

Your Guide to Bariatric Surgery



St. Joseph's
Hospital-South



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Chapter One – General Information

Welcome to the BayCare Bariatric Surgery Program

This guide will help you learn more about weight loss surgery and how to move toward weight loss success. Learning as much as you can about your digestive system and your surgical procedure will help you play an active role in your recovery.

Please read the entire guide before surgery. **Bring the guide with you when you come to the hospital for your weight loss surgery procedure.** Review any questions with your doctors, nurses, dietitian or bariatric program manager. They'll answer questions and help you and your family on your weight loss journey.

This guide has been prepared for information only. It should not be considered a substitute for medical advice.

Meet Your Team

At the hospital, your surgeon is supported by a strong and talented team. These team members will help you prepare for surgery. They'll make your hospital stay as comfortable as possible and help you recover as quickly as you can. Members of your team include:

Internal Medicine Specialist/Hospitalist (Physician)

A medical doctor may follow your care and manage your current conditions during your hospital stay.

Nurses

Licensed nurses will help coordinate your activities and provide your care. Your nurse will be in charge of your personal care, pain management and discharge planning. The registered nurse (RN) and licensed practical nurse (LPN) wear royal blue scrubs.

Nurse Manager

Registered nurse managers will oversee your care while you're in the hospital. Your satisfaction is very important to them. Don't hesitate to contact the appropriate manager for any reason. Nurse managers wear royal blue scrubs with a white lab jacket.

Patient Care Tech (PCT)

The patient care tech works under the direction of an RN or LPN. They take your vital signs and assist you with activities such as bathing or getting to the bathroom. The PCT wears green scrubs.

Dietitian

A registered and licensed dietitian and nutritionist will visit you during your hospital stay, when requested by your surgeon, to review postsurgical nutrition goals and guidelines.

Nurse Navigator

This is a specialized nurse who helps coordinate your care with your doctor, primary nurse and other health care professionals.



Chapter One – General Information

My Bariatric Team

Weight Loss Surgery Program,
St. Joseph's Hospital-South
6901 Simmons Loop
Riverview, FL 33578
(813) 302-8497

Nurse Navigator: _____

Dietitian: _____

Assistant: _____

Keyur Chavda, MD
205 S. Moon Ave., Suite 102
Brandon, FL 33511
(813) 681-4644

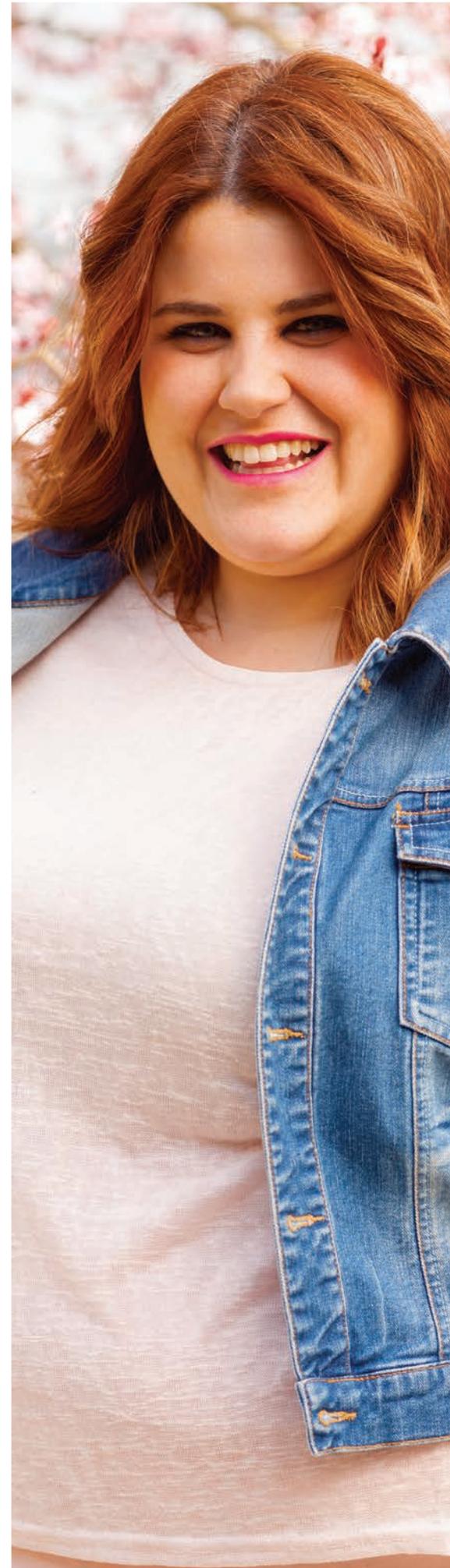
Medical assistant/Nurse: _____

Reception: _____

My Goals After Surgery

I want to be able to enjoy:

1. _____
2. _____
3. _____



Chapter One – General Information

How to Get Here

St. Joseph's Hospital-South Map



Tobacco-Free Campus

To promote a healthy lifestyle, BayCare hospitals are tobacco-free and there are no smoking areas. Studies have shown that smoking negatively impacts healing, including the internal healing necessary with weight loss surgery. If you or a loved one smokes, you might

want to consider stopping prior to surgery. If you need a nicotine patch during your hospital stay, let your physician know and one will be ordered. Free resources include QuitNow at QuitNow.net/Florida or (877) U-Can-Now (877-822-6669).

Chapter One – General Information



Finding Your Way Just Got Easier

BayCare Compass is a free mobile app that will help guide you to wherever you want to go in the hospital. It's as easy as typing in where you want to go and following the instructions.

BayCare Compass features:

- Detailed maps of hospital floors
- Directory listings of departments
- Real-time location
- Points of interest around the hospital
- Driving and parking directions



Download
BayCare Compass
today.





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Chapter Two – Your Digestive System



The Role of Leptin and Ghrelin

The division of the stomach that occurs in both gastric bypass and sleeve gastrectomy procedures have an effect on hunger hormones.

Ghrelin

Ghrelin is a hormone which helps ensure that the body gets enough food. This hormone may also work against the body—it can encourage eating more food than required to meet your individual nutritional needs. This typically results in weight gain.

Leptin

Leptin is another hormone that helps us turn off our hunger signals when our body is properly fueled. When leptin levels are low, the body has difficulty turning off hunger signals. This typically results in weight gain.

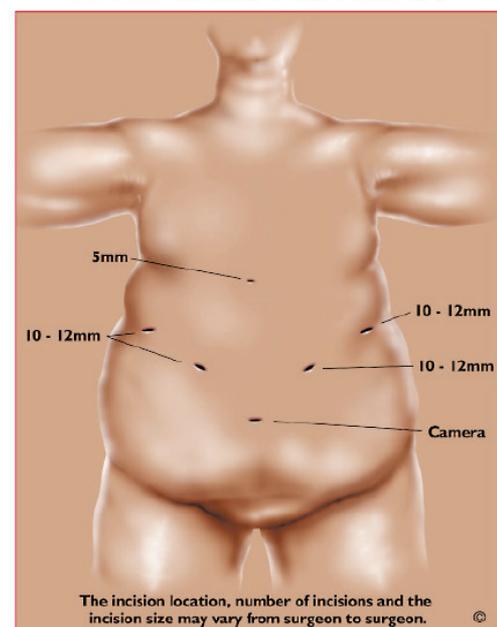
Weight Loss Surgery Technique

Surgeries are done laparoscopically, which means the surgeon makes several small incisions in the abdomen. Using a scope and long instruments, he and the surgical team can clearly see what they're doing on large television screens, which are connected to the scope with a camera. The robotic or open surgical technique may be required, if indicated.

Advantages of Laparoscopic Technique:

- Fewer wound complications
- Lower chance of infection
- Lower chance of herniation
- Less pain and faster recovery
- A better view of your anatomy for the surgeon

Incisions for Laparoscopic Weight Loss Surgery

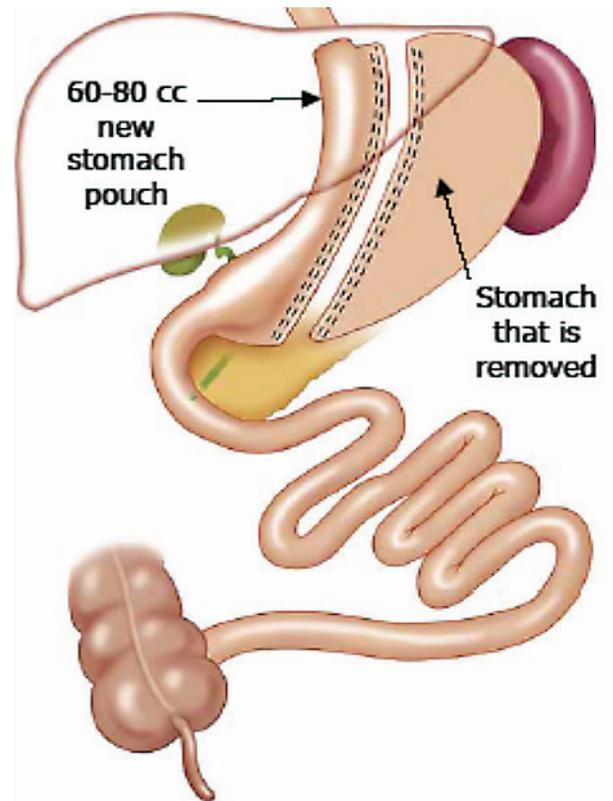


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Weight Loss Surgery Options

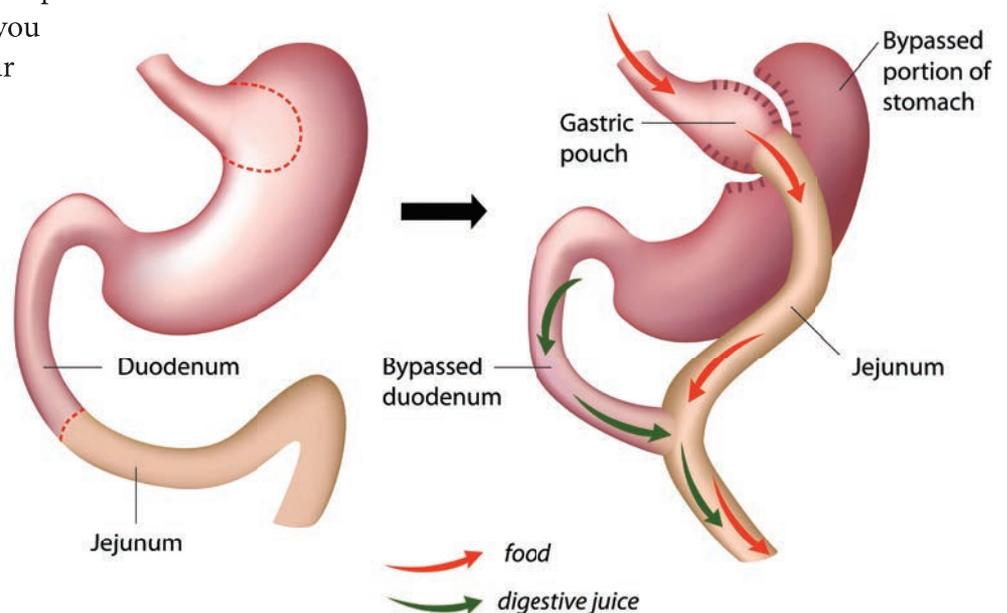
Sleeve Gastrectomy

The sleeve gastrectomy is a procedure that surgically removes about 2/3 of the stomach, with the remainder stapled closed. You'll feel full after eating or drinking a small amount. The texture of your food intake will be advanced slowly after the procedure. It's important to follow guidelines provided around meal size, foods to choose, texture and frequency to both protect the healing staple line of your new smaller stomach and help you feel your best after surgery. Vitamin and mineral supplementation is required after the sleeve gastrectomy procedure.



Gastric Bypass

Gastric bypass surgery results in a small stomach pouch and allows food to bypass part of the stomach and small intestine. While stapling creates a small stomach pouch, the remainder of the stomach is not removed but is completely stapled shut and divided from the new stomach pouch. A portion of the small intestine is rerouted to connect to the small pouch of the stomach. Following your surgery, you will feel full more quickly than when your stomach was its original size. Bypassing part of the stomach and intestine will also result in fewer calories and nutrients being absorbed. After surgery, the texture of your food will be advanced very slowly. It is important to follow the volume guidelines to initially not put pressure around the staple lines of the new pouch. The decreased absorption of nutrients can put you at risk for certain deficiencies. This makes vitamin/mineral supplementation very important.





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Chapter Three – Getting Ready for Surgery

Medical History and Physical Exam

No surgical procedure can take place until we review your overall health and medical history. The surgeon also needs to ensure that you're healthy enough to undergo surgery. Your primary care physician will need to provide a letter of medical clearance and your surgeon will examine you to determine your current health status.

Insurance and Steps to Surgery

Health care benefits are constantly changing. It's important for you to understand your insurance benefits and coverage criteria for weight loss surgery as every policy is different.

Upon completion of the surgeon-ordered testing/clearances, with records sent to the St. Joseph's Hospital-South Weight Loss Surgery Program, your presurgical file will be sent to the surgeon's office for review. The surgeon's office will call you to schedule a tentative surgery date (approximately four or more weeks out) and a presurgical surgeon's office visit (approximately two weeks prior to the tentative surgery date). Your completed presurgical file is submitted to your insurance company for review/approval. You can contact the BayCare Central Pricing Office to request an estimate of out-of-pocket expenses associated with your hospital stay by visiting MyEstimator.org. You can also contact a financial counselor by calling (855) 233-1555 once a surgery date is scheduled and approved.

Presurgical Weight Loss

Per surgeon's orders, you should begin your structured diet two weeks before your surgery date. Education on what foods to include and the protein powder to use will be reviewed at the presurgical bariatric nutrition consult. If you misplaced your presurgical diet instruction sheet, contact the St. Joseph's Hospital-South Weight Loss Surgery Program at (813) 302-8497 to request another copy.

Discharge Planning

Typically, the hospital stay for a sleeve gastrectomy is one to two nights. However, there may be a situation in which you may need to stay longer (for example, if you're also having a hernia repair). General discharge goals include the ability to drink an adequate amount of fluids, move around with little assistance, urinate, indicate that your bowels are moving (passing gas or bowel sounds), adequate pain control (on a 0–10 scale, your pain should be at a five or below), and a good understanding of your postsurgical nutrition plan.

Preparing to Take Time Off from Work

Talk to your employer about asking time off from work. After surgery, one to six weeks may be needed based on the type of work you do. Family and Medical Leave Act (FMLA) and/or Short Term Disability forms can be faxed or hand delivered to the surgeon's office once a surgery date is scheduled. The surgeon's office will not complete intermittent FMLA paperwork for presurgical visits, such as imaging studies or appointments with the multidisciplinary team.

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Chapter Four – Caring for Yourself: Presurgical Preparations

Home Preparation

Homecoming should be a joyful experience. Remember that although you still look like you, your body has changed. You may feel afraid or anxious about how to manage your new body. You can also experience excitement, sadness, grieving or other mixed emotions, which may surprise you. You may even feel regret at your decision to have surgery. This is normal and should get better. If you need help dealing with your feelings, contact the St. Joseph's Hospital-South Weight Loss Surgery program or consider contacting the BayCare Behavioral Health office in Tampa at (813) 762-1743 to schedule an outpatient appointment. If you're experiencing suicidal thoughts, call 911. Some things to consider prior to discharge:

- Before your surgery, review the “Weight Loss Surgery Nutrition Advancement Guide” that was given to you during your visit with the dietitian.
 - Keep several canisters of whey protein isolate on hand in assorted flavors, including unflavored.
 - Have sugar-free drinks available, such as Crystal Light, in your favorite flavors.
 - Clean out your cabinets, removing any food items that may be difficult for you to keep from eating.
 - Purchase measuring cups to help you portion your foods.
 - Be sure to purchase vitamins formulated for bariatric surgery.
- If you're an emotional eater, you may find yourself replacing food with other unhealthy habits. Ask for help even if you aren't sure you need it.
- Medications
 - Be sure that your medications are broken or crushed when possible, and taken one at a time. If they're coated for your stomach or time-release pills, they may NOT be broken or crushed. If they're 1mm size (the size of a Tic-Tac mint) or smaller, they may be swallowed whole. If your medications are available in a liquid form, you may ask your doctor to prescribe them that way before your surgery. Call your pharmacist with any questions regarding your medications.

- Purchase adult-strength liquid Tylenol. You can't take ibuprofen or aspirin as these may harm your stomach lining. If your prescription pain medication contains acetaminophen (Tylenol), do NOT use any other form of acetaminophen (Tylenol) while taking it.

What to Pack

Bringing a few items from home can make your hospital stay more comfortable. We suggest you bring:

- Nonskid, closed-heel-to-toe slippers or sneakers for walking
- A toothbrush, toothpaste, mouthwash or denture supplies
- A comb or hairbrush
- Shaving supplies or cosmetics

Bring no more than \$5 cash to the hospital and leave jewelry and other valuables at home. We prefer that you wear a hospital gown rather than your own nightgown or pajamas. We supply plus-sized gowns for your comfort.

Preparing for Your Surgery

A preadmission visit, called Pre-Procedure Testing (PPT), at St. Joseph's Hospital-South will be arranged to help prepare you for surgery. During the visit, you'll meet with a PPT nurse and will:

- Be asked about your health history and current medication use
- Be expected to pay your insurance copay. If you're unable to pay your copay, St. Joseph's Hospital-South will provide financial assistance or a financial counselor.
- Have any needed tests done. This may include blood tests, a urine test, chest X-rays, an EKG and other tests ordered by your bariatric surgeon.
- Have your surgery consent form reviewed with you
- Receive instructions for surgery
- Meet with a staff member from the anesthesia department to review your health history, medication use and test results to determine your anesthesia needs. Anesthesia is given during surgery to induce sleep and prevent pain.

Chapter Four – Caring for Yourself: Presurgical Preparations

You may be directed to continue taking any medications until the day of your surgery. Or you may need to stop taking certain medications before surgery. Talk with your doctor about which medications to take and which to stop. It's very important that you tell your doctor about all medications you take, prescription or over-the-counter. Aspirin products and medications such as ibuprofen (the active ingredient in Advil and Motrin), naproxen (Aleve), and aspirin (Excedrin) may need to be stopped several days before your surgery and **must not be taken after your surgery due to possible stomach irritation.**

The Day Before Your Surgery

- Don't eat or drink anything after midnight. Failure to follow these instructions may result in the cancellation of your procedure.
- Report any changes in your condition to your physicians. Some problems may require postponing your surgery. These include a sore throat, a cold, a fever, dental problems, difficulty urinating and skin conditions such as rashes or abrasions.
- You will receive a phone call from St. Joseph's Hospital-South the day before your operation reminding you when to arrive at the hospital for your surgery.

The Morning of Your Surgery

- If you've been instructed to take medications in the morning, swallow them with only a small sip of water. **DO NOT** drink or eat anything unless instructed by your surgeon.
- Bathe or shower.
- Allow plenty of time to arrive at the hospital as directed.
- If you use a CPAP or BiPAP, **you must bring it to the hospital.** Failure to do so may delay your surgery.

Sleep Apnea and Surgery

Immediately after surgery, it's common to continue to feel the effects of the anesthesia used during surgery. You may experience shallow breathing; postoperative pain and the medications used to treat it also contribute to this. If you have sleep apnea, you already experience breathing issues. The combination of the postoperative anesthesia with sleep apnea is very dangerous. Bring your CPAP equipment with you to the hospital. It's vital that you use your CPAP equipment before and after surgery.

Health Care Directives

A health care directive (also known as a living will) gives the person of your choice the power to act on your behalf during any medical emergency. This document is used to ensure that your wishes are followed even if you can't communicate them.

A health care directive goes into effect when:

- You're in a coma or near death
- You can't communicate your wishes through speech, in writing or by gestures

If you don't have a living will, you may request one when you're admitted to the hospital. Ask an admissions representative for a living will form. Since the medical team must know of your health care directives, **bring a copy of your living will to the hospital with you.** It'll become a part of your records.



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At the Hospital

Being in the hospital may be an unusual experience for you. This list may help you understand the hospital routine.

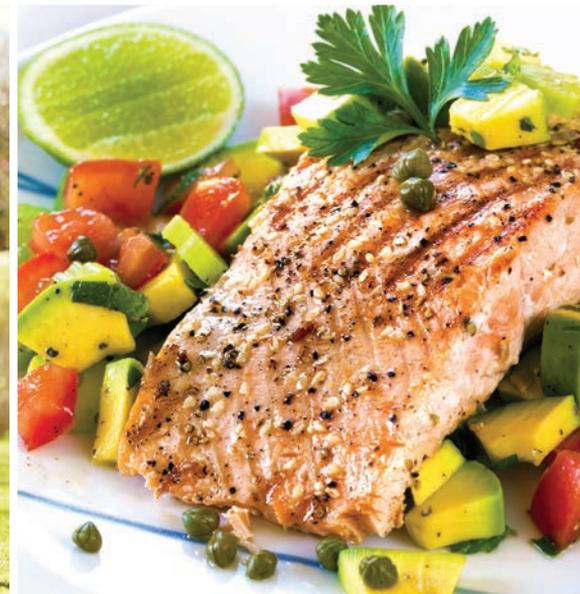
- When you arrive, you'll meet with a nurse. He/she will help review what you can expect before and after surgery.
- You'll receive a hospital gown and a bag for your clothes and belongings.
- You'll be admitted to the presurgical area. Friends and family members may wait with you. A nurse will take your vital signs and ask you questions to prepare you for surgery. An intravenous (IV) line will be started.
- You'll be wheeled via stretcher to the surgery holding room and introduced to your surgical team. Your friends and family will be shown to the waiting area outside the operating room. While you're in the holding room, you'll get medication through the IV to make you feel relaxed and comfortable.
- You'll then undergo surgery. This process can vary in length. The actual operation is only one part of your time in the operating room. The rest of the time is spent preparing you for surgery.
- After the procedure, you'll be taken to the Post-Anesthesia Care Unit until you wake up. The waking-up process usually takes from one to two hours. During this time, your surgeon and/or nurse will talk with your family and friends.

- The anesthesiologist and recovery room nurse will care for you as you awaken. You may wake up with an oxygen mask or, if you use a CPAP, you may find that it has been placed on you. You might experience dry mouth, blurred vision, chills or pain. Your nurse will monitor your vital signs and make you as comfortable as possible.
- When you're fully awake and medically stable, you'll be transferred to the medical/surgical floor and put in a bariatric-friendly room.
- Visiting hours on all medical/surgical units are from 7am to 8pm. Please limit the number of guests to two. Young children are discouraged from visiting. Visitors may not stay after 8pm without permission from the charge nurse. For security reasons, those with permission will receive directions from nursing as to how to proceed. After 8pm, the only access to the hospital will be through the Emergency Department. Visiting hours differ for critical care areas. Check with the charge nurse for special hours.

Keeping You Safe

Keeping you safe is our top priority. We'll regularly ask you to identify yourself by stating your name and birth date and we'll compare it to your identification armband. This ensures we provide you with the right treatment, tests and medications. One of our goals is to prevent the spread of infection. Your health care team will wash their hands with soap and water or use alcohol gel before

Chapter Five – Surgery and Recovery



and after they see you. If you have concerns that your health care provider hasn't washed his or her hands, please speak up and let them know. Your doctor will also order IV antibiotics before and sometimes after your surgery to help prevent surgical site infections.

About Anesthesia

Anesthesia is a type of medication that causes you to lose sensation so that you feel no pain. For weight loss surgery, you must have general anesthesia. This type of anesthesia acts primarily on the brain and nervous system and eliminates sensations of pain. General anesthesia is administered by injection into your IV or by inhaling it. Your level of sleep is closely monitored to ensure that you won't awaken during the operation. An anesthesiologist or certified registered nurse anesthetist will give you anesthesia. Your doctor or nurse will evaluate your medical status and discuss the anesthesia process with you before the surgery.

Managing Your Pain

Although most patients who undergo weight loss surgery have minimal pain (less than 5 on 0–10 scale), all patients have the right to pain management. Treating pain is an important part of your care and recovery. Only you can describe the type and degree of pain you're having. The pain caused by surgery may be more severe at first, but it'll ease as your body heals. A common area for pain is in your shoulder area. The

carbon dioxide gas put into your abdominal cavity during surgery causes this. Moving around may help this pain, as well as an anti-gas medication. If you had a hiatal hernia repair during your surgery, your shoulder pain may be more severe and last longer.

We expect that you'll:

- Help your team in measuring your pain. Your nurses will ask you to rate your pain on a scale in addition to checking your level of sleepiness, vital signs, etc.
- Discuss pain relief options with your team to develop a plan for pain management.
- Ask for pain relief when pain first begins and before any activity that might cause pain.
- Tell your team about any worries you have about taking pain medications.

Measuring Your Pain

To help measure your pain, we'll ask you to rate it before and after a dose of pain medication. You'll rate your pain on the 0–10 pain scale below:



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Pain Medications

There are different methods by which we give you medications to treat your pain. Let your surgeon know in advance if you have a sensitivity to any of these medications:

- **IV:** Dilaudid, morphine, and fentanyl are the most common pain medications used after surgery. For the first 24 hours after your surgery, you may receive medication through the PCA pump (see below).
- **Oral:** Once you're cleared to begin the bariatric sugar-free clear liquid diet and you're able to tolerate the diet, you'll be given an oral medication for home pain relief. Because this medication contains Tylenol, do NOT take any additional Tylenol once you're at home.

The most common side effects associated with narcotics used for pain include:

- Decreased respirations/breathing
- Drowsiness
- Nausea/vomiting
- Dizziness
- Constipation
- Rash
- Itching
- Dry mouth
- Decreased appetite

In order to prevent excessive bleeding as well as irritation of your stomach, avoid taking Advil, Aleve, Anacin, aspirin, ibuprofen, Indocin, Mobic and Motrin. If you feel you need to take these drugs, talk to your surgeon. You may take acetaminophen (Tylenol) in a liquid form. **Do not take Tylenol along with the prescription pain medication given to you by your surgeon, as this may already contain Tylenol.**

Patient-Controlled Analgesia (PCA) Pump

This method allows *you* to control the amount of pain medication you receive.

- The nurse will show you how to use the pain control button on the pump.
- When your medication is being delivered, it'll be noted on the PCA screen.
- The pump is set so that you can't give yourself any additional medication until the last dose takes effect. This is usually 6–10 minutes after the previous dose. It takes 6–10 minutes for the medication to work.

- Some patients feel sick when using the PCA pump. If this happens to you, your nurse can give you anti-nausea medication. If the nausea persists, an alternate method of pain medication can be discussed.
- Keeping your pain controlled will help you heal faster. Use the pain control button 10 minutes before getting out of bed, especially the first time. **CAUTION:** Be sure that someone's there to help you avoid falling.
- Not all surgical pain can be relieved, but you can be made comfortable. Tell your nurse about any pain not addressed after your dose of pain medication.
- Call the nurse if you experience nausea, vomiting, itching or difficulty in passing urine or bowel movements.
- To prevent over-medication, only **you** should press the pain control button. Sleepiness and the lack of desire to press the button is a sign that you're getting enough medication.
- **Don't** use other medications, including street drugs or alcohol. They may put you at risk for life-threatening problems.
- **Don't** worry about getting "hooked" on pain medication. The amount of pain medication you give yourself is about one-tenth the amount of medication you'd receive if the nurse were to give you a pain shot.
- The pump that delivers your medication is an electrical device and must travel with you wherever you go.
- **REMEMBER:** Pain prevention and control brings short-term and long-term relief and healing benefits. Be sure to report any pain to your doctor or nurse.

PCA Content Reference:

- Pain Control After Surgery, A Patient's Guide, AHCPR Rub. No. 92-0021, Rockville, MD
- Agency for Health Care Policy and Research Public Health Service, U.S. Department of Health and Human Services, February 1992.
- Patricia Donnelly, Coordinator, Clinical Nursing Education (Updated by Margo McMonis, Coordinator, Clinical Nursing Education)

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Preventing Complications

After surgery, your body is weak and at a greater risk for infection and other health problems. You and your caregiver can help reduce the chance of postsurgical complications.

- Nurses will measure your blood pressure, temperature and pulse.
- To improve your circulation and strength, walking is encouraged.
- When in bed, wear the compression leg wraps given to you before your surgery.
- Use your incentive spirometer each hour while you're awake. Also, perform deep breathing and coughing exercises.
- Your incisions/dressings/drain (if present) will be checked regularly.
- You will have an IV. It's important that you're able to drink fluids without difficulty before it'll be removed.
- You may have a catheter in your bladder that'll be inserted during surgery. It'll be removed the morning after surgery. If you can't urinate once your catheter has been removed, tell your nurse.

Postoperative Respiratory Exercises

An incentive spirometer is a device that helps with lung expansion (expanded lungs are healthier lungs). Taking slow, deep breaths and coughing periodically will help keep your lungs clear. Use your incentive spirometer every hour while you're awake. If you feel lightheaded or dizzy, you may be overdoing it. Stop and rest. Resume deep breathing when you feel better.

Using an Incentive Spirometer

Exhale completely and close your lips tightly around the mouthpiece. Inhale slowly and deeply, keeping the small blue ball between the two arrows. When you can't inhale anymore, hold your breath for six seconds, then exhale slowly. Repeat as often as prescribed by your doctor.



How to Use an Incentive Spirometer

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Patient Care Plan – Gastric Sleeve

Day of Surgery

Activity plan

You'll be encouraged to get out of bed to sit in a chair. You'll also be encouraged to move from side to side.

Diet

- Follow your surgeon's orders.

Pain control

- Use the pain scale.
- Use pain medications as needed. You may have a PCA pump. Press the button as needed for pain.
- Tell your nurse the effects of the pain medication.
- Sometimes pain medication causes nausea. Tell your nurse if you experience this so they may give you an anti-nausea medication through your IV.

Breathing exercises

- Ten times each hour you should:
 - Cough
 - Take deep breaths
- Use the incentive spirometer.
- Be sure to use your CPAP machine while napping or sleeping if you have sleep apnea.

Other equipment in your room or attached to your body may include:

- An IV
- A urinary catheter in your bladder
- Compression devices on your legs
- Possibly a drain in your abdomen
- Equipment for taking vital signs

Things to report to the nurse

- Increase in pain
- Nausea or vomiting
- Drainage felt on your dressing
- Sudden onset of shortness of breath
- Any other concerns you may have

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Patient Care Plan – Gastric Sleeve

First Day After Surgery and Remainder of Stay

Activity plan

- A nurse or patient care tech will help you get out of bed.
- You'll be helped with walking in the hallways.
- You'll be helped into the bathroom for grooming.

Diet

- You'll begin the bariatric sugar-free clear liquid diet when told to by your surgeon.
- Take sips of water and write down your fluid intake. You'll be instructed to drink 1 ounce every 60 minutes, depending on your surgeon's orders.
- You must be able to drink fluids without vomiting before you'll be released from the hospital.
- You may begin bariatric sugar-free full liquids during your stay if ordered by the surgeon.

Pain control

- Use the pain scale.
- Use pain medications as needed. You may continue to use the PCA pump. Press the button as needed for pain.
- Tell your nurse the effects of the pain medication.
- Sometimes pain medication causes some nausea. Tell your nurse if you experience this so they may give you an anti-nausea medication through your IV.
- When you're able to drink fluids without nausea or vomiting, your PCA pump will be discontinued and you'll be given a liquid pain medication by mouth.
- Common side effects of narcotic pain medications include:
 - Nausea/vomiting/dizziness
 - Dry mouth
 - Constipation
 - Decreased appetite
 - Rash/itching
 - Decreased breathing

Things to report to the nurse

- Increase in pain
- Nausea or vomiting
- Any drainage on your dressing
- Sudden onset of shortness of breath
- Any other concerns you may have

Discharge plan

- Follow your nutrition advancement guide after you return home.

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When Can I Go Home?

A smooth and speedy recovery depends on you following your patient care plan. By strictly following this plan, you'll have a better chance of leaving the hospital on your scheduled day. The type of procedure you have and your general recovery will determine your length of stay. Your surgeon will review this with you.

Discharge Instructions

Follow Up:

- When you get home, call Dr. Keyur Chavda's office at (813) 681-4644 to schedule your first postsurgical appointment.
- You'll have several follow-up visits during the first year following your procedure.
- Standard visits occur at two weeks, then at months one, two, five, eight, 14 and 20. You'll see the surgeon yearly thereafter.

Signs and Symptoms to Report to Your Doctor

- Temperature above 101°F
- Incisions that are bleeding, red or warm to the touch, or have a thick, yellow, green or milky drainage
- Pain that your pain medication isn't helping
- You can't keep fluids down
- You're vomiting or experience extensive nausea after drinking
- Your skin or the white part of your eyes turn yellow
- Your stools are loose or you have diarrhea
- You develop a rapid heart rate
- You become short of breath and/or experience chest pain
- You develop a pain in your leg
- Shoulder pain that becomes worse over the few days following the surgery
- **You present to an emergency department for any reason. Let the emergency department know that you've had gastric sleeve surgery.**

Constipation is normal during the initial postsurgical period. If you're uncomfortable for three to five days, you can take one tablespoon of Milk of Magnesia every 12 hours until you have a bowel movement, then discontinue.

Wound Care:

- Leave bandages intact for three days after you've been discharged, then remove. Wash your hands with antibacterial soap before you remove them.
- If moisture gets in/underneath the bandages, they become saturated with blood or if the sides are lifting before the three days, remove them (after cleaning your hands).
- You may shower. Don't take a bath in the tub or go swimming in a pool until the doctor advises you to do so.
- Gently wash the wound areas with soap and water. Pat dry with a clean towel. Don't rub dry.
- To reduce infection, use a clean towel each time you wash and dry wound areas
- **Don't try to wash off or peel off the steri-strips or glue.** They'll come off or fall off on their own.
- If you have staples, leave them alone. Staple removal will take place at Dr. Chavda's office during a scheduled appointment.

Activity:

- Walk at least three times every day. Slowly increase the amount of steps that you take each day. Don't overdo it. If you have pain or discomfort, stop and rest.
- Limit the use of stairs
- **No lifting, pushing or pulling anything heavier than 10 pounds for six weeks after surgery.**
- No straining or strenuous exercise. If you need to cough or sneeze, hold a pillow firmly over your belly for support.

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Diet:

- It's essential to stay hydrated.
- Refer to your **BayCare Weight Loss Surgery Nutrition Advancement Guide** that you received prior to surgery for details. Some reminders:
 - Consume sugar-free clear liquids and high-protein liquids.
 - Sip liquids very slowly, one to two ounces every 30 minutes.
 - Minimum daily goals for intake are 48 fluid oz. from 24 ounces (three cups) per day of sugar-free clear liquids (water, Crystal Light, fat-free broth, etc.) **PLUS** 24 ounces (three cups) per day of high-protein liquids (protein powder mixed with 1% or fat free milk, Lactaid® or Fair Life® if lactose intolerant, or unsweetened soy milk)
 - Room temperature and warmer liquids may feel better and go down easier the first week.
- Begin vitamin and mineral supplementation once you're home from the hospital. Remember to take calcium in divided doses and separate by at least two hours from a multivitamin that contains iron.

Contact the St. Joseph's Hospital-South Weight Loss Surgery Program at (801) 302-8497 if you have questions about your postsurgical diet or to schedule an appointment with the bariatric dietitian.

Pain Management and Medications:

- You may take the pain medication prescribed to you by your doctor. **DON'T** take ibuprofen (Advil/Motrin), naproxen (Aleve) or aspirin (Excedrin), as these may harm the lining of your stomach. Talk to your doctor if you feel you need to take these drugs. It's acceptable to take acetaminophen (Tylenol).
- It's best to take the medications in liquid or chewable form. If your medication only comes in pill form, choose smaller pills when available. Ask your pharmacist or doctor if medication can be broken. Take only one pill at a time. Never take several pills at once because it may lead to a blockage.
- If you're taking narcotic pain medication, don't drive or use machinery. These medications may make you drowsy.
- Constipation is normal during the initial postsurgical period while on liquid diet texture. If you're uncomfortable for three to five days, you can take one tablespoon of Milk of Magnesia every 12 hours until you have a bowel movement, then discontinue.

Special Instructions

It's highly recommended that you participate in bariatric surgery program support groups after your procedure to continue learning how to manage your new ways of eating, the importance of activity and changes in relationships you may encounter. Contact the St. Joseph's Hospital-South Weight Loss Surgery Program at (813) 302-8497 for upcoming support group dates.

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Management of Postoperative Complications

Airway Obstruction

All patients are encouraged to **keep the head of the bed elevated** after surgery. If you have sleep apnea and use a **CPAP machine**, be sure to **bring your CPAP machine to the hospital on the day of surgery**. CPAP will be applied immediately after surgery when you wake from anesthesia. Respiratory therapy will also consult with you to make sure everything is working correctly.

Bleeding

Internal bleeding is a rare but serious complication after surgery. Signs and symptoms include heart rate over 120 beats per minute, fever and belly distention. For gastric bypass and sleeve gastrectomy, your blood is tested for type as a standard admission procedure in the event a blood transfusion is needed.

Leak

This is a rare but serious complication. Follow your nutrition advancement guide as instructed to lessen stress to the suture site. Signs and symptoms include increased heart rate over 120 beats per minute and left shoulder pain.

Deep Vein Thrombosis (DVT)

Blood clots can form in your legs as a result of surgery and decreased activity. Medical prevention consists of compression therapy to your legs and medication (lovenox or heparin) during your hospital stay to prevent clots. **Walking as soon as possible after surgery** will improve circulation and help prevent blood from pooling in your legs. Signs and symptoms include a calf that is swollen and warm to the touch.

Emotional Changes

Be prepared for emotional ups and downs after you go home from the hospital. If these feelings continue or get worse, contact the Bariatric Surgery program or your mental health provider.

Esophageal Spasms

Some patients will experience an occasional tightness and pain in the upper abdomen and lower chest, just below the breast bone. The pain can last from one hour up to a full day. **The pain doesn't radiate to the left arm**. Esophageal dilation may occur if your pouch is too full.

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Pneumonia

Surgery and decreased activity limit the expansion of the lungs, creating an environment for pneumonia.

Using the **incentive spirometer** as instructed will help to expand the lungs. **Walking** soon after surgery also helps expand the lungs and decreases the chance of developing pneumonia. Signs and symptoms include elevated temperature greater than 101.5 degrees and difficulty breathing.

Stricture or Obstruction

The opening from the newly created small stomach pouch may narrow or close. The obstruction can usually be opened by performing an endoscopic examination as an outpatient procedure.

Vomiting

Vomiting is often a result of overfilling the small stomach pouch, drinking liquids too soon after a meal or not chewing food well. Eat slowly, chew your food well and stop eating at the first indication that you're full (satiety). Excessive nausea or vomiting should be reported to the team to be evaluated for risk of dehydration.

Wound Concerns

- It's common to have drainage of clear to reddish fluid from your wound in the first week or two after surgery.
- A small amount of blood can make the fluid appear bright red. A reddish appearance is no cause for alarm.
- If you notice signs and symptoms of infection (pus-like discharge, red streaks, fever, swelling or pain at incision sites), notify medical personnel.
- Contact your surgeon's office with any concerns as soon as you notice any signs of infection or excessive drainage.

Long-Term At-Risk Considerations

- Gallstones and kidney stones
- Gastric outlet strictures
- Internal hernias
- Malnutrition
- Marginal or stomal ulcer secondary to the use of nonsteroidal anti-inflammatory drugs
- Nutritional deficiencies
- Periodontal disease
- Pregnancy is contra-indicated for 18-24 months post-bariatric surgery because of the rapid weight reduction that could result in nutritional deficiencies (Thomas & Taub, 2010).
- Small bowel obstructions
- Ulcer

Reflux

Reflux is common after sleeve surgery. You may need to increase your PPI medication. Eat more slowly and take smaller bites. Sit upright for a minimum of 30 minutes after eating. Don't lie down right after eating. Avoid foods that are spicy or acidic (coffee, tea, tomatoes).

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Vitamin and Mineral Supplementation

Due to your decreased volume and variety of food, it'll be difficult to consume adequate amounts of various nutrients. The following vitamin and mineral supplements are required to insure proper levels of nutrients due to malabsorption and eating less food after surgery. **Vitamin and mineral supplementation is a LIFELONG requirement after bariatric surgery.**

1. Bariatric formulated daily chewable, liquid or capsule multivitamin with iron

2. Calcium citrate (1,200–1,500mg) with vitamin D (3,000IU):

- Must be in citrate chewable form (1,200–1,500mg per day, in divided doses of 400–600mg)
- If you're on iron supplements or iron in the multivitamin, separate iron supplements from your calcium by at least two hours.

3. Vitamin B12:

- Required after gastric bypass
- May be needed after sleeve gastrectomy if your levels are low
- It's recommend that your B12 levels be checked three months after surgery.

Follow up with your primary care physician after surgery for bloodwork at six months, 12 months and annually thereafter (it is recommended that B12 be checked starting at three months postoperative):

- Vitamin B12
- CBC CMP
- Iron TIBS Ferritin
- Lipids TSH HAIC
- Thiamin
- Vitamin D (25 hydroxy)

Osteoporosis/Dexa Scan

Bone density scanning, also called dual-energy X-ray absorptiometry (DXA) is used to measure bone loss. Testing how strong your bones are is the only way to know if you have osteoporosis (thinning of the bones) which causes a higher risk for fractures.

Treatment of metabolic bone changes after bariatric surgery is recommended in long-term follow-up monitoring for anyone at risk for bone loss based on age, gender and associated risk factors. Bone loss monitoring should include annual albumin, calcium, PTH and 25-OHD levels from your primary care physician.

Medications to Avoid

Changes in the structure of your stomach and absorption in your intestines doesn't allow your body to utilize some medications. **Use extreme caution when taking diuretics, NSAIDS and anticoagulants. Time- and extended-released medications should be avoided.** Consult your pharmacist if you're unsure if a medication is appropriate or can be crushed. These medications should be avoided after surgery:

- Advil
- Meclomen
- Alka Seltzer
- Mobic
- Anacin
- Motrin
- Ascription
- Nalfon
- Aspirin
- Norgesic
- Bufferin
- Tolectin
- Coricidin
- Vanquish
- Cortisone
- Dolobid
- Empirin
- Excedrin
- Feldene
- Fiorinol
- Ibuprofen

Medication Adjustments

Your diabetes and blood pressure medications may need to be reduced, stopped or otherwise adjusted after surgery. Follow up with your doctor(s) who normally prescribe these medications as soon as possible after surgery. It can be helpful to keep a log of your blood sugar and blood pressure if you're on these medications to help determine changes in dosage.

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After Weight Loss Surgery

The First Few Weeks

After weight loss surgery, give your body and mind time to adjust. For example, you may feel very tired and have difficulty drinking enough fluids or protein because of a decrease in hunger. You may feel very emotional and experience feelings of regret. All of these are normal and they typically pass with time. It's important to have a good support system in place to help you deal with the changes you may experience. Focus on staying hydrated (getting enough fluids).

The First Year

This is called the honeymoon period. Most patients typically experience a period of rapid weight loss. You may feel as though nothing you do (or fail to do) could stop you from losing weight. But this period will eventually end – usually between 12 to 18 months after surgery. Your hunger may return, and your weight loss will taper off and stabilize. Apply your new lifestyle during the first year so that it becomes normal for you.

Year Two and Beyond

When the honeymoon period ends, you'll find that what you eat takes on even greater importance and will affect your weight. This is true whether you're still losing weight or maintaining your weight loss. Making poor food choices will cause weight gain or weight plateau. It's important that you find the support to assist you with identifying the reasons for poor choices and to recognize difficulties with making positive lifestyle changes. It's recommended that you attend support groups to reinforce behavioral changes. If you continue to do things the way you did before your surgery, you'll achieve the same results – weight gain.

As your appetite increases, advance the amount of food consumed in one sitting in increments of $\frac{1}{2}$ ounces. As the volume of your meals increase, decrease the number of meals/snacks consumed in a day from between five and six to three and four. Use measuring cups and spoons to measure food, not a gram scale. Eat until comfortably full; stop eating at the first sign of feeling full. Signs of feeling full may include a runny nose, sneezing or hiccups. Another sign is pressure in the chest area.



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Frequently Asked Questions

Why do I have to stop smoking?

Smoking can lead to complications during and after surgery. We want you to be successful with your decision to have weight loss surgery and eliminate any unhealthy habits that won't lead to improving your health and lifestyle.

Will I lose my hair? Can I prevent hair loss?

Hair thinning can occur due to nutrient changes in your body. Meeting your protein goal, and vitamins and mineral supplements each day can help. Hair loss is usually noted three months after surgery; after seven months regrowth begins. Not everyone has hair loss and it's temporary. Taking zinc and biotin may be suggested by your doctor.

Is it normal to feel full and that food is “stuck?”

During surgery you were intubated (a breathing tube was placed down your windpipe) and you may have a sore throat or hoarse voice. This is temporary. If you have **ANY breathing difficulties**, notify your medical team immediately or call 911 if you're at home. Remember, surgery affects how food travels in your digestive system and your satiety (feeling full). You're going to feel different. Time, patience and knowledge will help you be successful and healthy.

What should I do about medications I was taking before surgery? Should I continue taking them?

It's your responsibility to ensure that your primary or prescribing doctor(s) are aware that your medications may need to be adjusted after surgery. **DO NOT** just stop taking medications after your surgery without consulting your doctor. Plan ahead — contact your primary doctor and discuss the possibility that your medications may need to be adjusted, especially diabetes and blood pressure medication. Medications should be in crushable, chewable or liquid form for two months after surgery if possible. Contact your prescribing doctor(s) prior to surgery. Don't wait until the last day or after surgery.

How many pills can I take at once?

If the medication can't be converted to chewable or liquid, you can take **one pill every two minutes** if ordered by your physician. **NEVER** take a handful of pills; this can lead to a blockage.

When can I exercise?

Exercise should be similar to eating — creating a new lifestyle habit. Begin walking as soon as possible; this may even be four to six hours after surgery once the anesthesia has worn off. The first week you may be limited by fatigue and mild pain. Walk around the house or in a mall with air conditioning and areas to sit and rest. Your discharge instructions recommend no heavy lifting greater than 10 pounds for the first six weeks after surgery.

I don't like to exercise. How will this affect my weight loss after surgery?

Regular exercise is a habit you need to develop after committing to weight loss surgery. Find exercise you enjoy and that you can also do by yourself prior to having surgery. Don't sit for long periods of time as blood clots may form.

When can I go back to work?

Your ability to return to work should be addressed with your surgeon.

Where do I buy vitamin and mineral supplements?

We recommend seeking quality brands that are bariatric specific. If you have questions about the multiple choices of brands available, ask your bariatric dietitian. Purchase your vitamins and minerals prior to your surgery so that they're available when you get home from the hospital. You'll need to take vitamins every day to avoid nutrient deficiencies.

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Why are my clothes fitting loosely, but the scale hasn't moved?

It's normal to have periods of plateaus through all phases of weight loss after surgery. Following weight loss surgery, you may lose weight rather quickly at first, and then as time passes, the weight loss slows down. You may lose inches and not pounds during a plateau. Weight will stabilize at about 18 months and won't follow an obvious trend. It can be inconsistent with alternating periods of significant weight loss followed by no weight loss. This is normal.

How do I fit fiber into my eating plan?

When beginning the pureed/blenderized texture after surgery and beyond, in addition to eating protein foods at meals, it's important to remember to incorporate a small amount of vegetables, fruits and beans (one to two tablespoons) to each meal. Plant-based foods contain fiber and beneficial phytonutrients, which are absent from vitamin/mineral supplements.

Are protein bars and high-protein cookies okay to have?

Protein bars and high protein cookies are sources of carbohydrates and usually loaded with sugar and fats, which isn't the best way to obtain protein. Don't make protein bars or cookies part of your regular meal plan; occasionally they're alright. Look for 10–15 grams of protein, 5–8 grams of fiber and less than 15 grams of sugar with no more than 200 calories.

What foods contain protein?

Besides the typical meat sources such as chicken, fish and turkey, try low-fat or fat-free cottage cheese and/or Greek-style yogurt, hummus paired with veggies, roasted chickpeas and edamame. Limit intake of high saturated fat sources of protein such as bacon, sausage, pepperoni, salami and full-fat cheese.





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