# Kelsey-Seybold Clinic

## METABOLIC HEALTH: Medical and Surgical Weight Loss Program

*Expert Weight Loss Care from a Trusted Source*



Kelsey-Seybold Clinic®

Changing the way health cares.℠

# Understanding Obesity and Weight Loss Treatment

**Obesity can affect nearly every part of health and daily life – impacting energy, mobility, sleep, relationships, work, and overall quality of life.**

For some people, weight loss is achievable with lifestyle changes alone. For many others, weight gain is driven by a complex combination of factors including genetics, metabolism, hormones, medications, environment, stress, and sleep, which can make long-term weight loss difficult without medical support.

Obesity is now recognized as a **chronic disease**, not simply a matter of willpower. It is linked to more than 200 health conditions, including diabetes, heart disease, sleep apnea, joint pain, and certain cancers.

The health risks are significant. More advanced obesity (Class II and III) is associated with a substantially higher risk of premature death – approximately 40% higher in women and 62% higher in men compared to individuals at a healthy weight. It is also associated with reduced life expectancy, largely driven by heart disease, cancer, and diabetes.

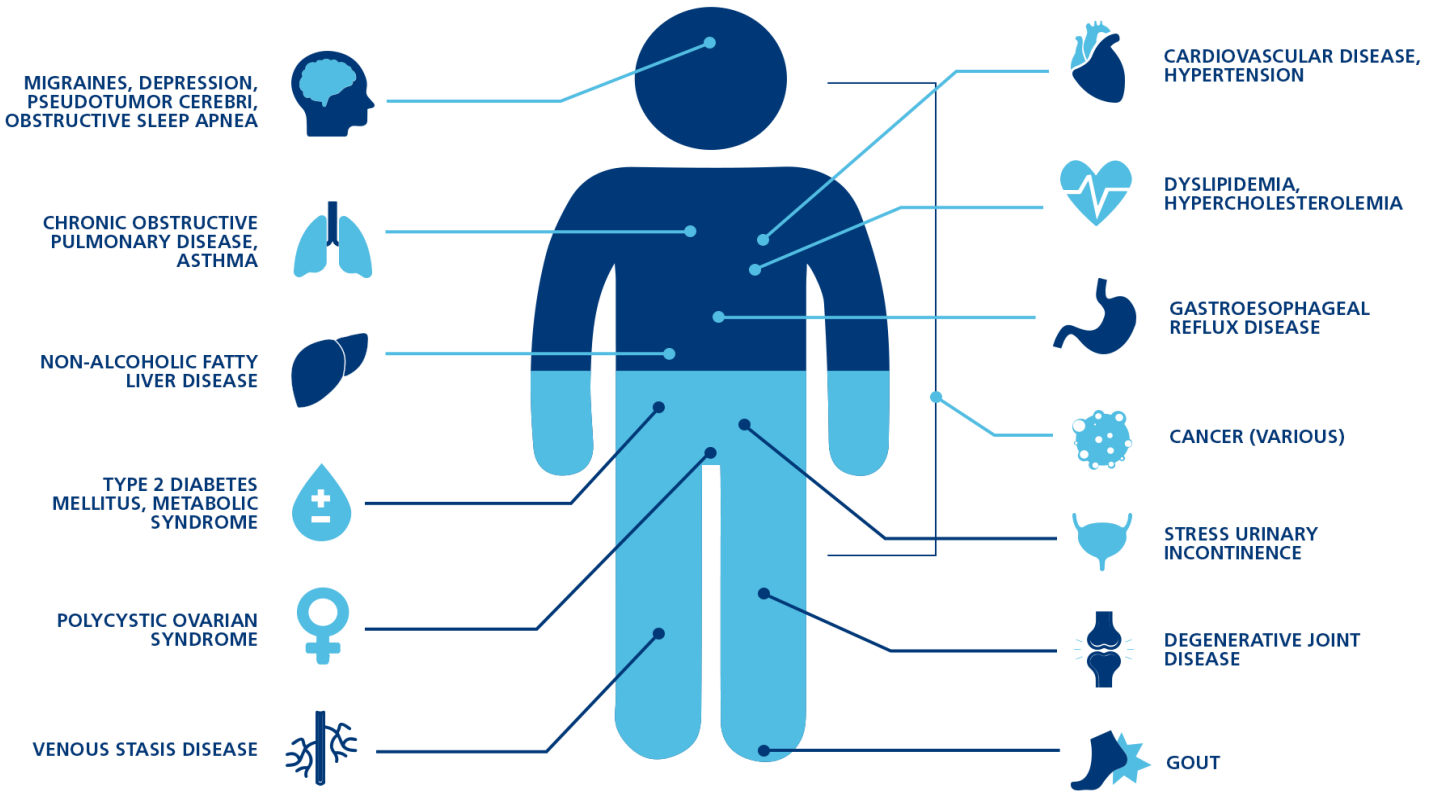
One large U.S. study estimated that excess weight contributes to nearly 500,000 deaths each year and was associated with higher excess mortality than smoking in 2016.

Because of its wide-ranging effects, modern care focuses on **comprehensive, personalized long-term management** that includes medical, behavioral, and lifestyle support, rather than short-term dieting alone.

At Kelsey-Seybold Clinic, our mission is to reduce the burden of obesity through a comprehensive, multidisciplinary approach that combines medical expertise, advanced technology, and compassionate, coordinated care.

**Our goal is to help patients achieve:**

- Sustainable weight loss
- Improved metabolic health
- Reduction of obesity-related diseases
- Improved overall quality of life




SOURCE: https://drwizman.com/obesity-comorbidities/#

# The PathWEIGHS™ Program

Kelsey-Seybold's bariatric surgery program is part of the PathWEIGHS™ Program, a multidisciplinary weight management program designed to support patients throughout their health journey.

Patients are typically referred to the program by their primary care physician.

**After referral:**

- Patients complete a questionnaire through MyKelseyOnline (MKO)
- The referral is reviewed by a Nurse Navigator
- Patients participate in a Healthy Living Workshop

**Patients are then connected with specialists such as:**

- Certified Obesity Medicine physicians
- Endocrinologists
- Metabolic and bariatric surgeons
- Registered dietitians
- Behavioral health specialists

**During the first several months, the program focuses on:**

- Nutrition education
- Lifestyle changes
- Behavioral health support
- Medical and surgical therapy

**For appropriate patients, additional options may include:**

- Anti-obesity medications
- Endoscopic procedures
- Metabolic and bariatric surgery

# PathWEIGHS™ Program Care Track

The PathWEIGHS™ program provides a structured care pathway to guide patients from initial referral through long-term success.

## STEP 1: Referral

Referral placed by your Kelsey-Seybold physician or provider.

## STEP 2: Program Intake

- Complete the PathWEIGHS™ questionnaire through MyKelseyOnline
- Referral reviewed by the Nurse Navigator

## STEP 3: Healthy Living Workshop

Patients participate in the Healthy Living Workshop, which introduces key concepts including:

- Nutrition
- Physical activity
- Behavioral strategies
- Sleep and stress management

## STEP 4: Initial Specialist Visit

Patients meet with an appropriate provider based on their needs:

- Certified Obesity Medicine Provider
- Endocrinologist
- Bariatric Surgeon

## STEP 5: Personalized Treatment Plan

Your care team develops a customized treatment plan that may include:

- Lifestyle and nutrition counseling
- Anti-obesity medications
- Endoscopic procedures
- Metabolic and bariatric surgery

## STEP 6: Ongoing Multidisciplinary Care

Patients receive ongoing support through:

- Follow-up medical visits
- Nutrition counseling
- Behavioral health support
- Shared medical appointments

## STEP 7: Long-Term Weight Management

Long-term success includes:

- Continued medical monitoring
- Medication management when appropriate
- Surgical or endoscopic revisions if needed
- Lifelong nutrition and vitamin monitoring

# Anti-Obesity Medications

Medications are now an important part of obesity care and may be used before surgery, after surgery, or as standalone therapy.




## GLP-1 / GLP-1-GIP MEDICATIONS

Examples include semaglutide and tirzepatide.

Expected weight loss: 15–22% total body weight loss

**Common side effects:**

- nausea
- constipation
- diarrhea
- heartburn

## PHENTERMINE

Expected weight loss: 5–10% total body weight loss

**Side effects:**

- insomnia
- dry mouth
- increased heart rate

## PHENTERMINE / TOPIRAMATE (QSYMIA)

Expected weight loss: 10–15% total body weight loss

**Side effects:**

- tingling sensation
- dry mouth
- constipation

## NALTREXONE/BUPROPION (CONTRAVE)

Contrave works by targeting areas of the brain that regulate appetite and food cravings.

Expected weight loss:

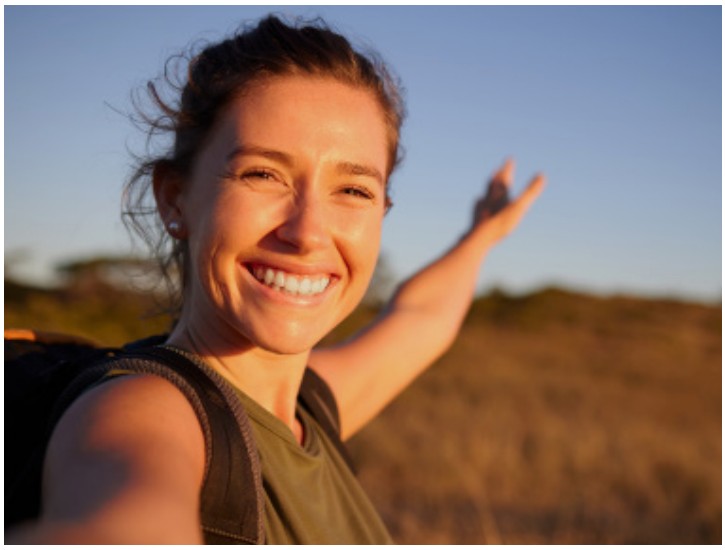
5–9% total body weight loss

**Common side effects:**

- Nausea
- Headache
- Constipation
- Insomnia

# Metabolic and Bariatric Surgery

## Metabolic and bariatric surgery is one of the most effective treatments for severe obesity and metabolic disease.



Surgery works through:

- restriction of stomach size
- hormonal changes affecting appetite
- metabolic improvements in blood sugar regulation

All procedures are performed using minimally invasive laparoscopic or robotic techniques.

Most patients stay one night in the hospital and return home the following day.

Outpatient sleeve gastrectomies at the Kelsey-Seybold Memorial Villages Surgery Center are another option for certain patients allowing patients the option to go-home the same-day after their procedure.



## SLEEVE GASTRECTOMY

During sleeve gastrectomy, approximately 70–80% of the stomach is removed, leaving a narrow sleeve-shaped stomach. The intestines are not altered.

Expected outcomes:

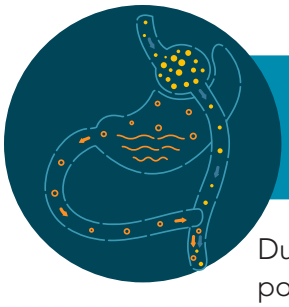
- Approximately 20–25% total body weight loss

Improvement in obesity-related conditions:

- Type 2 diabetes remission or major improvement: approximately 45–60%
- High blood pressure improvement: approximately 50–65%
- Obstructive sleep apnea improvement: approximately 60–70%
- Approximately 200 obesity-related health conditions—such as joint pain, fatty liver disease, and fertility issues—improve as well.

Risks:

- Sleeve gastrectomy is generally a safe procedure and safer than most other common surgical procedures such as laparoscopic cholecystectomy (gallbladder removal), or knee replacement. The risk of a serious complication within the first 30 days is approximately 1–2%. Most common serious complications include bleeding, leak, blood clot, infection. Long-term risks include new or worsened acid reflux (approximately 20–35%), weight regain (5-15%), and vitamin or mineral deficiencies (10%). Daily vitamins, healthy lifestyle changes, and regular follow-up help reduce long-term risks.



# ROUX-EN-Y GASTRIC BYPASS

During Roux-en-Y gastric bypass, the stomach is divided to create a small stomach pouch approximately the size of a thumb or small egg. This pouch becomes the new stomach.

The small intestine is then connected to the gastric pouch so that food passes directly from the pouch into the small intestine. Digestive enzymes from the pancreas and bile from the liver mix with food farther downstream.

Expected outcomes:

- Approximately 25–30% total body weight loss

Improvement in obesity-related conditions:

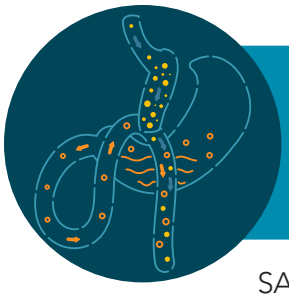
- Type 2 diabetes remission or major improvement: approximately 60–75%
- High blood pressure improvement: approximately 50–70%
- High cholesterol improvement: approximately 60–80%
- Acid reflux improvement: approximately 70–90%
- Higher rate of improvement in obesity-related diseases when compared to sleeve gastrectomy.

Additional benefit:

- Often improves severe acid reflux

Risks:

- Gastric bypass is generally a safe procedure. The risk of a serious complication within the first 30 days is approximately 2–4%. Short-term risks include bleeding, leak, blood clot, infection, or early bowel obstruction. Long-term risks include marginal ulcer (approximately 5–10%), internal hernia or bowel obstruction (2–5%), vitamin or mineral deficiencies (20–30%), dumping symptoms after eating sugary or highly processed foods (20–40%). Most long-term risks can be reduced by taking lifelong vitamins, avoiding nicotine and anti-inflammatory medications such as ibuprofen and naproxen, following dietary recommendations, and attending regular follow-up visits.



## SINGLE ANASTOMOSIS WITH DUODENILEAL BYPASS WITH SLEEVE (SADI-S)

SADI-S combines sleeve gastrectomy with an intestinal bypass.

First, a sleeve-shaped stomach is created. The first portion of the small intestine, called the duodenum, is then divided and connected to the small intestine farther downstream. This creates a single intestinal connection and decreases the absorption of calories and nutrients.

SADI-S was first described in 2007. Although it is newer than sleeve gastrectomy and gastric bypass, it is now an accepted bariatric procedure endorsed by ASMBS and is rapidly gaining popularity.

When compared to the gastric bypass, it is associated with more weight loss, and improvement in obesity-related conditions. There is a lower risk of marginal ulcers, internal hernias, and intussusception.

There is a higher risk of reflux when compared to the gastric bypass.

Given that this is a relatively new procedure, long term risks and benefits are not well-defined.

**Expected outcomes:**

- 30–40% total body weight loss



## ENDOSCOPIC SLEEVE GASTROPLASTY (ESG)

ESG is performed using an endoscope equipped with a suturing device.

Sutures are placed inside the stomach to reduce stomach volume by approximately 60–70%, creating a sleeve-like shape without removing any tissue.

Although it is newer than laparoscopic or robotic sleeve gastrectomy, it is now an accepted bariatric procedure endorsed by ASMBS and is rapidly gaining popularity.

When compared to sleeve gastrectomy, there is a lower risk of short-term complications such as leak or bleeding. There is a lower long-term risk of reflux, but a high chance of weight regain.

Given that this is a relatively new procedure, long term risks and benefits are not well-defined.

**Expected outcomes:**

- 10-15% total body weight loss

Serious complication risk: <1%

## REVISIONAL BARIATRIC PROCEDURES

Approximately 10–20% of bariatric patients may require additional treatment over time.

**Common revisional procedures include:**

- sleeve to gastric bypass
- sleeve to SADI-S
- gastric band removal with or without conversion
- Transoral Outlet Reduction (TORe)

## SURGERY OUTCOMES

Outcomes for each surgery vary by patient. The MBSAQIP calculator is a helpful tool developed by the American College of Metabolic and Bariatric Surgeons (ASMBS) to provide personalized information regarding weight loss and comorbidity resolution after surgery.

**Scan this QR code to access facs.org and the Bariatric Surgical Risk/Benefit Calculator.**



# Treatment Options

Weight loss treatments vary in effectiveness depending on the therapy used.

| TREATMENT | Average Total Body Weight Loss (TBWL) |
|---|---|
| Lifestyle therapy | 3–7% |
| Phentermine | 5–10% |
| Phentermine / Topiramate | 10–15% |
| GLP-1 / GLP-1-GIP medications | 15–22% |
| Endoscopic Sleeve Gastroplasty | 15–20% |
| Sleeve Gastrectomy | 20–25% |
| Gastric Bypass | 25–30% |
| SADI-S | 30–40% |



# What Should I Do Next?

The first step in improving your health is understanding your current weight and health risks.

## START BY CALCULATING YOUR BODY MASS INDEX (BMI)

BMI is a screening tool that helps determine whether your weight may be affecting your health and whether medical treatment may be helpful.

**Scan this QR code to access the American Society for Metabolic and Bariatric Surgery's BMI Calculator.**

Next, think about your goal weight and health goals. For many patients, success is not only measured by weight loss, but also by improvements in conditions such as diabetes, high blood pressure, sleep apnea, or joint pain.

Today, obesity treatment often involves combination therapy. Research shows that the most successful long-term results come from using multiple tools together, rather than relying on a single strategy.

These tools may include:

- Nutrition and lifestyle changes
- Behavioral support
- Anti-obesity medications
- Endoscopic weight-loss procedures
- Metabolic and bariatric surgery

Your care team will work with you to develop a personalized treatment plan that uses the right combination of therapies to help you achieve your goals safely and effectively.

By using the available tools and working closely with your care team, you can greatly improve your chances of achieving sustainable weight loss and better overall health.

## COMBINATION THERAPY

| TREATMENT | Overweight (BMI 25-26.9) | Overweight (BMI 27-29.9) | Obesity (BMI 30-34.9) | Severe Obesity (BMI 35-39.9) | Morbid Obesity (BMI >40) |
|---|---|---|---|---|---|
| Diet<br>Physical Activity<br>Behavioral Therapy | ✓ | ✓ | ✓ | ✓ | ✓ |
| Medication | | ✓ | ✓ | ✓ | ✓ |
| Endoscopic intervention | | | ✓ | ✓ | |
| Metabolic and bariatric surgery | | | | ✓ | ✓ |

# Pre-Surgical Clearances

Thanks for trusting Kelsey-Seybold with your weight loss surgery. Because undergoing a bariatric procedure is a life-changing decision, we require all patients to complete the following steps before surgery can be scheduled.

## 1. NUTRITION COUNSELING

Depending on your insurance plan, you may be required to complete one or more nutrition visits with one of our registered dietitians prior to surgery. Participation in shared medical appointments and support groups may also help fulfill these requirements. Your bariatric care team will guide you through this process and assist you in completing all necessary pre-surgical requirements. A referral is needed from your primary care physician. Even if you've consulted with a dietitian previously, you'll be required to complete a new consultation specifically related to your surgery prior to your procedure

## 2. BEHAVIORAL HEALTH EVALUATION

A behavioral health evaluation is recommended prior to surgery. Because mood, stress, and emotional factors can influence eating behaviors, this evaluation helps assess readiness for surgery and identify any psychological factors that may affect postoperative success. If you're part of a KelseyCare Advantage plan, we'll refer you to a Kelsey-Seybold provider. Otherwise, you can use one of the following psychologists for an evaluation or a psychologist of your own choosing. Once you've completed your evaluation, please fax your report to 713-442-5211, Attention Bariatrics Team.

**Psymed Solutions (Preferred Provider)**
psymedsolutions.com
972-232-7474
Insurance: Most plans accepted

**Kelsey Seybold Clinic Behavioral Medicine**
(https://www.kelsey-seybold.com/medical-services-and-specialties/behavioral-medicine)
Plans accepted: KelseyCare Advantage

**Online Bariatric Psych Evals**
onlinebariatricpsychevals.com
973-696-0800
Insurance: Most plans accepted
Cash Payment: $175 maximum

**Advantage Point**
advantagepointbehavioral.com

**Stuart Nathan and Associates**
mental-health-houston.com

## 3. ENDOSCOPY

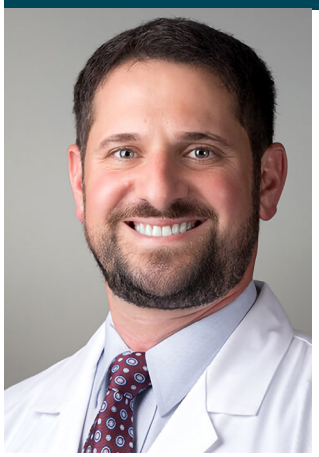
An endoscopy might be required prior to surgery. This will be scheduled for you at the time of the initial consultation with the surgeon. An endoscopy helps to determine your current gastrointestinal health and anatomy. We'll schedule an appointment for you at Memorial Hermann Memorial City, the Baylor St. Luke's O'Quinn Medical Tower near the Texas Medical Center, or at one of the Kelsey-Seybold Surgery Centers. Once the appointment is scheduled, you'll be notified and provided with all logistical information regarding the endoscopy.

- Do not drink or eat anything after midnight the night before your appointment.
- Please make sure you arrange a ride to and from your appointment, as you will be under anesthesia.

Once you have completed these steps, please call our Bariatric Surgery scheduling team at 713-442-5200 to schedule your surgery.

# Your Kelsey-Seybold Bariatric Team

## Eric Rachlin, MD, Metabolic and Bariatric Surgeon



Dr. Eric Rachlin is a fellowship-trained bariatric surgeon. He earned his Bachelor of Science in neurobiology from The University of Texas at Austin in 2009, where he graduated magna cum laude.

He earned his medical degree from Baylor College of Medicine in Houston in 2015. He completed his General Surgery residency in 2020 at Baylor College of Medicine and completed his Minimally Invasive Surgery and Bariatric Surgery fellowship at Memorial Hermann Memorial City in Houston in 2021.

Dr. Rachlin is a member of the Society of American Gastrointestinal and Endoscopic Surgeons and the American Society for Metabolic and Bariatric Surgery.

He and his team provide consultations at Kelsey-Seybold's Memorial City Clinic and Katy Clinic, either in person or through virtual appointments. Surgery is performed at Memorial Hermann Memorial City Medical Center.

"My goal is to provide all patients with the same respect, empathy, and quality of care that I would give to a family member. I hope my patients leave every interaction feeling their concerns were adequately addressed and all questions sufficiently answered."

## Shravan Sarvepalli, MD, Metabolic and Bariatric Surgeon



Dr. Shravan Sarvepalli specializes in metabolic and bariatric surgery, foregut surgery, and advanced endoscopic procedures.

He earned his medical degree from Rush Medical College and completed his General Surgery residency at Temple University Hospital. He subsequently completed a Bariatric and Foregut Surgery fellowship at Case Western Reserve University.

Dr. Sarvepalli focuses on multidisciplinary obesity care, integrating surgical treatment, advanced endoscopic techniques, and modern anti-obesity medications to develop personalized treatment plans.

Dr. Sarvepalli has authored numerous publications on topics related to combining anti-obesity medications with bariatric surgery, racial disparities in surgical care, and robotic surgery. He has presented his work at various regional and national conferences.

He performs robotic bariatric surgery, revisional bariatric procedures, and advanced endoscopic therapies including endoscopic sleeve gastroplasty.

Dr. Sarvepalli sees patients at Kelsey-Seybold's Memorial City Clinic and Fort Bend Medical and Diagnostic Center. Surgery is performed at Memorial Hermann Memorial City Medical Center.

# Bariatric Surgery Frequently Asked Questions

## Q: What role do medications play in weight loss?

**A:** Anti-obesity medications are now an important part of modern obesity treatment. They may be used:

- As a primary treatment for weight loss
- Before surgery to help reduce surgical risk
- After surgery to help prevent or treat weight regain

These medications work by reducing appetite, improving metabolism, and helping regulate the body's weight-control systems.

Medications are most effective when combined with nutrition counseling, lifestyle changes, and regular follow-up with your care team.

## Q: How much weight can I expect to lose with medications or surgery?

**A:** Weight loss is typically measured using Total Body Weight Loss (TBWL).

**Average results include:**

- GLP-1 or GLP-1/GIP medications (semaglutide, tirzepatide): 15–22% TBWL
- Phentermine/Topiramate (Qsymia): 10–15% TBWL
- Contrave (naltrexone/bupropion): 5–9% TBWL
- Phentermine: 5–10% TBWL
- Metabolic and Bariatric Surgery
- Sleeve Gastrectomy: 20–25% TBWL
- Gastric Bypass: 25–30% TBWL
- ADI-S: 30–40% TBWL

For example, if a patient weighs 250 pounds, a 25% total body weight loss would equal approximately 60 pounds of weight loss.

Individual results vary depending on medical conditions, lifestyle habits, and adherence to treatment recommendations.

## Q: Can medications be used after bariatric surgery?

**A:** Yes. Anti-obesity medications are frequently used after bariatric surgery to help:

- Treat weight plateaus
- Prevent weight regain
- Improve metabolic conditions such as diabetes

Using medications after surgery is increasingly common and reflects the multidisciplinary approach to obesity care.

## Q: When will I begin losing weight after the surgery?

**A:** Many patients begin losing weight before surgery while following the pre-operative diet. Immediately after surgery, some patients may experience temporary weight gain due to IV fluids and normal postoperative swelling.

Most patients begin to see consistent weight loss within the first two weeks after surgery.

## Q: How long will I continue to lose weight?

**A:** Weight loss typically occurs most rapidly during the first 6–12 months after surgery.

Most patients continue losing weight for 12–18 months, depending on the procedure performed and adherence to nutrition and lifestyle recommendations.

After this time, weight loss generally stabilizes, and the focus shifts to long-term weight maintenance and health improvement.

# Frequently Asked Questions (continued)

### Q: How much weight can I expect to lose with surgery?

**A:** In general, patients lose 50% to 80% of their excess body weight within 12 to 24 months after surgery. For example, if you're 250 pounds and your ideal body weight is 150 pounds, you can expect to lose between 50 and 80 pounds from weight loss surgery within two years. Weight will fluctuate and plateau during this time, just as with any weight loss program. It's also possible to regain the weight you've lost if you don't continue a healthy lifestyle regimen for the long term.

### Q: Can weight regain occur after surgery?

**A:** Bariatric surgery is a powerful tool for weight loss, but it is not a cure for obesity. Some patients may experience weight regain over time.

Maintaining long-term success usually requires:

- Healthy eating habits
- Regular physical activity
- Ongoing follow-up with your care team
- Sometimes the use of anti-obesity medications

If weight regain occurs, additional treatment options may include medical therapy, endoscopic procedures, or revisional bariatric procedures.

### Q: Will I need another surgery later?

**A:** Most patients do not require another surgery. However, 10–20% of patients may require additional surgical treatment later due to weight regain or anatomical changes.

Options may include:

- Revisional bariatric surgery
- Endoscopic procedures such as Transoral Outlet Reduction (TORe)
- Anti-obesity medications

Significant weight loss can also result in loose skin. Some patients choose body contouring surgery 1–3 years after their weight stabilizes.

### Q: How often will I follow up after surgery?

**A:** Regular follow-up visits are important for long-term success. Patients are typically seen:

- 1–2 weeks after surgery
- 3 months after surgery
- 6 months after surgery
- 2 months after surgery

After the first year, most patients are seen once or twice per year to monitor weight, nutrition, and metabolic health.

### Q: What is the most important factor for long-term success?

**A:** Long-term success often comes from using multiple treatment tools together.

These may include:

- Healthy nutrition habits
- Regular physical activity
- Behavioral support
- Anti-obesity medications
- Surgical or endoscopic procedures when appropriate

Obesity is a chronic disease, and long-term management often requires ongoing medical care and a combination of therapies.

# Before Surgery Timeline

## ONE MONTH BEFORE SURGERY

- Stop taking birth control pills one month prior to surgery. While you're not taking birth control pills, use another form of birth control to avoid getting pregnant.

## SIX WEEKS BEFORE SURGERY

- DO NOT smoke or use nicotine products at least six weeks before surgery.

## TWO WEEKS BEFORE SURGERY

It's important that you adhere to strict guidelines during the week prior to your weight loss surgery. Doing so will help prevent complications, aid in recovery, and ensure positive outcomes.

- FOLLOW YOUR DIET. Follow the preoperative diet provided by your bariatric surgeon. This will be a low-calorie diet that may consist of only liquids to help you lose weight quickly before the operation. If you have diabetes, monitor your blood sugars closely.
- STAY ACTIVE. Make time every day to walk or exercise during the one to two weeks leading up to surgery.
- FILL YOUR PRESCRIPTIONS. Fill new and current prescriptions that you'll need to take while you're in the hospital. Your bariatric surgeon will let you know which medications you should discontinue prior to and after surgery.
- GET PLENTY OF SLEEP. Come to surgery mentally sharp and well rested. Continue to use your CPAP or BIPAP mask if you have one and bring your equipment to the hospital.

## THE NIGHT BEFORE SURGERY

- Drink only clear liquids, such as water, decaffeinated black coffee or tea (no creamer), or bone broth.
- Before midnight, drink 32 ounces of one of the following:
  - Regular sports drink like Gatorade (NOT sugar-free)
  - Apple juice
  - Cranberry juice
- Don't eat after midnight. While it may be tempting to eat a "last meal" of high-calorie, high-carb foods before the procedure, it's important to stick to your preoperative diet.
- Do not shave the surgical area.
- Shower using surgical soap purchased from your local drugstore.
- Sleep on clean sheets and don't allow pets in bed with you.

## THE MORNING OF SURGERY

- Take your medications as instructed by your bariatric surgeon.
- At least four hours prior to surgery, drink 16 ounces of one of the following:
  - Regular sports drink like Gatorade (NOT sugar-free)
  - Apple juice
  - Cranberry juice
- Using the CHG wipes provided by your surgical team, clean yourself in this order:
  1. Neck, chest, and shoulders
  2. Arms, hands, and armpits
  3. Abdomen and groin
  4. Right leg and foot
  5. Left leg and foot
  6. Back and buttocks
- Do not use any powder, lotion, or deodorant.
- Dress in clean, loose-fitting clothing to go to the hospital.
- Don't wear makeup or nail polish.
- Remove all jewelry, including piercings.
- Leave all valuables at home.
- If you wear contacts, bring your solution to the hospital. You may opt to wear glasses instead of contacts for convenience.

**Scan this QR code to view the Bariatric Pre-Op Liquid Diet on the Kelsey-Seybold Clinic website.**

# What to Expect During Your Hospital Stay

## PREOPERATIVE CARE

- Your bariatric team will talk you through the procedure and what to expect in the operating room.
- You'll be given an IV, antibiotics, and medication to help you relax. You'll also be given medications to help limit postoperative pain and nausea.

## POSTOPERATIVE CARE

- You'll be taken from the operating room to a recovery room where you'll stay for a few hours. You will then be taken to your hospital room after recovering from anesthesia. If you qualify for same-day discharge, you will go home after you've recovered from anesthesia.
- Your pain will be managed with IV medication. Some of the medications will be given around the clock, while others will be given on an as-needed basis.
- You'll also be given anti-nausea medication since it's common to feel nauseated after surgery.
- You can have clear liquids (water, sugar-free Gatorade, popsicles, and broth) four hours after surgery. Staying hydrated is the most important thing. Drink 1 ounce of any fluid every 10 to 15 minutes when awake for a total of 40 to 60 ounces of fluid per day.
- If you're doing well the day after surgery, you can start the full liquid diet (clear liquids, protein shakes, yogurt, etc.), which you'll continue for the first week after surgery.
- Within the first hours of your surgery, you'll need to get out of bed and walk in your room or in the hallways. The nursing staff will assist you with walking, but it's important that you keep moving to prevent blood clots and other complications, such as pneumonia, gas, and constipation. You should try to walk at least three times a day during your hospital stay and walk as much as possible at home.
- Sequential compression devices will be applied to both of your legs to help with circulation and prevent blood clots. You'll also receive blood thinner injections (Lovenox) while in the hospital to prevent blood clots.

## BEFORE LEAVING THE HOSPITAL

- Ask your surgery team any questions about post-surgery care, diet restrictions, or anything else you need to be successful with your recovery at home.
- You'll begin increasing liquids gradually before discharge.
- Your surgical team will review your medication plan with you, including your current and post-surgery medications.
- Schedule a follow-up appointment with your surgeon for one week after surgery.
- Review your post-surgery diet plan with your surgical team.
- Be sure you have someone to drive you home. If you have a long drive home, get out of the car every hour to walk and stretch to prevent stiffness and blood clots.



# Bariatric Surgery Discharge Instructions

## ACTIVITY

- Get up and walk every hour to prevent blood clots.
- Do not lift anything over 15 pounds for four to six weeks after surgery.
- Do not do any heavy housework (vacuuming, mopping, etc.) for at least two weeks after surgery.
- Do not drive until you're no longer taking pain medication and it doesn't hurt when you turn or bend.
- Do not have sexual intercourse for at least two weeks.

## BATHING

- Do not soak incisions in a bathtub or swim for two to three weeks after surgery.
- During your daily shower, let the water and soap run over your incision sites. Any soap is fine.
- Pat your incisions dry, but do not use any ointments, lotions, or powders on them. Do not scrub or peel off the surgical glue in the first two weeks. It should flake off on its own but can be removed after two weeks.

## DIET

- The most important part of your diet after returning home is staying hydrated. Make sure you're drinking 40 to 60 ounces of clear liquids per day or 1 ounce every 10 to 15 minutes.
- Stay on a full liquid diet for one week after surgery.
- Adhering to the phased diet program given to you by your dietitian and surgeon is pivotal to avoiding complications and jumpstarting your weight loss journey.

## EMOTIONAL WELLBEING

- You may go through emotional ups and downs after surgery. This is completely normal.
- Eating 60 to 90 grams of protein per day, getting out of the house, exercising, and participating in a bariatric surgery support group can help improve your emotional wellbeing.
- Avoid weighing yourself more than once a week.

## MEDICATIONS

- Do not use any of the following medications that can cause stomach ulcers:
  - Advil, Motrin, Ibuprofen, Aleve, Meloxicam, Naproxen, Celebrex
  - Aspirin
  - Pepto Bismol
  - Excedrin, Mobic
- Permanently avoid taking nonsteroidal anti-inflammatory drugs if you have had gastric bypass surgery.
- For the first four to six weeks, any approved medication larger than the eraser on a pencil should be crushed or split. You can put the crushed medication into an approved liquid or food for easier consumption. Large pills in capsule form should be opened and the medication poured into an approved liquid or food.
- Do not take all your pills at once. Space them out and take one pill every 10 minutes to avoid them getting stuck.
- Remain on the antacid medication Protonix for three months after surgery.

## PREGNANCY AND BIRTH CONTROL

- It's very important to avoid getting pregnant for the first one to two years after surgery.
- Birth control pills may not be as effective as they were prior to surgery due to malabsorption. Use a back-up method and consult your doctor about what birth control method would be best for you.
- You may resume taking birth control pills one month after surgery.
  This will decrease the risk of blood clots.

## SMOKING

Do NOT smoke or use nicotine products at any time after surgery. It causes delayed healing and increases your risk for ulcers, blood clots, pneumonia, wound infections, and other medical issues. If you had gastric bypass, avoid secondhand smoke as well, since it can increase your risk of ulcers.

# Bariatric Surgery Discharge Instructions

## VITAMINS

- After surgery, DO NOT start taking any vitamins until after your one-week post-op visit with your surgeon.
- You may receive samples of a chewable multivitamin* prior to surgery.
- You'll need to take a bariatric-specific multivitamin* with iron for the rest of your life.
- Your bariatric team can help you choose the best vitamin for you and will take bloodwork to determine if you need to take additional vitamins or supplements.

| Sleeve/Gastric Bypass/Lap Band | Vitamin/Mineral | Duodenal Switch* |
|---|---|---|
| At least 12 mg/day, preferably 50-100 mg/day | **Vitamin B1** | At least 12 mg/day, preferably 50-100 mg/day |
| 500-1,000 mcg/day | **Vitamin B12** | 500-1,000 mcg/day |
| 400-800 mcg/day (800-100 mg childbearing aged women) | **Folate** | 400-800 mcg/day (800-1,000 mg childbearing aged women) |
| 1,200-1,500 mg/day, from both diet and supplements | **Calcium** | 1,200-1,500 mg/day, from both diet and supplements |
| 5,000-10,000 IU/day or 3,000 mcg/day | **Vitamin A** | 10,000 IU/day or 6,000 mcg/day |
| 3,000-5,000 IU/day or 75-125 mcg/day | **Vitamin D** | 3,000-5,000 IU/day or 75-125 mcg/day |
| 15 mg/day or 22 IU d-alpha tocopheral succinate/day | **Vitamin E** | 15 mg/day or 22 IU d-alpha tocopheral succinate/day |
| 90-120 mcg/day | **Vitamin K** | 300 mcg/day |
| 45-60 mcg/day (additional may be needed for menstruating women) | **Iron** | 45-60 mcg/day (additional may be needed for menstruating women) |
| 8-11 mg/day (Sleeve, Lap Band) 8-22 mg/day (Gastric Bypass) | **Zinc** | 16-22 mg/day |
| 1 mg/day (Sleeve, Lap Band) 2 mg/day (Gastric Bypass) | **Copper** | 2 mg/day |

* Duodenal Switch patients may need higher levels of fat-soluble vitamins A,D, E, and K to maintain normal lab values, due to the nature of fat malabsorption caused by the procedure.

**Some notes about calcium:**

- Calcium citrate is the preferred form – look for this when purchasing a generic calcium brand.
- Calcium and iron compete for absorption: allow at least two hours between your calcium and iron-containing supplement for best absorption.
- The body only absorbs 500 – 600 mg calcium at a time; take your calcium doses throughout the day for maximum absorption.

# Bariatric Surgery Discharge Instructions

## RECOMMENDED MULTIVITAMINS* - Sleeve/ Gastric Bypass (select one)

- Bariatric Advantage Chewable Multi EA (two/day) + three calcium chews
- Celebrate Multi-Complete 45 Chewable (two/day) + three calcium chews
- Opurity Bariatric Multi Chewable with Iron (one/day) + three calcium chews
- Bariatric Advantage Ultra Solo with Iron Capsule (one/day) + three calcium chews
- Celebrate One-45 Capsule (one/day) + three calcium chews
- Opurity Bariatric Multi Capsule with Iron (two/day) + three calcium chews

* Multivitamin must also contain magnesium, selenium, manganese, molybdenum, chromium.

## RECOMMENDED MULTIVITAMINS* - Duodenal Switch (select one)

- Bariatric Advantage Chewable High ADEK Multi (two/day) + four calcium chews
- Celebrate Chewable Multi ADEK (three/day) + four calcium chews + 45 mg iron
- Bariatric Advantage High ADEK Multivitamin Capsule (two/day) + four calcium chews
- Celebrate ADEK Capsule (four/day) + four calcium chews, + 45 mg iron

* Multivitamin must also contain magnesium, selenium, manganese, molybdenum, chromium.

## TIPS

1. Your bariatric multivitamins should have been purchased prior to surgery, and you should have already begun taking them pre-surgery. Bariatric multivitamins that meet ASMBS guidelines are not found in stores and must be purchased online. Before you buy, price compare – they are often cheaper on the vitamin company's website than through a third party such as Amazon.
2. If you have nausea or trouble tolerating vitamins, try taking them with food or after eating. Slow release iron may be tolerated better.
3. Use a phone timer or the Baritastic app to help you remember to take your vitamins.
4. Participate in companies' auto-ship option so you always have vitamins stocked.



# Bariatric Surgery Possible Complications

As with any type of surgery, weight loss surgery has its risks. Some of these complications are common and mild, but some will require immediate or eventual medical attention.

## NAUSEA AND VOMITING

Most bariatric surgery patients will experience nausea and vomiting at some point as they adjust to new eating habits, such as when to eat and drink and how much to consume. However, contact your bariatric surgery team if you're vomiting frequently or if you can't determine the cause of your nausea or vomiting.

## GASTROINTESTINAL ISSUES

It's common to experience constipation and gas/bloating after bariatric surgery. However, chronic constipation can lead to intestinal blockage and other serious issues, so it's important to address it as soon as possible. Here are some ways to stay regular after surgery:

- Use milk of magnesia, MiraLAX, or a glycerin suppository as needed (these laxatives should not be used for the long term).
- Eat 1/8 to 1/4 cup of unsweetened applesauce, Cream of Wheat, or unsweetened pureed prunes a day until you're regular.
- Add 1 Tbsp of raw wheat bran or ground flaxseed to your protein shakes, unsweetened applesauce, hot cereal, or refried beans every day until you're regular.
- Drink a lot of water, but remember to sip and to not drink beverages with your meals.
- If you're having gas pains that don't go away with exercise, try simethicone drops or Gas-X. Contact your physician if these methods don't ease gas production.

## DUMPING SYNDROME

If you eat and drink at the same time, or if you eat high-fat foods or sweets, you may experience severe diarrhea, nausea, light-headedness, and stomach cramps. This is why bariatric surgery patients are strongly encouraged not to drink anything with meals, limit sugar intake, and eat low-fat foods.

## WEIGHT GAIN

While bariatric surgery is highly effective for weight loss, it's only a tool. To maintain results, you have to adhere to recommended diet restrictions, eating habits, and lifestyle changes. If you're struggling with weight gain after surgery, contact your bariatric surgery team or join a bariatric surgery support group.

## HYPOGLYCEMIA

Low blood sugar can occur after bariatric surgery but usually happens long after having the procedure. If you feel dizzy, clammy, and sweaty, or like you may faint, contact your bariatric surgery team. If hypoglycemia is left untreated, it can lead to seizures.

## STRICTURE

Tightening or stricture of the opening between your stomach and intestine can occur after gastric bypass. Commonly occurring four weeks after surgery, symptoms include vomiting after eating or drinking that gets worse over time, the sensation that food is stuck in your esophagus, not being able to tolerate certain foods or textures after the initial liquid diet, and experiencing pain when eating solid foods.

If you have any of these symptoms, contact your bariatric surgery team immediately. While this can be treated with an outpatient procedure, it needs to be treated as soon as possible.

## HAIR LOSS

Rapid weight loss commonly causes hair thinning, and hair loss often occurs after bariatric surgery because you're not eating enough protein daily. Try to consume at least 60 grams a day of protein or the amount your dietitian or physician has recommended.

## ULCER

Sores in the lining of the stomach or small intestine are possible at any time after bariatric surgery and cause severe, persistent nausea and pain, especially with eating. Early detection is key, so contact your physician if you're experiencing any symptoms. Ulcers can be treated with anti-ulcer medication such as Protonix or Prilosec.

# Bariatric Surgery Possible Complications

## VITAMIN DEFICIENCIES

Vitamin deficiencies are common when patients don't take vitamins or choose to take a generic over-the-counter multivitamin. To prevent vitamin deficiencies, bariatric multivitamins are available.

| Vitamin/Mineral | Lab to Request | pre-op | 2 months post-op | 6 months post-op | Annually post-op | Signs of Deficiency |
|---|---|---|---|---|---|---|
| **Vitamin B1** | Thiamine (vitamin B1) | ✓ | ✓ | ✓ | ✓ | Poor memory, irritability, tingling in extremities (*treat with 100mg B1 daily, if you suspect a deficiency without a lab draw) |
| **Vitamin B12** | B12 cobalamin, methylmalonic acid | ✓ | ✓ | ✓ | ✓ | Anemia, fatigue, muscle weakness, cognitive impairment |
| **Folate** | Serum folate | ✓ | ✓ | ✓ | ✓ | Anemia, red tongue, mental confusion, weakness, fatigue |
| **Calcium** | Serum calcium, PTH, alkaline, phosphatase | ✓ | ✓ | ✓ | ✓ | Bone loss, leg cramping, muscle weakness, osteoporosis |
| **Vitamin A*** | Plasma retinol | ✓ | | | ✓ | Night blindness, poor wound healing, loss of taste |
| **Vitamin D** | Vitamin 25 (OH) D | ✓ | ✓ | ✓ | ✓ | Osteomalacia, bone pain, tingling, fatigue |
| **Vitamin E*** | Plasma alpha tocopherol | ✓ | | | ✓ | Neurological damage, muscle weakness, gait disturbance |
| **Vitamin K*** | PT 10-13 seconds | ✓ | | | ✓ | Hemorrhage, easy bruising, bleeding gums |
| **Iron** | Iron status, ferritin, TIBC | ✓ | ✓ | ✓ | ✓ | Anemia, pale skin/nail beds, glossitis, fatigus, dysphagia |
| **Zinc** | Serum zinc | ✓ | ✓ | ✓ | ✓ | Hair loss, taste changes, diarrhea |
| **Phosphorus** | Serum phosphorus | ✓ | ✓ | ✓ | ✓ | Fragile bones, stiff joints |
| **Copper*** | Serum copper | ✓ | | RNY, DS | RNY, DS | Anemia, hair/skin/nail hypopigmentation |
| **Magnesium** | Serum magnesium | ✓ | | ✓ | ✓ | Loss of appetite, numbness/ tingling, nausea, vomiting |
| **Selenium*** | Serum selenium | | | RNY, DS | RNY, DS | Infertility, muscle weakness, fatigue, hair loss, weakened immune system |

*with specific findings

Shaded areas indicate that it is not necessary unless indicated by physical assessment/specific findings; there is not data regarding copper or selenium post-sleeve.

# Bariatric Surgery Possible Complications

## LEAK

Gastrointestinal leaks are possible up to one week after bariatric surgery or after you're discharged from the hospital. If you experience any of these symptoms, call your surgeon's office immediately or go to an emergency room if it's after regular office hours:

- Persistent left shoulder pain
- Severe pelvic pain
- Fever (over 101°)
- Inability to urinate or empty your bowels
- Anxiety, sweating, chills
- Nausea and vomiting
- Persistent hiccups (with other symptoms)
- Color change in drainage from incisions

## WHEN TO SEEK IMMEDIATE MEDICAL ASSISTANCE

You should call your bariatric surgeon or seek emergency care if you experience any of the following:

- Chest pain that's getting worse
- Difficulty breathing when at rest
- Fever over 101°
- Pain, redness, or swelling in the legs (indicative of blood clots)
- Increased drainage, swelling, or pain at incision sites
- Incision drainage that is green or pus-like or has a foul smell (normal drainage is yellowish-red in color and odorless)

## FOLLOW-UP APPOINTMENTS

Your Kelsey-Seybold bariatric team is here to support you at every stage of your weight loss journey. After surgery, you will need to be closely monitored to help prevent complications or to identify and treat complications if they do arise. For this reason, as part of your post-surgery care plan, you'll be scheduled for a series of follow-up appointments with your bariatric surgeon. During these visits, your health and weight statuses will be monitored, and any issues will be addressed.

In addition to bariatric care appointments, you'll also need to schedule a follow-up appointment with your primary care physician two to three weeks after surgery. You'll also need to see a Kelsey-Seybold dietitian two to three months after surgery.

## BARIATRIC SUPPORT GROUP

All pre-operative and post-operative patients, as well as friends and family members of patients, are encouraged to attend a local support group near you and find online support groups. Ask your dietitian for recommendations.

If you have any questions about what you can expect from weight loss surgery, call your bariatric surgery team at 713-442-5200.

### Call Kelsey-Seybold First!

Please call your doctor first if experiencing any non-emergency related issues at 713-442-5200. Kelsey-Seybold representatives are available 24/7 and will provide guidance for the best course of treatment and care needed.

If you are feeling dehydrated, we can arrange for IV fluids at either the Rapid Treatment Clinic (RTC) or Memorial Hermann Digestive Health Center, which are open during normal business hours.

**24/7 Kelsey-Seybold Nurse Triage: 713-442-0000**

# Nutrition and Diet Guidelines

## TWO MONTHS BEFORE SURGERY

Because bariatric surgery changes your anatomy, it will require you to develop healthy habits that last a lifetime if you want to maintain weight loss. The sooner you start, the more prepared you'll be for surgery, recovery, and the rest of your post-operative journey.

## START WITH THESE SIMPLE CHANGES

- Eat your meals slowly, taking 20 to 30 minutes to finish. This keeps your portions in check and allows you to enjoy your food more.
- Eat a small, fiber and protein-rich meal or snack every three to four hours to stabilize blood sugar, maintain energy, and prevent overeating.
- Don't eat while watching TV, driving, or using electronic devices, which can result in mindless eating. When you limit distractions, you can focus more on hunger and fullness cues and avoid overeating.
- Try to drink 64 ounces of zero-calorie liquids a day. Hydration is key to optimal health, improving brain function, regulating hunger, increasing energy, and more. You'll know you're hydrated enough if your urine is pale yellow or clear. You should also avoid caffeinated and carbonated beverages.
- Get your family involved by letting them have a say in weekly meal planning, preparing meals together, and getting them on board with healthier living.

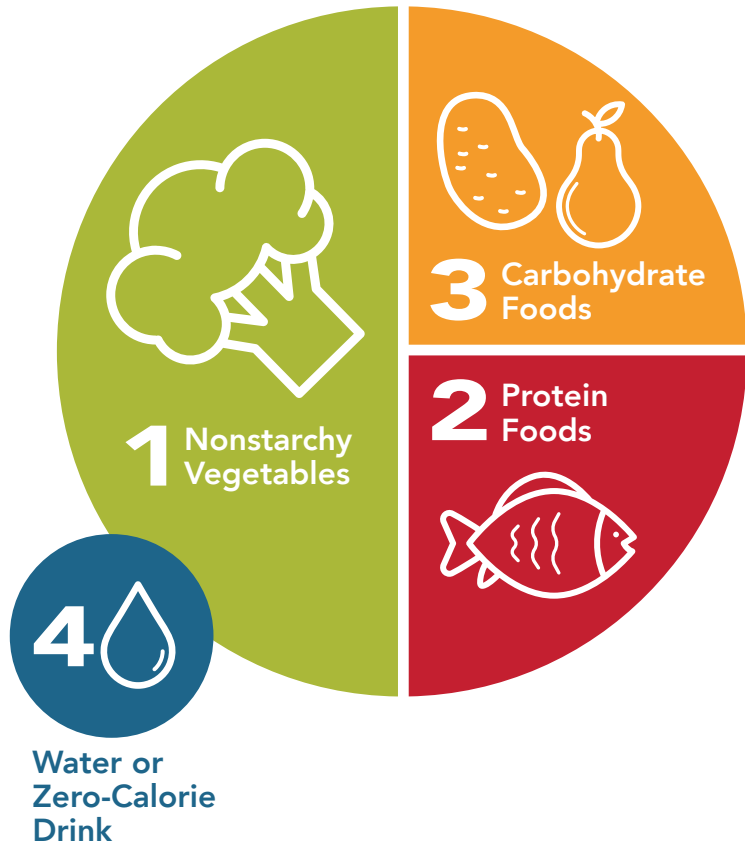
## THE PLATE METHOD

Following this simple eating formula can greatly help with portion control. After surgery, you'll continue to follow the plate method (during Stage 4), but with smaller portions. By starting now, you'll be more successful transitioning to smaller portions later.

Your pre-operative plate should contain:

- 2 cups of non-starchy vegetables
- 1/2 – 1 cup (or two pieces) of whole grains, fruit, or starchy vegetables
- 3 – 4 ounces of lean plant-based on animal protein (about the size of a deck of cards or the palm of your hand)

You can also use healthy oils for cooking, such as olive and avocado oils, and as a salad dressing.



# Nutrition and Diet Guidelines

## GROCERY SHOPPING

Healthy eating starts at the grocery store. And healthy shopping starts with a well-planned grocery list. Follow these tips to make sure your food shopping trip goes smoothly:

- Plan every meal and snack for each day and write the items you'll need on your list.
- Include your family in meal planning. If they have a say in the weekly menu, they may not only be more likely to support your weight loss journey, but also decide to eat healthier themselves.
- Don't go to the grocery store hungry. You'll be less tempted to stray from your list.
- Don't forget about spices and herbs. You can use them freely, and they add much more interest to your food.
- Fresh or frozen produce is best. Rinse canned varieties, or buy cans that state "no salt added."
- Prepared produce can be more expensive, but if you're short on time to prepare fruits and vegetables yourself, things like sliced apples, baby carrots, bagged salads, and spiralized zucchini can be huge timesavers.
- Items like string cheese, nuts, hummus, and low-fat plain yogurt are great snacks to have on hand.

## COOKING AND MEAL PREP

- If you don't have time to cook each night, find time on the weekends or on your days off to meal prep. Prepping can involve chopping vegetables, marinating meat, or cooking complete meals so all you have to do is heat them up later. Whichever you choose, each meal should include a lean protein and non-starchy vegetables.
- Portion out snacks like fruit, nuts, seeds, and boiled eggs into easy grab-and-go containers.
- Keep "rescue foods," such as nuts, protein bars, and lean jerky in the car or at your desk for hunger emergencies.
- Cook with healthy oils, such as avocado and olive oil, or non-stick cooking sprays instead of butter and oils like coconut or peanut.
- Try one to two new recipes a week so you don't get bored with the same meals.
- Prepare produce in various ways. For instance, trying broccoli steamed and roasted. Also consider using vegetables as a substitute for starchy foods like potatoes and pasta.

## DINING OUT

- Try to plan ahead by looking at a restaurant's menu online before heading out.
- Skip any pre-meal snacks provided by the restaurant, such as rolls or chips. It's very easy to overeat these items.
- Choose main dishes that are steamed, grilled, or broiled instead of breaded or fried. If you're unsure, ask your waiter for clarification on how a meal is prepared.
- Don't be afraid to ask for substitutions, such as steamed vegetables instead of fries.
- If the restaurant serves large portions, ask for a half portion, share the meal with a friend, or ask for a to-go box immediately so you can box up half of the meal as soon as it comes to the table.
- If you're afraid of overeating, or if you're unable to substitute for healthier sides, choose a la carte items over ordering a full meal.

## ON THE GO

- Nothing can sabotage your diet easier than getting hungry when you're out running errands or on the road. Prepare for those moments by keeping non-perishable snacks in your car, purse, or bag.
- On road trips, pack a cooler with containers full of cheese, veggies, and nuts.
- If you must stop at fast food restaurants, arm yourself beforehand by researching what you can order, such as salads, grilled chicken, and healthier sides.

# Nutrition and Diet Guidelines

## PHYSICAL ACTIVITY

Moving your body is essential to optimal health, and any physical activity is better than none. Physical activity will aid in your weight loss and your long-term weight maintenance. Exercise can also help relieve fatigue, prevent loose skin, fight disease, increase "feel good" endorphins, improve self-esteem, and protect bone density. Start small but start somewhere.

There are three key areas you should focus on when it comes to exercise:

- Cardio Burns Calories and Gives You More Energy
- Get a minimum of 150 minutes of continuous exercise of moderate intensity every week (30 to 45 minutes five times per week).
- Strength Training Keeps Your Lean Muscle Mass
- When it comes to strength training, it's important to start slow. Start with 1- to 5-pound weights, then increase weight once you can do three sets of 15 to 20 reps. If you feel sharp pain, don't try to push through it. Stop and try a different exercise.
- Lunges, squats, and lifting weights are all great exercises for strength training.
  Sit-ups, crunches, or other core exercises are also excellent toning options that can lead to a stronger core and help prevent future injuries.
- Flexibility Prevents Injuries
- If you feel sore or tight after your workout, flexibility exercises that stretch your muscles can help. It can also help you avoid straining yourself when you're running or lifting weights. When stretching, it's important to be careful. Take each stretch slowly and hold it for 10 seconds – don't bounce up and down. Go far enough that you feel a burn but ease up if you feel sharp pain.

## PRE-OP LIQUID DIET: ONE WEEK BEFORE SURGERY

Approximately one week before surgery, your doctor will start you on a fully liquid, low-carbohydrate diet. Your physician will specify exactly when you should start the diet. If you're diabetic, your doctor may decrease your insulin/diabetic medications during this time.

In addition to protein shakes, you should aim for a fluid intake of 64 ounces per day. You should also avoid drinking through straws.

The liquid diet serves several purposes. First, it helps you lose some weight before surgery, which reduces the risk of your laparoscopic surgery having to be converted to open surgery. It also reduces your liver size, intra-abdominal fat, co-morbidities, operating time, recovery time, and postoperative risks.

It's very important that you adhere to this liquid diet according to your surgeon's instructions. There have been cases in which a patient's surgery was canceled due to noncompliance with the pre-op diet. If you find yourself struggling with the guidelines, contact your bariatric team for help.

**Scan this QR code for details about the liquid diet and acceptable fluids.**



# Post-Surgery Nutrition Guides

After bariatric surgery, how you eat is just as important as what you eat. You should aim for at least 64 ounces of carbonation-free and sugar-free beverages per day to stay hydrated. You should also try to consume at least 60 grams of protein, which will promote healing and prevent the loss of lean muscle after surgery. Getting adequate protein can also help prevent hair loss.

## POST-SURGERY DIET STAGES

After bariatric surgery, you will need to follow a diet that progresses from liquids to solid foods (textures). The specific progression of textures is prescribed to provide a concentrated source of nutrition that will empty the stomach easily and allow for safe healing.

Typically, the stages are as follows:

- Week 1 post-surgery: full liquid diet and protein shakes (anything that pours like a liquid without chunks)
- Weeks 2 and 3 post-surgery: pureed foods
- Weeks 4 and 5 post-surgery: soft foods
- 6 weeks+ post-surgery: regular textured foods

## HOW TO EAT, GENERAL GUIDELINES

After Stage 1, which is the initial post-surgery liquid diet phase, you should also incorporate the following guidelines when eating to help ensure safety, comfort, and weight loss:

- Drink at least 64 fluid ounces of noncarbonated, sugar-free beverages each day.
- DO NOT drink fluids 10 minutes before eating, while eating, and for 30 minutes afterward.
- DO continue sipping liquids throughout the rest of the day.
- Consume at least 60 grams of protein daily.
- Eat every three to four hours or five to six meals per day.
- Take 20 to 30 minutes to finish your meals.
- Chew foods to a toothpaste consistency before swallowing.
- Avoid raw fresh fruits and vegetables until 12 weeks after surgery.
- Eat protein foods first, followed by vegetables and fruits, and lastly starchy foods.
- Avoid carbonated beverages and straws for the first two to three months after surgery.
- Do not drink alcohol for one year after surgery.
- Restaurant foods are NOT recommended for the first two months after surgery.
- Avoid or limit foods that contain sugar. Sweets can cause dumping syndrome and decrease your weight loss. Choose fruit to satisfy your sweet tooth instead.
- Stop eating when you feel satisfied.
- Record any foods you're unable to tolerate. Bring this with you to the next appointment with your dietitian.

It's not always easy to know how much protein is enough. Use the following examples as a guide for daily protein intake:

- 50 grams of protein = 3 ounces of meat + one egg + 1 cup skim milk + 2 ounces of cheese
- 60 grams of protein = 4 ounces of meat + one egg + 1/2 bottle of Premier Protein shake + 2 ounces of cheese
- 70 grams of protein = 4 ounces of meat + one egg + 1 cup skim milk mixed with protein powder + 1 ounce of cheese

After the initial post-surgery liquid diet phase, you should also incorporate the following guidelines when eating to help ensure safety, comfort, and weight loss:

- Eat every three to four hours, which equates to four to six small meals per day.
- Take 20 to 30 minutes to finish your meals. Take small bites and chew thoroughly.
- Don't drink fluids while eating or for 30 minutes after eating a meal or snack.

### Feeling Full

The feeling of fullness after eating is going to be different after surgery. You'll become full quicker than you used to, and if you eat beyond feeling satisfied, you'll likely experience pain, nausea, and vomiting.

When you feel gentle tightness or pressure near your breastbone, you're comfortably satisfied and should stop eating. You may also experience the hiccups or a runny nose when your post-surgery body is full.

## STAGE 1: WEEK 1 POST-SURGERY

### Liquid Diet

While in the hospital, you will be given clear liquids immediately after surgery and then full liquids the day after surgery. The priority for the first two weeks post-surgery is to remain hydrated. This is even more important than getting enough protein. Typically, your hydration goal will be 48 to 64 fluid ounces of liquids per day, or three to four regular size water bottles.

### How to Eat During Stage 1

- Sip, slowly and continuously.
- Avoid gulping in order to prevent pain and discomfort.
- Aim to drink 1-2 fluid ounces of liquid every 15-minutes.
- Your first drink of the day should be a high-protein liquid.

**IMPORTANT**:
For the first two to three months after surgery, don't use straws, drink carbonated beverages, or put anything "chunky," such as fruits or nuts, in your liquids or foods. Straws and carbonation can cause air bubbles and may lead to gas or discomfort. And food particles can become stuck in your incision staple lines and cause irritation or infection. For this reason, you should not consume any smoothies or other blended liquids during this time. You also shouldn't drink alcoholic beverages for one year after surgery.



**Scan this QR code for lists of specific liquids permitted.**

## STAGE 2: WEEKS 2 AND 3 POST-SURGERY

### Pureed Proteins

Beginning week 2, you can continue consuming the liquid foods from Stage 1 and start to add pureed, soft proteins. During this time, your stomach pouch and the opening to the intestine is swollen and small, so you'll only be able to consume a small amount of food. Your priority during this stage should be consuming at least 60 grams of protein each day.

**NOTE**: Begin taking your vitamins in week 2. If you received vitamin samples prior to surgery, you can try them now. Take one to two different vitamins per day until you determine which ones you can tolerate best. If you become nauseous or vomit after taking a vitamin, discontinue its use. If you can't tolerate any of the sample vitamins, contact your bariatric team for suggestions on which vitamin to buy that's best for you.

### How to Eat During Stage 2

In addition to the General Guidelines listed on pages 31 and 32, please adhere to the following during Stage 2

- Expect to eat only 2 to 3 tablespoons or 1/4 cup of food at every meal.
- Avoid foods containing saturated fats, added or refined sugars, and course or crunch foods.
- Foods can be cooked using cooking spray.
- Foods like fish, poultry, and meat may be difficult to tolerate in this stage.
- Puree them with a liquid, such as broth, to make sure they're not dry.
- You may mix food with nonfat mayonnaise or nonfat salad dressing.
- Avoid eating foods from squeeze-pouches, such as Go-Go Squeeze or Once Upon a Farm.

### Tips on How to Puree Foods

- Cut foods into small pieces.
- Use a food processor or blender.
- Add liquid such as broth, liquid consistency soup, milk, nonfat mayonnaise, or fat-free salad dressing.
- Blend or puree until the food is smooth.
- Strain foods to ensure there aren't any solid pieces
- Season foods to taste. You might avoid spicy foods (e.g., hot sauce, pepper)

### Planning Meals

You may continue to incorporate the protein, hydration, and other liquids from Stage 1.



**Scan this QR code for foods and liquids permitted in Stage 2, as well as a sample one-day menu.**

## STAGE 3: WEEKS 4 AND 5 POST-SURGERY

Starting week four, you can continue consuming the foods from Stages 1 and 2 and begin to add soft foods. During this time, your gut is still healing, so you'll likely only be able to consume a couple of ounces per meal. You should be reaching the protein and hydration goal daily.

### How to Eat During Stage 3

- Eat every 3 to 4 hours (breakfast, mid-morning snack, lunch, midafternoon snack, dinner, nighttime snack).
- Expect to eat only a couple of ounces of food every meal.
- Eat mostly protein. Fresh raw vegetables and fruits should NOT be eaten until week 12.
- Rinse off canned fruits to remove excess sugar, even if it's packed in water or 100% juice.
- Foods should be fork-tender or cooked until tender enough to cut, mash, or pull apart with a fork.
- Foods can be cooked using cooking spray or small amounts of healthy fats — such as olive, avocado, or canola oil.
- Foods can be mixed with nonfat mayonnaise or nonfat salad dressing.

### Planning Meals

You may continue to incorporate foods and protein, hydration, and other liquids from Stages 1 and 2.

**Scan this QR code for lists of foods and liquids you can add to your diet in Stage 3, plus a sample one-day menu.**

## STAGE 4: 6 WEEKS POST-SURGERY AND BEYOND

At six weeks, you'll begin your long-term way of eating. This is how you'll need to eat for the rest of your life to maintain the effectiveness of your weight loss surgery. You still won't be able to eat as much as you did pre-surgery without feeling sick. You should aim to reach your daily protein goal through whole foods, rather than protein shakes or supplements.

Once you reach this stage, any texture of food is safe. Try one new food at a time to see what you can tolerate. If it doesn't sit well the first time, try again a couple of weeks later or prepare it differently.

### How to Eat During Stage 4

- Suggested eating schedule
  - Breakfast: 30 minutes to 1 hour after waking
  - Mid-morning snack: 2 – 3 hours after breakfast
  - Lunch: 2 hours after mid-morning snack
  - Mid-afternoon snack: 2 – 3 hours after lunch
  - Dinner: 2 hours after mid-afternoon snack
  - Nighttime snack: 2 hours before bed
- Use the post-surgery Plate Method.
  - 2 – 3 oz of lean protein (about 1/4 cup)
  - ¼ cup non-starchy vegetables or fruit
  - 2 tablespoons (or 1/4 piece) fiber-rich whole grains or starchy vegetables
- Protein should make up at least half of each meal.
- Foods can be cooked using cooking spray or small amounts of healthy fats, such as olive or avocado oil.
- Pasta and rice should be overcooked until mushy to keep them from expanding in your stomach. They should also be eating in small amounts (about 2 tablespoons).
- Add one new food to one meal each day. If you have any discomfort, wait one to two weeks before trying again.

### Planning Meals

You may continue to incorporate foods and protein, hydration and other liquids from Stages 1 to 3.

**Scan the QR code for lists of the foods and liquids that should become the centerpiece of your daily diet going forward, plus a sample one-day meal plan.**

# Patient Resources

## WEIGHT LOSS SURGERY SUPPORT GROUP

Bariatric surgery is a specialized procedure that can take a physical and emotional toll on patients. We encourage all of our bariatric surgery patients to join a weight loss surgery support group so you can meet and interact with people who are experiencing the same challenges. Those who attend support group meetings range from preoperative to many years postoperative. The wealth of insight and help you will receive at support groups is invaluable.

The Kelsey-Seybold bariatric team recommends a weight loss surgery support group that meets at Memorial Hermann Memorial City Medical Center. This monthly group provides education and peer support and is designed to help you adjust to and maintain healthy lifestyle changes to ensure long-term success.

**All meetings are free of charge.**

Scan the QR code for information about the NewStart support group or email MHMCNewStart@memorialhermann.org.

## COOKBOOKS

**"The Easy 5-Ingredient Bariatric Cookbook: 100 Postsurgery Recipes for Lifelong Health"** by Megan Wolf, RD

**"Fresh Start Bariatric Cookbook: Healthy Recipes to Enjoy Favorite Foods After Weight-Loss Surgery"** by Sarah Kent, MS, RDN, CD

**"The Complete Bariatric Cookbook and Meal Plan: Recipes and Guidance for Life Before and After Surgery"** (paperback) by Megan Moore, RD

## FOLLOW-UPS WITH A REGISTERED DIETITIAN

Nutrition appointments are encouraged for all patients. It's recommended to meet with a registered dietitian within the first two to three months after surgery and every three to six months during the first year after surgery for optimal success.

**If you have any questions or concerns about nutritional guidelines before and after weight loss surgery, your bariatric surgery team is here to help. Call us at 713-442-5200.**

