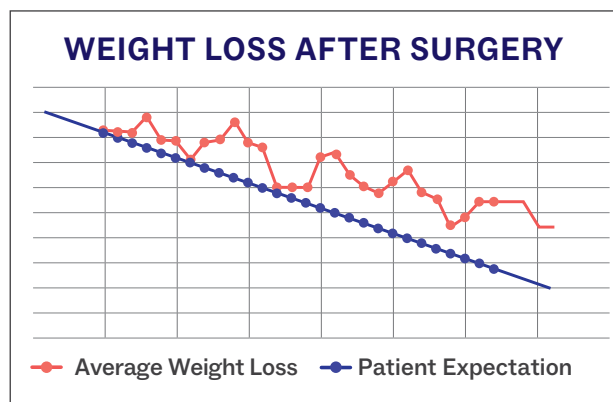
- Eating the right amount and types of foods in your diet stage
- Exercising: Do cardio exercise 3 to 5 times per week and strength training 2 times per week
- Drinking adequate amounts of liquid
- Working on improving thoughts about food, health, and happiness
- Using a support system

One of the biggest expectations after surgery is that your body will show signs of weight loss every day (see the blue line on the graph at left). The reality is that your weight will change as your metabolism adjusts. This might mean that your weight loss stops for a time. (See the orange line on the graph.) This stopping and starting is a normal part of the process. It is not recommended to weigh daily. Instead, weigh at the same time weekly, first thing in the morning.

Despite following all the rules and following the lifestyle after surgery, your body is designed to protect itself from future starvation and may fight against what you are trying to achieve. Paying attention to non-scale victories (wins that are not about the number on a scale) during times when weight loss has stalled is essential and can be a sign of positive body changes. Some examples of non-scale victories are:

- The way that your clothes fit (looser)
- The ability to do more (lift more weight or walk farther)
- Improved energy levels
- An increase of the amount of muscle you have

Tracking your habits, portions, fluids, and diet may help you see if there is something contributing to your weight plateau. It is important to not get discouraged when weight stalls happen. Keep up with your lifestyle changes and continue to make small modifications. The weight loss will return. Obesity is a persistent disease that requires constant management. Just like other health conditions, it is essential to follow up with your doctor regularly. Remember, you have the power to make your weight loss journey a success.





# Nutrition After Surgery

Your surgery changed your body. To help it stay healthy, your body needs you to change how you eat. The following guidelines will help you keep the weight off while getting the nutrition you need.

Planning meals in advance will help you get enough protein and other nutrients to reach your daily nutrition goal.

**During stage 1**, it is important to listen to your body and stop when you feel full (not stuffed). Each meal in this stage will be about  $\frac{1}{4}$  cup of food. Eating slowly will help you feel full and help prevent nausea, vomiting, and dumping syndrome.

**About 2 weeks after surgery**, you will talk with your surgeon about adding more foods to your diet. These might include soft proteins like canned chicken or tuna, deli meats, and soft canned vegetables. You may now be able to stop drinking protein shakes, unless your surgeon says otherwise.

## General Recommendations — ALL Facilities

STAGE 1 Clear Liquid	STAGE 2 Full Liquid	STAGE 3 Soft Proteins	STAGE 4 Protein, Foods and Vegetables	STAGE 5 Maintenance
	Post Op 3 to 14 days	Post Op >15 days to 4 weeks	Post Op > 4 weeks until weight loss goal achieved	
~ 2 ounces	2 to 4 ounces	2 to 4 ounces	2 to 4 ounces	4 to 8 ounces
<b>Allowed Foods:</b> <ul style="list-style-type: none"> <li>• Broth</li> <li>• Sugar-free Jell-O</li> <li>• Sugar-free popsicles</li> <li>• Herbal tea (unsweetened, caffeine-free)</li> </ul>	<b>Allowed Foods:</b> <ul style="list-style-type: none"> <li>• Stage 1 foods, skim milk</li> <li>• Light yogurt (no chunks)</li> <li>• Sugar-free Carnation Instant Breakfast</li> <li>• Boost Glucose Control</li> <li>• Sugar-free protein drinks</li> </ul> <b>Goals:</b> <ul style="list-style-type: none"> <li>• Begin vitamin supplementation for life</li> </ul>	<b>Allowed Foods:</b> <ul style="list-style-type: none"> <li>• Cottage cheese</li> <li>• String cheese</li> <li>• Canned meat (no red meat)</li> <li>• Refried beans</li> <li>• Eggs</li> <li>• Thin deli meat</li> <li>• Canned and cooked vegetables</li> </ul> <b>Goals:</b> <ul style="list-style-type: none"> <li>• Introduce 1 food at a time</li> <li>• No fluids 30 minutes before and after meals</li> <li>• Chew to puree</li> </ul>	<b>Allowed Foods:</b> <ul style="list-style-type: none"> <li>• Meat</li> <li>• Beans</li> <li>• Eggs</li> <li>• Cooked or raw non-starchy vegetables</li> <li>• Soups (low carbohydrates)</li> </ul> <b>Goals:</b> <ul style="list-style-type: none"> <li>• 70% high protein foods</li> <li>• 30% vegetables</li> <li>• Eat food, stop intake of protein shakes (4 to 8 weeks post-op)</li> </ul>	<b>Goals:</b> <ul style="list-style-type: none"> <li>• Eat protein first</li> <li>• Spend 15 to 20 minutes eating</li> <li>• Engage in mindful eating: listen to hunger and fullness cues</li> <li>• Chew to puree consistency</li> <li>• Daily multivitamin</li> <li>• Emphasize protein, not calories</li> <li>• No carbonation, gum, straws</li> <li>• Avoid alcohol and caffeine</li> <li>• Fluids 30 minutes before or after meals only</li> <li>• Drink 4 to 6 ounces between meals</li> <li>• Select lower fat, high protein, sugar-free foods</li> <li>• Protein drinks or bars should generally not be consumed after Stage 3</li> </ul>

Sip 3 to 4 ounces of water every hour between meals (Stages 1 to 4)

## Liquids

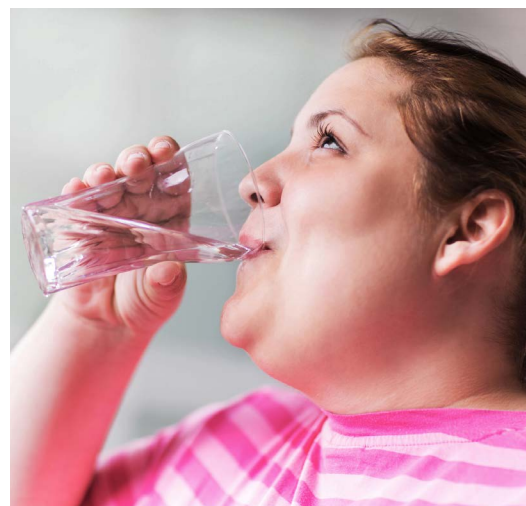
Hydration is essential for good health, proper weight loss, and improved energy. It is best to sip 48 to 64 ounces of water each day. **Do not drink fluids 30 minutes before or after each meal or while you are eating.** Water is the ideal choice and can be flavored with a slice of citrus (orange, lemon, or lime) or sugar free beverage flavoring (Crystal Light, Mio, others). You can also have vegetable juices such as V-8 (not the fruit juice varieties), tomato, and carrot juice. Warm drinks like chicken and beef broth are also allowed.

Because your stomach size is significantly smaller, **drinking fluids on a regular schedule is vital to avoid dehydration.** Always have recommended liquids with you and take small sips frequently, letting it remain in your mouth for a while before swallowing. If you experience any symptoms of dehydration such as dry skin, dry mouth, dark urine (pee), or very little urine output, increase your liquids and contact your doctor.

**Do not drink carbonated beverages of any kind.** Carbonation makes you burp and causes bloating, which can stretch your stomach pouch.

**Alcoholic beverages should be avoided.** Alcoholic beverages (including beer, wine, and liquor) are high in calories, are often carbonated, and extremely hard on your stomach. In addition, you absorb the alcohol quicker after surgery and are at higher risk for transferring a food addiction to alcohol. Some over-the-counter medications, such as NyQuil and certain cough syrups, also contain alcohol and should be avoided.

Caffeine is a known diuretic (dehydrating medication) and may slow wound healing. To maintain proper hydration, it is recommended that you avoid drinks containing caffeine (coffee, tea, etc).





## Protein

Protein is key for healing your body after surgery and for maintaining good health.

It is important for you to eat protein with every meal. You can only absorb 20 to 30 grams of protein per meal, so you need to have small protein-based meals more often. Because your stomach pouch is smaller, it can be hard to meet the daily protein recommendation. Therefore, it is essential that you eat the protein foods first, and then eat your vegetables if you are still hungry.

You should aim to eat between 60 grams (g) and 100 g of protein each day, depending on your stage of diet, activity level, and weight. It is recommended that most of your diet (70%) be high protein foods with the rest of your diet (30%) vegetables. This is especially important during the weight loss phase.

Eat protein-based meals 3 to 6 times daily, depending on what your facility and surgeon recommend. Add an additional protein or vegetable snack between meals only if you feel hungry, dizzy, tired, or weak. After the liquid phase of the diet when you are working on your weight loss goal, protein supplement drinks like Boost and Ensure should only be used when advised by your physician or when another source of protein is not available.

Protein Ideas	
Low-fat cheese	Tofu/Tempe/Edamame
String cheese	Skim milk
Low-fat Ricotta	Shellfish
Chicken	Beans, lentils, or refried beans
Fish	Venison
Eggs	Canned meat
Ham or pork	Greek yogurt (low sugar)
Non-fat cottage cheese	Thin deli meat (low-fat)

### Increasing protein in your day

Think of meals in terms of which proteins and vegetables you can eat.

- Melt low-fat cheese on refried beans, meat, or any kind of vegetables.
- Eat an omelet, scrambled egg, slice of meat, or nonfat/low-sugar yogurt for breakfast.
- Mix nonfat cottage cheese with hard-cooked diced eggs, tuna, turkey, or chicken.
- Eat tuna or chicken salad, made with light mayonnaise, on a bed of lettuce.
- Add nonfat cottage cheese and small pieces of meat to tossed salad.
- Use legumes such as lentils, pinto, and kidney beans.
- A few nuts (no more than 4) on occasion.
- Add tofu to soups.
- Use dry milk powder in soups or other foods. instead of protein powder.



## Vegetables

Vegetables contain the vitamins, minerals, and antioxidants your body needs. They will also be the main way to get fiber in your diet after surgery. One third (30%) of every meal should be vegetables. It's important to try a lot of different kinds to get all the nutrients your body needs.

Initially, all vegetables need to be moist and very soft. Canned vegetables such as carrots or green beans are best to begin with. After 6 weeks, you may begin adding raw vegetables as tolerated. Vegetables that have a lot of fiber such as lettuce, celery, asparagus, spinach, and others like these should be added in last. They can be difficult to digest and will need to be chewed well to reduce risk of a temporary blockage.

## Fruit

Fruit is typically not recommended until your goal weight is achieved. However, fruit can help to regulate your bowels and may be included up to 2 times per week once your goal weight is reached. When picking canned fruit, choose those packed in water or with no sugar added. Avoid high-fiber fruits such as pineapple in the beginning. These are difficult to digest and need to be chewed well. Be aware that fruit contains natural sugar and may cause diarrhea and dumping syndrome. Many of the same vitamins and minerals found in fruit are also found in vegetables.





## Milk and dairy products

Skim milk is an excellent source of calcium and Vitamin D, which help keep your bones and teeth healthy. After surgery, you may experience intolerance to milk and milk products. You will also need to take a calcium supplement every day to fully meet your body's needs (see page 39).

## Grains

Carbohydrates such as grains and starches are high in fiber and calories. It is best not to eat bread, pasta, rice, cereals, crackers, chips, tortillas, and potatoes during weight loss phase. After the weight loss phase, whole grain varieties of these items can be added to your diet occasionally and in small amounts.



## Soups

Drain of all the liquid in the soup and skip the pasta and potatoes. All soups, like beef bouillon, beef broth, and tomato should be counted as liquids.

- Bean
- Bean and ham
- Broccoli
- Chili
- Chicken
- Chicken vegetable
- Lentil
- Minestrone
- Turkey vegetable
- Vegetable



## Condiments

Use condiments sparingly.

- Salsa
- Mustard
- Lettuce
- Ketchup
- Lime juice
- Pickle relish
- Vinegar
- Mayonnaise
- Sauces
- Sour cream
- Margarine
- Salad dressing

## Example meal ideas (for Stage 3)

Remember these are sample menus and should be adapted as needed.

### Breakfast

- 1 slice deli meat with 2 tablespoons of melted low-fat cheese on top
- 2 tablespoons scrambled egg with 1 tablespoon grated low-fat cheese
- 2 tablespoons scrambled egg with 1 tablespoon mild tomato salsa or diced deli ham
- 3 tablespoons yogurt with 1 tablespoon cottage cheese
- 3 tablespoons cottage cheese with 1 tablespoon diced tomato

### Lunch and Dinner

- 3 tablespoons cottage cheese, 1 tablespoon soft cooked beans or carrots
- 3 tablespoons ricotta cheese with tomato salsa, 1 tablespoon cooked zucchini
- 2 tablespoons tuna fish mixed with 1 tablespoon low-fat cottage cheese and 1 tablespoon cooked green beans
- 2 tablespoons low-fat refried beans with 1 tablespoon low-fat cheese and 1 tablespoon salsa



# Going Through the Stages: What to expect as you advance

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The following are some concerns that can develop as you go through the 5 recommended diet stages.

## Dumping syndrome

Dumping syndrome happens most often with gastric bypass surgery. Eating refined sugar may cause nausea, stomach cramps, weakness, diarrhea, cold sweats, rapid heart rate, and light-headedness. Together, these symptoms are called “dumping syndrome.” Dumping syndrome can be eliminated by avoiding all food with sugar as one of the first 3 ingredients on the label. Common sugars include glucose, dextrose, fructose, sucrose, honey, corn syrup, and molasses. Sorbitol and mannitol may also cause dumping problems. Some people experience dumping with fruit. You will have to assess your tolerance.

You may use sugar substitutes such as Equal, Sweet and Low, Sugar Twin, Splenda, Truvia, and Sweet One.

## Constipation and diarrhea

It is normal to have some constipation or bowel movements (poops) only once every 2 to 3 days. If your bowel movements are hard, try to add more high fiber foods in your meal plan. Make sure you are drinking enough between meals and you are sipping 64 ounces per day. Additionally, walking or being active can help relieve constipation. If fiber foods do not work, please call the surgeon’s office for recommendations.

Diarrhea often occurs when guidelines are not being followed. If you have diarrhea:

- Check your sugar intake, including the amount of fruits you are eating if you are at your goal weight.
- Make sure your fluid intake is high (to avoid dehydration).
- If diarrhea lasts longer than 2 days, call the office and speak to your doctor’s nurse.





## Nausea and vomiting

Following the recommended dietary guidelines generally prevents nausea and vomiting. **Remember to move through the diet stages slowly.**

Adding new foods one at a time is helpful in case a certain food disagrees with your system. If a food seems to upset you, stop eating it for 2 to 3 weeks, but don't be afraid to try it again in the future.

### Hints for nausea:

- Use an antacid, like Tums before eating.
- Drink your liquids at room temperature.
- Return to only liquids and soft foods for 1 or 2 days.
- Pay close attention to your body's signals for fullness and stop eating when full. You may feel nausea, pressure, or fullness in the center of your abdomen. **One extra bite can cause pain or discomfort.** If you do not have signs of fullness, continue to measure your servings.

**If you have problems with discomfort, nausea, or vomiting, ask yourself the following questions and make changes at your next meal:**

- Are you stressed? Strong emotions, including happiness and frustration, can cause indigestion. Use relaxation methods such as a warm bath, hot pad, deep breathing or soft music before a meal.
- Did you eat too fast or not chew your food well enough?
- Did you eat too much?
- Did you drink fluids with the meal or too soon after the meal?
- Did you lie down too soon after the meal?
- Did you eat foods such as tough meat or fresh bread?

**If you vomit after a meal, it may be because the outlet from your pouch to intestine may be narrowed. Avoid solid foods and sip clear liquids such as broth.** Gradually work back to a more solid diet. If vomiting continues for more than 24 hours, contact your doctor. Continued vomiting or reflux can be very hard on your esophagus (food tube) and tooth enamel. Teeth can be strengthened by use of topical prescriptive fluoride. Contact your dentist for advice and treatment.

### DINING OUT TIPS

Eating in restaurants with family and friends is an important social experience you shouldn't avoid. The following guidelines will help you make it an enjoyable experience while maintaining your new eating habits:

- Order a smaller portion.
- Avoid fried foods.
- Share a meal.
- Ask for a to-go container with your meal and only leave a small portion on your plate before eating.
- Select foods you know you can tolerate.
- Look at the menu online ahead of dining out to help you make healthier choices.
- Ask for dressings, sauces and condiments on the side.
- Select lean meats.
- Ask for more vegetables.



## Portion control and measuring

Many people struggle with portion sizes. It can help to have preportioned plates and bowls so that you don't take more food than you are supposed to eat (2 to 4 ounces total). Large portions can tempt you to overeat.

## Mindless and emotional eating

Mindless and emotional eating can be a response to holidays, celebrations, or emotions. Ideally, we want to eat intentionally and as fuel for our body. It is helpful to form positive relationships with food and healthy coping mechanisms that are not food related. If this is something that is frequent in your life, it may help to work with a dietitian or mental health professional as this is something that can quickly lead to weight regain. One thing you might try is creating a list of 3 "pick up and go" activities, such as listening to music, walking, or reading. These activities are a way to learn positive habits and help give yourself time to determine if the hunger is physical or emotional hunger.

## Temporary hair thinning

Many patients develop hair loss for a period after surgery. Hair loss is typically noticed 3 to 4 months after surgery. Hair re-growth is generally seen around 7 to 9 months after surgery. Hair loss is usually not a permanent condition and is typically linked to being female, young, and having low blood levels of zinc, folic acid, protein, and ferritin. People rarely lose more than  $\frac{1}{3}$  of their hair thickness. Hair loss is often decreased by eating enough protein and taking your daily multivitamin.

## Long term nutrition

It can take 12 to 18 months to reach your weight loss goal. Once you have achieved your goal, it is time to transition into the weight maintenance phase. Maintenance is a life-long commitment. Going back to old habits can be a very real temptation. Please be aware that you are not alone in this journey. Your surgeon and weight loss team are here to help.

Moving into the maintenance phase of your diet can be overwhelming. It is wise to try small amounts of a new food item, one at a time, to help with the change in your menu options. The main foods in your diet will continue to be protein and vegetables. However, whole grains and fruits can be added a few times throughout the week. Your stomach pouch will hold a maximum of 6 to 8 ounces per meal. If you eat more it will lead to overfilling and eventually long-term stretching of your stomach pouch.

## Weight

It's normal for your weight to change in small amounts both up and down. Regaining some weight is typical 2 to 5 years after your surgery. Long-term weight loss is dependent on many factors including your starting weight, following the dietary guidelines, regular exercise (if able), and participation in a support group. Gastric bypass patients are usually able to keep off around half of their total excess weight long term. Set reasonable expectations that you know you can meet.

To help you make the weight loss permanent, be sure to involve your weight loss team if you gain more than 10 pounds. Often this gain is due to behavioral, nutritional, or physical issues that should be addressed quickly. It is important to seek solutions to small amounts of weight regain sooner than later, when they become large gains and are more difficult to address.

## Gastric bypass maturity

The gastric bypass pouch “matures” over time. The pouch becomes less sensitive and develops a stronger tolerance to food choices. Before your pouch becomes “mature,” it may be helpful to continue developing lifelong healthy eating, drinking, and fitness patterns.

## Getting back on track

If you find that you are slipping off track, go back to the beginning. Here are some points to consider:

- Eat 3 small meals each day (4 to 5 oz. each)
- Eat protein and vegetables only
- Don't skip meals
- Practice portion control
- Only eat when hungry. Pay attention to hunger-fullness cues.
- If physically hungry between meals, drink water first. If that doesn't help, add in a protein snack (no more than 2 a day). Remember it takes 20 to 30 minutes after eating for your body to signal it is full.
- Snack less throughout the day
- Reduce foods with high amounts of sugar, complex carbohydrates, or starch.
- Drink 64 ounces of water daily
- Avoid caffeinated beverages



# Vitamins, Minerals, and Medications



## Example: Multivitamins

Bariatric Advantage:  
Chewable

Optisource Post-Bariatric  
Surgery Formula: Chewable

Celebrate Multi-Complete:  
Chewable

Bariatric Fusion:  
Chewable

Opportunity Bypass and  
Sleeve Optimized: Chewable

Laboratory studies will be performed routinely to check your health and nutritional status. The following blood tests will be checked at 6 months and once yearly thereafter:

- Complete blood count
- Electrolytes (essential minerals)
- Glucose (blood sugar)
- Iron studies, ferritin
- Vitamin B-12
- Aminotransferases, alkaline phosphatase, bilirubin (liver function)
- Albumin (liver and kidney function)
- Lipid profile (blood fats)
- Vitamin D
- Parathyroid hormone (PTH)/ Calcium (thyroid function)
- Thiamine
- Folate (folic acid or vitamin b9)
- Hemoglobin A1C (glucose)
- Vitamin A (Duodenal switch only)

## Multivitamin

Your physician will watch your need for vitamin and mineral supplements to ensure all your body's nutrient needs are met. Your reduced stomach size will not allow you to eat enough food to provide your body with its daily requirements for many vitamins and minerals, including calcium and iron.

This means you will need to take a multivitamin every day after your surgery. These will need to be chewable or liquid vitamins and should be continued daily for life. Bariatric-specific multivitamins tend to be more complete. They also tend to be more expensive. If cost is a problem, choose a multivitamin that contains 200% of your DV (daily value) of vitamins and minerals. Note that most multivitamins will require more than one tablet each day to meet these requirements. See the list of essential vitamins and minerals on the next page.



## Calcium citrate

Calcium is found in a variety of sources such as dairy and some vegetables. Calcium is important to help prevent bone loss during rapid weight loss. Your doctor will recommend a daily chewable calcium supplement of 1200 to 1500 milligrams (mg) per day. If you had the duodenal switch surgery, you may need 1800-2400 mg per day. Do not take more than 500 mg of calcium at one time as this is the most your body can absorb at once. Choose a calcium supplement that includes vitamin D. We recommend selecting calcium citrate over calcium carbonate as your body can better absorb it. Take calcium about 2 hours after taking multivitamins that contain iron.

## Iron

If your blood test shows that your iron levels are low, your doctor may prescribe an iron supplement. As noted above, **do not take iron supplement the same time as you take calcium**. This also means you should not take your iron pill with milk, yogurt, or cheese, or with antacids.

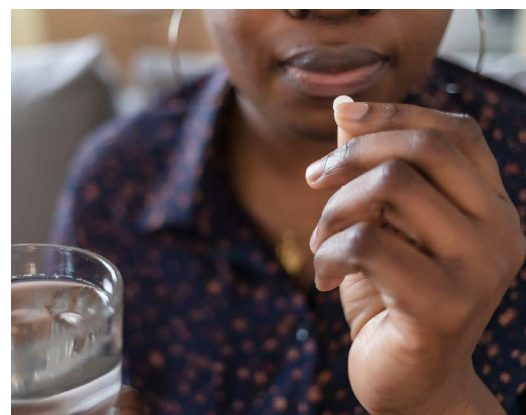
Vitamin C helps your body absorb iron. Liquid iron should be added to water and given through a straw to prevent tooth stains.

## Vitamin B1 (Thiamine)

You may have a vitamin B1 (thiamine) deficiency because you aren't getting enough nutrients after surgery. This may be because your body isn't absorbing the nutrient or because of nausea and vomiting. Make sure your multivitamin gives you at least 12 mg of thiamine per day. Some facilities will recommend 20 to 30 mg.

## Vitamin B12 (Cobalamin)

You can become deficient in vitamin B12 (Cobalamin) because your stomach pouch is smaller. For most people, eating animal products such as meat, poultry, shellfish, cheese, eggs, and milk every day will provide enough vitamin B12. Because you are eating less, you will need to take a daily vitamin or supplement that has 350 to 500 micrograms (mcg) of vitamin B12. There are many different ways to take Vitamin B12, including sublingual (under the tongue), lozenges, liquid, and injections. If using injections, these should be 1000 mcg a month.



## Medications

After surgery, your body may absorb your medications differently, so you may need to change the way you take your medications. Most medications will need to be in a chewable, dissolvable, injectable, or liquid form. Gummies are not recommended after surgery.

Follow up blood lab tests are critical if you are taking a medication that requires a specific amount in your blood stream (for example, some blood thinners or seizure medications). Medication that is dosed by weight needs to be reviewed and dosing changed as weight is lost.

Please check with your pharmacist and doctor before crushing any medications. **Warning: Crushing or chewing a long acting or sustained release medication may result in serious harm due to releasing large amounts of medication all at once. Always consult with your surgeon or primary care physician on which medications to avoid and how to take them after surgery.**

The list below is from many post-operative instructions, and is not specific to your case, your surgeon, or your facility.

General Recommendations — Medications		
Medications to Avoid	Medications Usually Well Tolerated	Medications Recommended for Colds
<ul style="list-style-type: none"> <li>• <b>Advil</b> (ibuprofen)*</li> <li>• <b>Motrin</b> (ibuprofen)*</li> <li>• <b>Alka-Seltzer</b> (some preparations have aspirin)</li> <li>• <b>Vanquish</b> (some have aspirin, caffeine, and acetaminophen)</li> <li>• <b>Anacin, Bufferein, Ecotrin</b> (or any formulation with aspirin)</li> <li>• <b>Coricidin</b> (a mix of chlorpheniramine and acetaminophen — some have aspirin)</li> <li>• <b>Excedrin</b> (aspirin)</li> <li>• <b>Fironal</b> (aspirin and butalbital)</li> <li>• <b>Pepto-Bismol</b> (bismuth subsalicylate, an aspirin-like drug)</li> <li>• <b>Orudis</b> (ketoprofen)</li> <li>• <b>Aleve</b> (naproxen)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Senekot-S</b> (extract of senna and docusate)</li> <li>• <b>Panadol</b> (acetaminophen)</li> <li>• <b>Tylenol Extra Strength</b> (acetaminophen 500 mg)</li> <li>• <b>Gas-X</b> (simethicone)</li> <li>• <b>Colace</b> (docusate)</li> <li>• <b>Dulcolax suppositories</b> (bisacodyl)</li> <li>• <b>Fleet enemas</b> (sodium phosphate)</li> <li>• <b>Glycerin suppositories</b> (glycerin)</li> <li>• <b>Phillips Milk of Magnesia</b> (magnesium hydroxide)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Benadryl</b> (diphenhydramine)</li> <li>• <b>Dimetapp</b> (brompheniramine)</li> <li>• <b>Robitussin</b> (guaifenesin)</li> <li>• <b>Sudafed</b> (pseudoephedrine)</li> <li>• <b>Triaminics</b> (pseudoephedrine, chlorpheniramine, dextromethorphan)</li> <li>• <b>Tylenol cold products</b> (acetaminophen, diphenhydramine, dextromethorphan)</li> </ul>

\* May be permitted in gastric sleeve patients only, refer to your surgeon's instructions.

## Some medications may cause weight gain

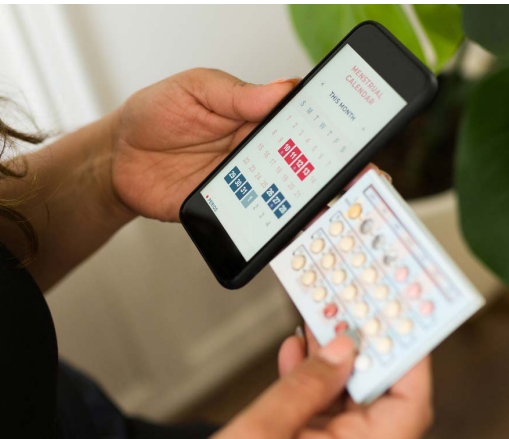
The following medications are known to cause weight gain in patients. It is recommended that you avoid these medications or switch to an alternate if possible.

Medications That Cause Weight Gain		
Antidepressants, Antipsychotics	Seizure Medications	Blood Pressure Medications
<ul style="list-style-type: none"> <li>• <b>Zoloft</b> (sertraline)</li> <li>• <b>Lithobid</b> (lithium)</li> <li>• <b>Zyprexa</b> (olanzapine)</li> <li>• <b>Risperdal</b> (risperidone)</li> <li>• <b>Clozaril</b> (clozapine)</li> <li>• <b>Elavil</b> (amitriptyline)</li> <li>• <b>Paxil</b> (paroxetine)</li> <li>• <b>Seroquel</b> (quetiapine)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Depakene</b> (valproic acid)</li> <li>• <b>Depakote</b> (divalproe)</li> <li>• <b>Tegretol</b> (carbamazepine)</li> <li>• <b>Neurotin</b> (gabapentin)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Lopressor</b> (metoprolol tartrate)</li> <li>• <b>Tenormin</b> (atenolol)</li> <li>• <b>Inderal</b> (propranolol)</li> <li>• <b>Norvasc</b> (amlodipine)</li> </ul>
Diabetes Medications	Corticosteroids	Antihistamines
<ul style="list-style-type: none"> <li>• <b>Actos</b> (pioglitazone)</li> <li>• <b>Avandin</b> (rosiglitazone)</li> <li>• <b>Diabeta</b> (glyburide)</li> <li>• <b>Glucotrol</b> (glipizide)</li> <li>• <b>Lantus</b> (insulin)</li> <li>• <b>Amaryl</b> (glimepiride)</li> <li>• <b>Novolog</b> (insulin)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Deltason</b> (oral prednisone)</li> <li>• <b>Medrol</b> (oral methyl-prednisolone)</li> <li>• <b>Solu-Cortef</b> (hydrocortisone)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Allegra</b> (fexofenadine)</li> <li>• <b>Zyrtec</b> (cetirizine)</li> </ul>

## Iron Supplementation

Iron deficiency anemia (low-iron in the blood) occurs in some patients, especially menstruating women. If your blood test shows that your iron levels are low, your doctor may prescribe an additional iron supplement.

**Do not take iron supplement the same time as you take your calcium supplement.** Calcium and iron compete for absorption in your body. This also means you should not take your iron pill with milk, yogurt, or cheese. Vitamin C helps your body absorb iron. Tomatoes, red bell peppers, and dark green vegetables are high in Vitamin C. Also avoid taking iron supplements with antacids. Liquid iron should be added to water and given through a straw to prevent tooth stains.



## Birth Control and Pregnancy

Pregnancy should be avoided in the 12 to 18 months after weight loss surgery. It is important to figure out a birth control plan if you are a sexually active woman (18 to 44 years old) as those that struggled to get pregnant before surgery **may have an easier time getting pregnant after surgery due to the weight loss.** Women who have bariatric surgery are encouraged to use 2 methods of birth control such as an IUD or condoms and spermicide, in addition to oral contraceptives.

Pregnancy can be safe once your weight is stable for at least 18 months. That's how long you need for your meal portions to become normalized and your nutritional health status strong enough to provide for a growing fetus. Women who get pregnant after weight loss surgery should plan to jointly meet with the surgical care team along with their obstetrician.



# Exercise after Surgery

Exercising regularly will help contribute to success after bariatric surgery. Studies show that an exercise program can improve health and reduce complications after surgery.

As your body changes, be open to trying activities that you previously had not enjoyed. You may be surprised at what you can accomplish and enjoy.

## Benefits of regular exercise

- Help manage weight
- Build muscle and prevent muscle loss
- Boost immune system
- Prevent injury
- Improve metabolism
- Reduce stress
- Promote digestion
- Strengthen bones
- Improve sleep
- Reduce risk of chronic diseases

## Cardio

Cardio exercise includes running, walking, cycling, rowing, playing basketball, or anything that makes you breathe harder and increases your heart rate. This type of exercise burns more calories upfront than strength training. The intensity can range from low to high and should be sustained for at least 10 minutes at a time for maximum benefit.

## Strength training

Strength training should be done along with cardio to improve your overall health. Strength training exercises typically include some form of resistance, such as weights, resistance bands, body weight, or springs, like in Pilates. Strength training helps you build and maintain muscles, increase your metabolic rate (how fast your burn calories), improve your bone density, and improves balance and coordination. You should avoid strength training until 4 to 6 weeks after surgery.

## Flexibility

Flexibility exercises, like stretching, yoga, and Pilates, can help improve your balance and joint mobility and helps relieve pain from tight muscles. For the most benefit, do at least 10 minutes of flexibility exercises 2 days per week. The best time to do flexibility exercises are right after doing another exercise while muscles are warm. Stretches should be held for 30 to 60 seconds. Be sure to breathe deeply while you stretch.

## HAVE QUESTIONS ABOUT YOUR EXERCISE PROGRAM?

Reach out to the LiVe Well Center Exercise Staff with any questions about your exercise program, or to help you find an exercise class at one of the centers. **Find the closest Live Well Center near you.** Some locations may have a bariatric-specific program.

### Tips for success

- Find a buddy to help keep you motivated
- Choose something that sparks your interest
- Make it a family affair
- Remember your reasons for getting fit
- Schedule time for it daily
- Mix up your routines
- Focus on progress, not perfection

## Bariatric Surgery Physical Activity Guidelines

	Before Surgery	After Surgery Weeks 1 to 6	After Surgery Weeks 6 to 12	Long-Term Maintenance	Examples
<b>Cardio</b>	<ul style="list-style-type: none"> <li>• 30 to 60 minutes a day</li> <li>• 6 days a week</li> <li>• Moderate to vigorous intensity*</li> </ul>	<ul style="list-style-type: none"> <li>• At least 4, 10-minute sessions daily</li> <li>• Gentle walking 7 days a week</li> <li>• Gradually increase speed, time, and intensity</li> </ul>	<ul style="list-style-type: none"> <li>• 20 to 30 minutes a day</li> <li>• 7 days a week</li> <li>• Moderate intensity*</li> </ul>	<ul style="list-style-type: none"> <li>• 45 to 60 minutes a day</li> <li>• 5 to 6 days a week</li> <li>• Moderate to vigorous intensity*</li> </ul>	<ul style="list-style-type: none"> <li>• Walking</li> <li>• Jogging or running</li> <li>• Cycling, indoors or outside</li> <li>• Dance</li> <li>• Swimming laps</li> <li>• Rowing</li> </ul>
<b>Strength</b>	<ul style="list-style-type: none"> <li>• 2 to 3 minutes each week, all muscle groups</li> <li>• 2 to 3 sets of 8 to 12 repetitions with each exercise</li> </ul>	<ul style="list-style-type: none"> <li>• No strength training for 4 to 6 weeks</li> <li>• <b>Day after surgery:</b> Take deep breaths</li> <li>• <b>Daily:</b> Draw in abdomen (pain free range)</li> </ul>	<ul style="list-style-type: none"> <li>• 1 to 2 days each week</li> <li>• Start with bodyweight only</li> <li>• Gradually increase time and resistance</li> <li>• Wait until weeks 8 to 12 to start abdominal exercises</li> </ul>	<ul style="list-style-type: none"> <li>• 3 days each week</li> <li>• 3 to 4 sets, 10 to 15 repetitions (lower reps if using heavy weights)</li> <li>• Variety of exercises</li> <li>• Core exercises 3 to 7 days a week</li> </ul>	<ul style="list-style-type: none"> <li>• Squats</li> <li>• Lunges</li> <li>• Bicep curls</li> <li>• Planks (after 8 to 12 weeks)</li> <li>• Rows</li> <li>• Tricep extensions</li> <li>• Lateral arm raises</li> <li>• Hamstring curls</li> </ul>
<b>Flexibility</b>	<ul style="list-style-type: none"> <li>• 5 to 7 days a week</li> <li>• Stretch after physical activity</li> <li>• Hold each position for 30 to 60 seconds</li> </ul>	<ul style="list-style-type: none"> <li>• As tolerated</li> <li>• Focus on legs or arms, not places near your surgery site</li> <li>• Pain-free range of motion</li> </ul>	<ul style="list-style-type: none"> <li>• 5 to 7 days a week</li> <li>• Modified stretches</li> <li>• Increase time of hold and repetitions</li> </ul>	<ul style="list-style-type: none"> <li>• 5 to 7 days a week</li> <li>• Variety of static and dynamic (moving) stretches after exercises</li> </ul>	<ul style="list-style-type: none"> <li>• Back scratch</li> <li>• Hamstring stretches</li> <li>• Yoga poses</li> </ul>
<b>Leisure</b>	<ul style="list-style-type: none"> <li>• Activities or sports as usual</li> <li>• Move at least 10 minutes every hour while awake</li> <li>• Increase daily step count</li> </ul>	<ul style="list-style-type: none"> <li>• 2 to 4 weeks after surgery, start light intensity activities</li> <li>• No vigorous or contact sports</li> </ul>	<ul style="list-style-type: none"> <li>• Light to moderate intensity</li> <li>• Gradually increase time and intensity, depending on symptoms</li> </ul>	<ul style="list-style-type: none"> <li>• Activities or sports as usual</li> <li>• Move frequently</li> <li>• Increase daily step count</li> </ul>	<ul style="list-style-type: none"> <li>• Gardening</li> <li>• Tennis</li> <li>• Housework</li> </ul>

## Emotional and psychological changes

Weight loss surgery will change the physical appearance of your body as well as the emotional, social, and spiritual aspects of your life. **Do not take these changes lightly.** Some of these changes may cause you to regain weight, spark concerns about your body image, or trigger substance abuse, feelings of abandonment, and stress.

As weight loss slows down, positive reinforcement can be helpful. Patients are often motivated when they see weight loss results, notice differences in their measurements, and hear positive comments on the changes. But that motivation may change when you reach the weight maintenance phase. This is when you need to focus on your commitment and dedication to long-term success.

Having a strong emotional support system throughout all phases of the bariatric surgery experience is important. Talk with your primary care provider, surgeon, or a mental health professional about ongoing emotional or spiritual challenges, anxiety about your body or interactions with others. If any medications are prescribed, be sure your doctor does not prescribe the type that can cause weight gain.

## Relationships

Relationships may be strained during the weight loss process. Other aspects of your personal life may also change as you reach your goals and increase your self-confidence. Many people feel that everything will be fixed with weight loss. However, experience tells us this is not always the case. For this reason, talking to someone and getting professional counseling may be helpful.

It's important to remember that other people will always have opinions and will provide both positive and negative comments, even when feedback is not wanted or requested. Surgical weight loss is not the "easy road." It is important for you to recognize and acknowledge the courage it took for you to make this decision and follow through on your goals.





## Your relationship with food

Food is central to so many social and cultural experiences. Having a positive relationship with food is extremely important and can take a lifetime of practice to master. If you used to use food to combat boredom, sadness, or anger, or use it as a reward system, you can expect a challenging adjustment. We encourage you to continue working with a mental health professional and registered dietitian to address these issues. Your support team can be key in helping you to learn how to incorporate non-food-based coping strategies into your life.

## Setting realistic goals

The goal of surgery is to help you lose over half of your excess body fat and reduce or prevent health problems. It is not cosmetic surgery. Keep in mind:

- Surgery is only an option if other methods haven't been successful.
- Surgery is meant to be permanent. You will need to make lifestyle changes for the rest of your life.
- Weight loss will not be maximized unless you commit to a healthy lifestyle including nutrition, physical activity, and behavioral aspects.
- Weight loss typically occurs over 12 to 18 months after surgery and is not just a steady decline. There are periods of weight drops and plateaus.
- Regular attendance at a support group can help you lose weight and make more sustainable, healthy lifestyle changes.

## Staying focused

Experience shows us that patients may be more successful when they keep a journal or diary, make connections with other patients, talk or cry with family or friends, and set goals.

When setting goals, set SMART goals (see page 14). What do you want to achieve at different time points after surgery? Write down your goals and refer to them often. This will help see your progress. What things are keeping you from reaching your goals? Where do you need help? Remember to choose non-food rewards for each goal you set and meet.



## Clothing

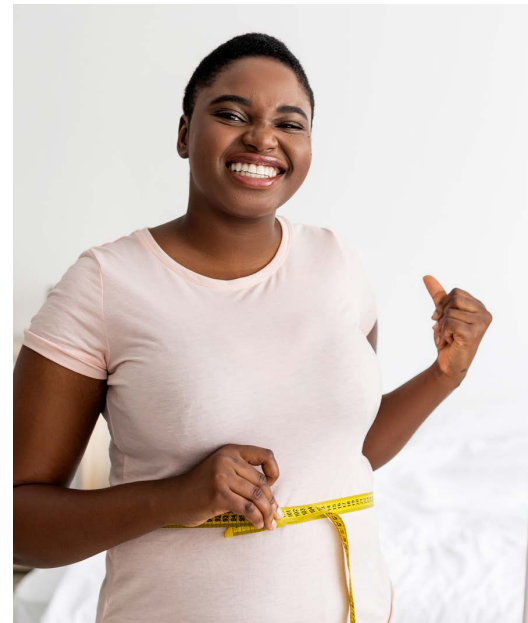
Many people find clothing rewards to be motivating. However, due to the amount of weight loss during the weight loss phase, clothing rewards will be short-lived. We recommend purchasing used or inexpensive clothing during this phase. You can also borrow or alter clothing and use this time to define the clothing styles you like. Your style preferences are likely to change several times during your weight loss. Check with your support group as many patients may want to share clothing during different stages of weight loss.

## Motivational pictures

Some people find it helpful and motivating to take frequent before and after photos. This can help to continue motivation and remind yourself of how far you have come. Photos are a way to document all the hard work you have put into your journey. **One word of caution:** Photos can also create behavioral problems or be triggering in some people. It's important to know yourself and understand how you will react to seeing photos. It is not recommended if seeing photos of your body triggers a negative emotional response.

## Cosmetic surgery

Everyone has a unique body structure. Some individuals may be good candidates for cosmetic surgery and others may not. Cosmetic surgery can improve stretched out skin, both in function and in appearance. However, unless it is deemed medically necessary, most cosmetic surgeries are not covered by insurance. If you are interested having cosmetic surgery, consult with your surgeon about the risks and benefits of this type of surgery. In most cases, you should wait at least 2 years after weight loss surgery before reconstruction takes place.





## Defining your support group

Many successful surgical weight loss patients say their support network was a great help in maintaining their new, healthy lifestyle changes. This may include family and friends as well as the bariatric program support groups. There are a wealth of options and resources available for people interested in bariatric surgery.

It is strongly recommended that you participate in a support group after surgery to help build on your success. Discussions may be therapeutic and are often filled with helpful information. Support groups teach you how to cope with changes in both physical and emotional aspects of your life.

Those who attend a support group have greater long-term weight loss success. Sometimes more support is needed. In these situations, we recommend regular meetings with a health professional.

## Support of family and friends

The first step in getting support is talking to your family and friends about weight loss surgery and your interest in it. It is best if family and friends are supportive. However, this may not always be the case. Sometimes, they can be against your decision. This may be because they don't understand or have preconceived notions about weight loss surgery. Explaining the advantages, benefits, and risks of bariatric surgery may open their minds to its importance.



# Intermountain Surgical Weight Loss Support Group

Intermountain holds monthly Surgical Weight Loss Support Group meetings. These are video-based meetings held on Microsoft Teams and generally include a guest speaker or activity with a healthcare professional.

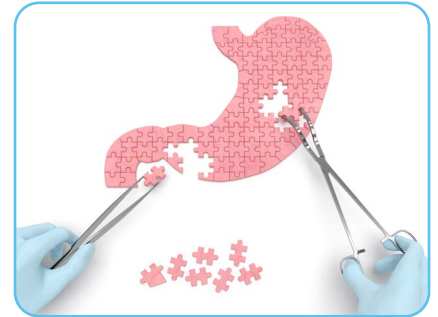
To register for these meetings, do an internet search for “intermountain healthcare surgical weight loss support group” or [click here to register](#).

## Facebook support group

The **Intermountain Surgical Weight Loss Support Facebook group** provides a place for people to communicate with each other, share feelings and experiences in a safe environment, and develop relationships that can contribute to improved physical and emotional health and support. This is a forum for celebrating success, such as improvement or resolution of comorbidities and allows for opportunity to have discussion with those who share common experiences and share your goals of health and wellness.

To join, scan this QR code with your mobile device, click join and answer the questions, and you will be added to the support group.

Intermountain Health is devoted to helping you live the healthiest life possible. Thank you for trusting us for your surgical weight loss journey and ongoing personal transformation.



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To find this booklet and other patient education, go to:  
[intermountainhealth.org](https://intermountainhealth.org)



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Also available in Spanish.