

WEIGHT LOSS SURGERY

VERTICAL SLEEVE GASTRECTOMY (VSG)

Patient Guide

Preoperative Guide for Bariatric Surgery



Welcome to Kettering Health Medical Weight Loss and Bariatric Surgery

Our Mission

To live God's love
by promoting and
restoring health.

Our Values

Belonging

Wholeness

Excellence

Leadership

Learning

You are to be congratulated for taking a major step to improve your life and your health. The weight loss surgery team is committed to being there for you throughout your entire weight loss journey. We are here to meet your individual needs and will do whatever we can to accomplish that.

This patient education book contains information about your weight loss surgery. It was created to help you prepare for your surgery and the lifestyle changes you will need to make after your surgery. The binder is yours to keep and refer to as needed. Please review this information before your surgery, as it will help you prepare for your surgery and your recovery. Please bring it with you to the hospital when you have your surgery.

Thank you for the opportunity and the privilege to be a part of this important decision. Please feel free to call us any time you have problems or concerns.

Your Weight Loss Surgery Team

Kettering Health Bariatric Surgery

(937) 439-4145

After hours: (937) 630-3701



Preparing for Surgery

Vitamins and Minerals	4
Protein Supplements	5
Grocery List	6
Goals Before Weight Loss Surgery	7

Preoperative Information

What Is Sleeve Gastrectomy	8
Advantages and Disadvantages	8
Safety	9
Reasons to Consider Sleeve Gastrectomy and Reasons Sleeve Gastrectomy May Not Be for You	9
What to Bring to the Hospital	9
Smoking	10
Pregnancy	10
Alcohol Facts	10
Before Surgery	11
Day of Surgery	11

Perioperative Information

Pain Control	12
Nausea	12
Bowel	12
Oxygen, Cough, and Deep Breath	12
Activity: Walk, Walk, Walk	12
Anticoagulant	13
Incision Care	13
JP Drain	13
Uppler GI Test	13
Complications and Adverse Effects	14

Discharge to Home

Personal Care	15
Medications	15
Nutrition	15
Exercise	15
Follow-up	15

Diet and Nutrition

After Surgery	16
Clear Liquid Diet	16
Full Liquid Diet	17
Bariatric Soft Protein Diet	18
Bariatric Soft Protein and Produce Diet	19
Bariatric Regular Protein and Produce Diet	20
High-protein, Low-carb, Low-sugar, Low-fat Diet	21
Tips for Eating Out	21
Quick Tips	22
Protein Content of Foods	23

Emotional Aspect of Weight Loss

What to Expect	25
Body Image	25
Depression	25
Coping-Style Adjustments	26
Relationship Adjustment	26
Divorce	26
Where to Find Support	27

Fitness and You

Workout Schedule	28
Motivation and Fitness Tips	29
Target Heart Rate Chart	31

Additional Resources

Website Resources	32
Frequently Asked Questions	33
Bariatric Planner	35

PREPARING FOR SURGERY

Preparing For Surgery

Vitamins and Minerals

Your shopping list prior to surgery will include vitamins, minerals, and protein supplements. **Please purchase your vitamins, some protein supplements, and your pantry items BEFORE surgery. However, do not buy too much supply of any one product in case your tastes change after surgery.**

Vitamins and minerals are to be taken for the rest of your life. This is your responsibility. You may choose one of the following options:

Option 1

- 2 Multivitamin chewables with at least 18 mg iron per tablet
- 2 Calcium citrate with vitamin D3, 1000 mg daily
- 1 B12, oral or sublingual (under the tongue) daily 500 mcg
- 1 B Complex, daily
- Biotin, 1000 mcg daily (optional)

Option 2

Opurity vitamin, chew 1 per day plus 2 calcium

Option 3

Fusion vitamins, chew 4 per day

Option 4

- 1 Bariatric Advantage Ultra Solo Citrus with iron, daily
- 2 Calcium, daily

Option 5

- 2 BariMelt with iron, daily
- 2 Calcium, daily
- 1 B Complex, daily

Option 6

PatchMD™ Vitamin patches, PatchMD.com

- Please use chewable vitamins for two to three months.
- Make sure medications are smaller than a dime for two to three months after surgery or until you can tolerate meat without difficulty.
- Start taking your vitamins after your one-week follow-up appointment.
- Do not take more than 600 mg calcium at one time.
- Do not mix multivitamins containing iron with calcium supplements (take two hours apart).
- Avoid time-released supplements.
- Avoid enteric/shiny coatings.

Contact a Kettering Health Bariatric Surgery dietitian at (937) 439-4145 with questions.



Protein Supplements

Whey Protein Concentrate READY TO DRINK

Product	Flavor	Protein Content	Where to Purchase
Premier Protein	Chocolate, Strawberry, Vanilla, Banana, Caramel	30 grams per 11 oz	Sam's, Costco, Kroger, Walmart, other stores
Muscle Milk or Muscle Milk Light	Many flavors	Wide range of protein content. Read labels.	Kroger, Walmart, gas stations, other stores
Pure Protein	Many flavors	23 grams	Kroger, Walmart, Target, other stores
Syntrax Nectar	Many flavors	23 grams	<i>syntrax.com</i> <i>vitacost.com</i>
Protein 2 O	Many flavors	15 grams	Local stores and online

Whey Protein Isolate POWDERS

Product	Flavor	Protein Content	Where to Purchase
Genepro	Unflavored	30 grams per scoop	<i>gnc.com</i> <i>amazon.com</i>
Unjury	Chocolate, Strawberry, Vanilla, Chicken soup	20 grams per scoop	<i>unjury.com</i> Kettering Health Dayton, Main Campus, and Miamisburg
Celebrate ENS 4 in 1 Protein	Many flavors	25 grams per scoop	<i>celebratevitamins.com</i>
Jay Robb Protein Powder	Unflavored and flavored	24 grams for egg 26 grams for whey	Kroger, Walmart, GNC, other stores
Body Fortress	Many flavors	25 grams per scoop	Kroger, Walmart, other stores
Walmart Whey Protein generic	Many flavors	25 grams per scoop	Walmart
Meijer Whey Protein generic	Many flavors	25 grams per scoop	Meijer
Isopure	Many flavors	25 grams per scoop	GNC, health foods stores, <i>amazon.com</i>
Bariwise	Many flavors	15 mgs	<i>Barwise.com</i>

Whey protein is a great source of 100% complete protein.

- Whey protein concentrate: sweet taste, can be found in pre-made containers and bottles, absorbed slower, may upset your stomach
- Why protein isolate: less sweet, must be mixed with lactose-free milk or water, easily absorbed, may be tolerated better by your stomach

Grocery List

This is for your **liquid diet**:

- ☐ Skim or 1% milk
- ☐ Lactaid, almond, or soy milk
- ☐ Light, smooth yogurts
- ☐ **Low- or no-sugar protein drinks**
- ☐ Sugar-free pudding
- ☐ Cream soups (strain or blend)
- ☐ Broth or bouillon
- ☐ Plain Cream of Wheat (add protein powder)
- ☐ Plain grits (add protein powder)
- ☐ Sugar-free, non-carbonated drinks
- ☐ Diet V-8 Splash
- ☐ Tomato juice or V-8 juice
- ☐ Sugar-free popsicles
- ☐ Sugar-free fudgsicles
- ☐ Sugar-free JELL-O
- ☐ Nonfat dry milk
- ☐ Sugar substitute

Don't forget:

- ☐ Small plates
- ☐ 4-ounce bowls
- ☐ 4-ounce cups
- ☐ Toddler utensils
- ☐ Water bottle
- ☐ Measuring cups and spoons

This is for your **soft diet**:

- ☐ Applesauce (no added sugar)
- ☐ Canned chicken (canned in water)
- ☐ Canned tuna (canned in water)
- ☐ Plain oatmeal (add protein powder)
- ☐ Low-fat cottage cheese
- ☐ Fat-free refried beans
- ☐ Liquid egg substitutes
- ☐ Eggs, scrambled with cheese
- ☐ High-protein smoothie
- ☐ May also use anything from full liquid phase of diet

You may also want to pick up:

- ☐ Gas-X chewables
- ☐ Miralax or Milk of Magnesia

- ☐ Pot pourri spray
- ☐ Long shower sponge
- ☐ Long shoe horn
- ☐ Back scratcher
- ☐ Tongs with baby wipes

Goals Before Weight Loss Surgery

Making lifestyle changes along with bariatric surgery will help you reach your weight loss goals. Your surgery is only part of your weight loss journey. **Your success will depend on your lifestyle choices and behaviors.** To help you reach your goals and desired weight loss, practice these behaviors *before and after surgery*.

- **Eat slowly.** Plan 20–30 minutes for each meal. Put food or utensils down in between bites.
- **Take small bites and chew, chew, chew.** Cut food into small, bite-size pieces. Chew food to an applesauce consistency.
- **Practice portion control.** Use smaller plates, which will make your portions appear larger.
- **Plan three small, protein and vegetable meals with one to two planned protein snacks.** Eating regular **high-protein** meals and snacks will help you stay fuller throughout the day. Eating this way will help you not overeat and take in too many calories, which will prevent weight gain.
- **Never skip a meal.**
- **Eat protein foods first.** Eating protein first will help you stay fuller longer. It will also help you reach your protein intake goals, which will prevent muscle loss.
- **Count protein grams each day.** Eating enough protein will help prevent muscle and hair loss and may help sustain your energy. Aim for 70–100 grams per day (women: 70–85 grams, men: 80–100 grams). Rule of thumb: 1 oz. of protein food = 7 grams of protein. Looks like 2 fingers.
- **Wait 5 minutes before and 30 minutes after eating to drink fluids.** Doing this helps you eat smaller portions and keeps you fuller longer. Drinking with your meals may flush the food through too quickly and cause weight regain.
- **Sip calorie-free, non-carbonated beverages in between meals.** Aim for 64 oz. per day minimum. **Sip, Sip, Sip.**
- **Avoid high-sugar food. Never drink sugary beverages.** Choose sugar-free and no-sugar-added options. Try artificial sweeteners.
- **Avoid fried foods.** Avoid fatty meats, highly processed meats, and heavy, butter sauces. Choose lower fat options.
- **Avoid high-calorie snacks.** Choose protein snacks. High-calorie snacks, such as chips and cookies, may lead to weight gain.
- **Limit eating out to no more than two times per week. Choose healthy protein and vegetable menu items.** Salads are also good options, but top them with protein and keep dressings on the side.
- **Practice reading labels.** When comparing foods, look for **higher-protein, lower-sugar options**. Limit sugar to no more than **5–7 grams** per serving.
- Minimize caffeine to 8 oz per day. This blocks absorption of iron and calcium.
- **Take your vitamins and minerals daily.** Wait two hours after drinking caffeine to take vitamins.
- **Attend as many bariatric support groups meetings as possible to meet and learn from others who have been through bariatric surgery.**

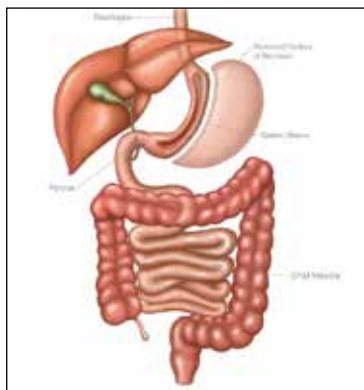
Preoperative Information

What Is a Sleeve Gastrectomy?

- The stomach is divided vertically and stapled. This removes between 80–90% of the stomach.
- The greater curvature of the stomach is the part removed. This portion is responsible for the excretion of ghrelin (hunger hormone).
- Currently it is not known if ghrelin levels increase again after two years. Patients report that some hunger and cravings do return.
- The remaining portion of the stomach resembles a banana and measures 1–2 ounces (30–40 cc) depending on the surgeon performing the surgery.
- Nerves to the stomach and pylorus remain intact, preserving the function of the stomach and drastically reducing the volume.
- Because the pylorus is preserved, dumping syndrome does not occur or is minimal.
- This procedure is not reversible.
- Dramatic weight loss allows significant improvement in health and downstages the patient to a lower risk group.

Advantages of Sleeve Gastrectomy

- Reduces stomach capacity but allows the stomach to function normally, so most food items can be consumed in small amounts.
- Eliminates the portion of the stomach that produces the hormones that stimulate hunger (ghrelin)
- Due to the fact that the intestines are not bypassed, the chances for ulcer formation, anemia, osteoporosis, protein and vitamin deficiencies, and intestinal obstruction are less likely to occur.
- Appealing for those who suffer from anemia and other existing conditions that make them a high risk for intestinal bypass procedures.



- Appealing for those who are concerned about the foreign body aspect associated with the band procedure, as well as those who are concerned about complications associated with intestinal bypass.
- Can be done laparoscopically, providing all the advantages of a minimally invasive surgery: fewer wound and lung problems, less pain, and faster recovery.

Disadvantages of Sleeve Gastrectomy

- Potential for inadequate weight loss or weight regain.
- Soft calories such as ice cream, milkshakes, and alcohol can be absorbed, slowing down weight loss.
- **Dumping syndrome** can occur when eating foods that are greasy, high in fat, high in carbohydrates, or when eating too much sugar. When this happens, extra insulin is released. The insulin lowers blood sugar, causing dumping syndrome. Signs and symptoms of dumping syndrome may include diarrhea, nausea, abdominal cramping, vomiting, sweating, rapid heart rate, dizziness, and weakness. For some people, these symptoms prevent them from going back to unhealthy eating habits. For many, the trouble digesting sugar is only temporary. When people return to a diet higher in sugar, it may cause weight gain.
- This procedure is irreversible due to removal of a portion of the stomach.
- **Patients may have a need for further weight loss. Patients may need to have a second stage procedure to help them lose the remainder of their weight. Remember, two stages may ultimately be safer and more effective than one operation for high BMI patients. This is an active point of discussion for you and your surgeon. The sleeve can be modified to an alternative procedure, such as the Roux-en-Y or biliopancreatic diversion with duodenal switch (BPD-DS).**

Safety

- Bariatric surgery is as safe or safer than other commonly performed procedures. Your risk for dying because of this surgery is very low.
- All surgeries may have risks. These risks vary depending on weight, age, and medical history. You should discuss these with your doctor and bariatric surgeon.

Reasons to Consider Sleeve Gastrectomy

- Your BMI is **35** or higher with comorbidities (i.e., high blood pressure, diabetes, heart disease etc.).
- Your BMI is **40** or higher (without comorbidities). This means you are at least twice your ideal weight, or you weigh **100** pounds more than your ideal weight.
- You have failed medical management in weight reduction.
- You have severe comorbidities (cardiac, pulmonary, or liver disease).
- You are advanced in age.
- You have inflammatory bowel disease (Crohn's disease).
- You need to continue specific medications (anti-inflammatory medicines, transplant medications).
- You need continued surveillance of the stomach that could not be evaluated after a gastric bypass.
- You have severe adhesions (scarring) to the bowel found during the operation.
- You have any combination of the above that significantly increases your risk.
- You are 18 years of age or older.
- You are **committed** to work and follow up with your specialist and the weight loss team in order to be successful.

Reasons Sleeve Gastrectomy May Not Be for You

- You should discuss your options with your surgeon if you have any of these.
- You are addicted to alcohol or other drugs.
- You are pregnant.
- You have a documented eating disorder.
- You are unwilling or unable to follow recommendations of the surgeon and bariatric team.
- You have esophageal motility disorder.
- **You have severe gastric reflux.**

What to Bring to the Hospital

- If you use a CPAP or BiPAP device at home, bring it along with a copy of your settings.
- Bring a list of your medications and allergies.
- Bring insurance cards.
- If you have a living will, advance directives, or durable power of attorney, bring a copy to be placed in your chart.
- Bring loose, comfortable clothing to wear.
- Hospital gowns will be provided as well as nonskid slippers.
- Personal items:
 - » Bring your toothpaste, toothbrush, and lip balm.
 - » Bring any special soaps, shampoo, or lotions that you use at home.
 - » Bring books, magazines, DVDs, crossword puzzles, etc.
 - » Bring your own pillow if you prefer. Please use a colored case so the hospital staff knows it is your pillow.
- Bring an extra-long cell phone charger.
- Do not bring any valuables or medications.
- Remove all jewelry, including wedding bands and body piercings.

Smoking

- **Do not smoke or use chewing tobacco after surgery.**
- The nicotine in tobacco has been linked as a cause of stomach ulcers, poor wound healing, and lung complications after surgery.
- If you are interested in information or resources to help you quit smoking, call the Ohio Quit Center at **1-800-QUITNOW (1-800-784-8669).**



Pregnancy

As a female patient, you should be aware that menstrual cycles may change post-operatively. With rapid weight loss, hormones held in fat cells are released. This may make menstrual cycles lighter, heavier, or more regular. There is a significant increase in risk of pregnancy. **One month prior to surgery, an alternative birth control may be necessary.** We do not recommend birth control pills or a Depo-Provera shot. Though these are effective means of birth control, they have also been linked to clotting disorders and may increase your risk of developing deep vein thrombosis or pulmonary embolus. Speak to your OB-GYN about alternative forms of birth control prior to surgery. An IUD may be recommended. After surgery, a follow-up with your OB-GYN may be needed for control of menstrual changes. To get the most benefit from your procedure, we recommend you avoid getting pregnant for 18 months after your surgery.

Alcohol Facts

- We recommend **you don't drink any alcohol**, especially during the rapid weight loss period.
- Alcohol is high in calories and sugar and may interfere with your weight loss efforts. There is no nutritional value in alcohol.
- Alcohol lowers the amount of nutrients your body absorbs.
- If you choose to drink, limit your intake and **do not** drink on an empty stomach.
- Less alcohol will affect you more quickly.
- Alcohol is a depressant. Alcohol slows your motor reflexes and clouds your judgment.
- Alcohol may interact with certain medications.
This can be fatal!
- Be aware that there is a high rate of **cross-addiction** among bariatric patients. **Cross-addiction** can be defined as trading one destructive behavior for another, such as, food for alcohol, sex, drugs, gambling, shopping, or excessive exercise.
- **Don't drink and drive** or operate heavy machinery!

Before Surgery

- Please discuss the use of **blood thinners** with your surgeon. You may be asked to stop these 7-10 days before surgery.
- Check with your physician about any over-the-counter medications or herbal supplements. Take only medications given to you while you are in the hospital.
- Report any signs or symptoms of an upper respiratory problem such as a fever (temperature greater than 101) or an infection that occurs two weeks prior to surgery. If you have any of the above, call your surgeon's office to inform them of your symptoms.
- The day before surgery, your surgeon requests you have a clear liquid diet after 2 p.m. You may continue to have clear liquids until midnight. **Be sure to drink plenty of fluids during this time.**

The Day Of Surgery

- Please take the following medications with a sip of water on the morning of your surgery: **blood pressure, heart, seizure, ulcer, or reflux but no liquid or tablet antacids, and breathing medications.**
- **Do not take diuretics (medications that make you need to urinate) a day before surgery or diabetes medications** on the day of surgery unless your doctor tells you to.
- Report to Registration on the main floor for check-in. Then you will proceed to the Preoperative department.
- Your family or partner may stay with you in the preoperative area until it is time for your procedure.
- The anesthesiologist (the specialist who keeps you asleep during surgery) will speak with you the morning of surgery. Be sure to mention if you have had any problems with anesthesia in the past.
- Your family or partner will wait in the surgery waiting area. After surgery, the physician will come out to the waiting room to inform your family of your condition. A volunteer will keep your family updated on any significant changes. If your family leaves the area, they should be sure to tell the person at the desk.
- Surgery times vary; however, your surgery should take approximately 45-90 minutes if done laparoscopically, and a little longer if an open procedure is required.
- When the surgeon gives your family or partner a report on the surgery, they will know you are in the recovery room.
- You will remain in the recovery room for one to two hours.
- After recovery you will be transported to the bariatric unit, where you will continue to recover until discharge.
- Individual medical conditions or surgical concerns may require that you be transferred to the Intensive Care Unit (ICU) for recovery.

Perioperative Information

Pain Control

- **Remember you will not be totally pain free;** however, your pain should be manageable.
- We will use various pain medications with the goal to minimize the need for narcotic medications.
- Please tell your nurse if you are having pain.
- All medications may cause some side effects.
- Notify your nurse if you feel nauseous (sick to your stomach), have a hard time urinating, are very sleepy much of the time, or are itching.

Nausea

- You **must** let your nurse know when you are experiencing nausea.
- You will be given nausea medication through your IV.
- Initially your nausea may be due to anesthesia or pain medication.
- Other reasons for nausea include eating too fast, eating too much, or eating food that just doesn't agree with you.

Bowel

- Bowel function returns 48–72 hours after surgery. Your stools may be liquid at first.
- Your stool may not begin to take form until several weeks after your surgery.
- You may not have a bowel movement every day.
- You do not have to have a bowel movement prior to being discharged from the hospital.
- If you feel that you are constipated, you may take a stool softener such as Metamucil, Milk of Magnesia, Miralax, Colace tablets, or a Dulcolax suppository.

Oxygen, Cough, and Deep Breath

- A **pulse oximeter** will measure your oxygen level. A small plastic clip or tape containing a small sensor will be placed on your finger.



- After surgery you will be given oxygen through a nasal cannula (tubing that goes through your nose). This will be removed when you no longer need it.
- As soon as you are awake, you will be asked to cough and take deep breaths often.
- Using a pillow to help you splint or support your incision will help you cough to help keep your lungs clear. This should be done every one to two hours while awake to prevent pneumonia.
- You will be given an **incentive spirometer**. This will help you take effective, deep breaths. This also helps prevent pneumonia and keeps your lungs expanded to prevent atelectasis (tiny areas of lung collapse). **This should be done 10 times an hour while awake.**
- A respiratory therapist or your nurse will teach you how to use the incentive spirometer.
- Remember, once you are shown how to cough, deep breathe, and use your incentive spirometer, it is your responsibility to do so.
- If you brought a CPAP or BiPAP machine to the hospital, it will be monitored by a respiratory therapist.



Activity: Walk, Walk, Walk

- You will be encouraged to walk three to four hours after arriving to your room, and several times throughout the evening. The nursing staff will assist you until you feel safe walking by yourself.
- The day after your surgery, you will walk 10–20 laps or more.
- Do not sit for long periods of time. The more you move, the better you will feel. Moving regularly will decrease your chances of complications developing.
- Walk five minutes each hour during waking hours at home.

Anticoagulant

- Your doctor may order an anticoagulant (blood thinner) after surgery.
- Depending on your physician, this medication is usually given by injection once or twice a day with a small, short needle into tissue under the skin.
- If your physician prescribes an anticoagulant for you to take at home following your surgery, your nurse will give you instructions.
- Sequential compression devices (SCDs), or foot pumps, help prevent phlebitis (inflammation of a vein) and blood clots. These pumps, will be on while you are in bed or sitting up in the chair. Remove them before attempting to walk.



Incision Care

- Your surgery may be done laparoscopically or the surgeon may make a midline abdominal incision (an opening down the middle of your abdomen; open surgery). If your procedure is done laparoscopically, you will have four to six small incisions.
- Incisions are closed with staples, sutures (or stitches), and/or fibrin glue.
- You will be provided with an abdominal binder. This will help stabilize your incision and support your stomach muscles. This is for your comfort only. If it is uncomfortable, you do not have to wear it.
- When you get home, gently wash your incisions every day with soap and water and pat dry.
- Remove the clear plastic bandages after two days at home, or when directed by your surgeon.
- Do not apply any creams, ointments, or powders on the incisions.
- Be sure your incision edges are healing together. If they open up, please see your surgeon.
- Notify your physician if your incision is red, hot, or draining foul-smelling fluid or pus.



JP Drain

- A clear, egg-shaped drain **may** be placed in your surgical incision at the time of surgery. This is known as a Jackson-Pratt (JP) drain and helps to collect the fluid that is inside your abdomen around your wound after surgery. When the drain is first put in place, the bulb at the end of the tube will be charged, or squeezed, to create gentle suction. As the fluid collects in the bulb, it will expand. Wash your hands before and after emptying the bulb. Empty the bulb two to three times a day. You may or may not have drainage, but be sure your bulb is recharged daily. If you have drainage, it should be a light pink or red. If you see any other color, such as tan or green, or the drainage looks like coffee grounds or there are food particles in the JP drain, notify your physician immediately.
- Your surgeon will decide when to remove the drain. There will be a small hole in your skin that may drain some at home. This is normal and can be covered with a light, dry dressing to collect the draining fluid. If the area where the drain used to be becomes red or hot or if the drainage changes color or thickness, please notify your surgeon, because as you may have developed an infection.



Upper GI Test

- Your surgeon **may** order a test called an upper GI to help us know if there may be a leak at the staple line. You will be asked to drink a liquid, and X-rays will be taken.

Complications and Adverse Effects

Complications that need immediate attention—call 911

- Pulmonary embolism—blood clot to the lung. Signs and symptoms include: sudden or unusual increased shortness of breath, restlessness, anxious, feeling like something just isn't right, impending feeling of doom.
- Leak—staple line breakdown along the sleeve. Signs and symptoms include: rapid heart rate; heart feels like it is racing to about 120 beats per minute; left-sided chest pain or pain between shoulder blades; chronic hiccups; change in JP drainage color from red or pink to tan or green, or the drainage looks like coffee grounds, or there are food particles in JP drain.

Complications to call surgeon

- Deep vein thrombosis (DVT)—pain or tenderness in the leg (usually the calf, but can be anywhere), leg is hot, red, or swollen
- Infection—redness, warmth, red streaks, drainage, fever greater than 101.4°
- Wound dehiscence—incision looks like it is splitting apart
- Urinary tract infection—Sensation of burning upon urination, urgency, or bladder does not feel empty after urinating
- A lot of severe nausea and/or vomiting—may lead to dehydration. Some nausea and vomiting is to be expected after surgery
- Severe abdominal distention and/or rigidity (that is, your abdomen becomes swollen and hard)
- Postoperative bleed—bright blood in the stool or JP drain, bleeding from incisions, vomiting blood

Other complications

- Incisional hernia—where parts of the abdomen poke through the incision
- Gastritis—irritation of the pouch
- Cholelithiasis—gallstones
- Ulcers—due to use of **anti-inflammatory medications, smoking, or alcohol**
- Adhesions/scar tissue from abdominal surgery
- Edema—swelling or narrowing of the stomach, causing nausea and vomiting
- Blockage—food or large pills can block opening into the stomach
- Protein malnutrition (not getting enough protein)—signs of this include extreme fatigue, brittle nails, poor healing, edema, and loss of hair. Hair thinning peaks in four to six months, and comes back in time. You may take biotin to help prevent hair loss.
- Anemia—signs include fatigue; washed out feeling; pale skin color, gums, and mucous membranes; or inside mouth, nose, or eyes may look pale.
- Dehydration—signs include dry mouth, little and dark urine output, fatigue, poor skin turgor, lethargy, weakness, and dizziness.

Discharge to Home

Personal Care

- Your hospital stay varies but usually lasts one to two days.
- Be sure you have a reliable adult to take you home after your surgery and to stay with you for the first few days.
- You will follow up with your surgeon in one week.
- You may be allowed to shower 24 hours after surgery, per your surgeon's instructions.
- No tub baths, saunas, hot tubs, tanning beds, or swimming until your surgeon says these are OK.
- **No lifting more than 10 pounds for two to four weeks based on surgeon preference.** To give you an idea of how heavy 10 pounds is, a gallon of milk is 8 pounds.
- You may climb stairs. If you get tired, stop and rest between steps.
- You may drive again after your first follow-up appointment, when your drain is removed, and you're able to steer and wear a seat belt comfortably.
- Sex is OK when you feel up to it. Use some form of birth control for the first 18 months, due to increased fertility and possible pregnancy.

Medications

- Crush pills that are larger than the size of a dime. **Do not crush extended-release tablets or capsules. Do not crush narcotics pill. If you have a question about crushing your medication, consult your pharmacist.**
- Do not take NSAIDs (nonsteroidal anti-inflammatories) after surgery, as these medications can cause stomach ulcers and bleeding. These include Advil, Aleve, Anaprox, Ansaid, Aspirin (including Excedrin and Bufferin), Cataflam, Celebrex, Clinoril, Daypro, Feldene, Ibuprophen (Motrin), Indocin, IndocinSR, Lodine, Lodine XL, Naprelan, Naprosyn/EC, Orudis, Oruvail, Relafen, Tolectin, Toradol, and Voltaren. Ask your doctor if you have any questions about NSAIDs.

Nutrition

- **Fluids:** Drink **64 ounces** of fluids per day. This is the minimum is and is your first priority, if nauseated.
- **Protein: 70-100 grams/day** (70-85 for most women and 80-100 for most men). This is the minimum and your second priority, if nauseated.
- **Take your vitamins. Once nausea is controlled, taking vitamins every day is very important.**
- **Keep a diary of your fluids, protein, and vitamin intake.** This will help you keep track of everything you eat and drink. You may use a phone app, spreadsheet, journal pad, or make copies of the journal in the back of this book.
- Your surgeon and dietitian want you to report your daily fluid and protein intake at every follow-up appointment so they can monitor your nutrition and health.

Exercise

- Exercise at least 30 minutes a day. Limit this to walking until your follow-up appointment with your physician.

Follow-up

Always keep your follow-up appointments with your surgeon. Long-term follow-up is the key to success!

Diet and Nutrition

We hope you find the following information helpful as you start your journey to a healthier and happier you! We have developed this section to help guide you in your daily food choices. Paying close attention to what you can eat at each phase of your diet can help you avoid complications after surgery and help you achieve the weight loss you desire.

After Surgery

- You can become dehydrated if you do not drink enough fluids. Do not wait until you are thirsty to drink.
- Sip fluids often. Your goal is **2–4 oz.** or **¼–½ cup** every half hour or 6 oz. per hour.
- If you feel pain, fullness, or nausea, **stop** drinking and try again in a few minutes.
- **No carbonation or straws** after surgery to prevent pain and discomfort.
- You will be able to eat very little food after surgery. **You may only be able to eat 1–2 teaspoons or tablespoons at first.**
- You will progress to approximately ¼–1½ cup.
- Eat slowly. Take 20–30 minutes to eat meals.
- After surgery you will be allowed to have a small amount of ice chips.
- Your first meal in the hospital will be clear liquids. You do not have to eat all the food on your tray.
- Remember to stop at the first sign of fullness.

Clear Liquid Diet

- You are usually on a clear liquid diet while in the hospital. Your diet may be advanced if your surgeon says it's OK.
- **Foods/beverages allowed:** High-protein gelatin, 100% fruit juice, broth, sugar-free gelatin, sugar-free popsicles, Propel, Crystal Light, Aquafina Flavor Splash, Minute Maid Light, and water.
- Avoid sugary juices.
- Foods that can be counted as liquid:
 - » Protein shakes
 - » Gelatin
 - » Ice
 - » Popsicles
 - » Soup
- Measurement conversions:

1 ounce	=	2 Tbsp	=	⅛ cup
2 ounces	=	4 Tbsp	=	¼ cup
3 ounces	=	6 Tbsp	=	⅓ cup
4 ounces	=	8 Tbsp	=	½ cup
6 ounces	=	¾ cup		
8 ounces	=	1 cup		
16 ounces	=	2 cups		
64 ounces	=	8 8-ounce cups		
		4 16-ounce bottles		
		3 20-ounce bottles + ½ cup		

Full Liquid Diet

- You may be advanced to the full liquid diet on the second day after surgery.
- These foods should be smooth in consistency, and they may be strained or blended if needed.
- Try to drink two protein shakes daily during this part of your diet.
- Drink sugar-free beverages and water to stay hydrated.
- All liquids can be added toward your daily 64-ounce goal.
- You do not have to wait 30 minutes after meals to drink during this stage of diet.

Foods/beverages allowed:

- **High-protein foods (consume these first):** Protein shakes, low-sugar yogurt/Greek yogurt/yogurt smoothie, UNJURY chicken soup, 1% milk, skim milk, Carbmaster, Silk or almond milk
- **Low-protein foods (limit these):** tomato/cream soups made with low-fat milk, V-8 juice, sugar-free pudding, thinned Cream of Wheat, and grits. You may add flavored or unflavored protein powder to any of these.

Sample Menu I

Breakfast	Lunch	Dinner
Greek yogurt	UNJURY chicken soup	Greek yogurt
Morning Snack	Afternoon Snack	Evening Snack
Protein shake	Protein shake	Protein shake

Sample Menu II

Breakfast	Lunch	Dinner
Thinned Cream of Wheat with protein powder/protein shake	UNJURY chicken soup	Greek yogurt
Morning Snack	Afternoon Snack	Evening Snack
Greek yogurt	Protein shake	Greek yogurt

Sample Menu III

Breakfast	Lunch	Dinner
Protein shake	UNJURY soup	UNJURY soup
Morning Snack	Afternoon Snack	Evening Snack
Greek yogurt	Protein shake	Protein shake

- Count fluid and protein intake daily.
- **Protein goal:**
 - » Women: 70–85 grams per day
 - » Men: 80–100 grams per day

Bariatric Soft Protein Diet (fork-mashable)

- Usually at your first follow-up appointment, your surgeon will talk to you about diet progression or changes.
- Remember to stop drinking 5 minutes before, during, and 30 minutes after meals.
- Drinking with your meals pushes your food through quicker, causing you to be hungry.
- Stay on this phase until you're meeting your fluid and protein goals daily.
- **Portion sizes are approximate.**
- Soft protein foods become your focus, and shakes will be used less as protein totals improve each day.
- Use high-protein liquids as needed to meet daily goals.

Foods/beverages allowed:

- **High-protein foods:** eggs; low-fat cheese or cottage cheese; low-fat string cheese; low-fat yogurt; canned chicken, tuna, and salmon; hummus; tofu; or fat-free refried beans

Sample Menu I

Breakfast	Lunch	Dinner
1 scrambled egg with low-fat cheese	2 oz. canned tuna with light mayonnaise	2 oz. canned chicken with light mayonnaise
Morning Snack	Afternoon Snack	Evening Snack
Protein shake	Protein shake	½ cup cottage cheese

Sample Menu II

Breakfast	Lunch	Dinner
Greek yogurt	2 oz. canned chicken	2 oz. moist pork loin
Morning Snack	Afternoon Snack	Evening Snack
½ cup cottage cheese	Protein shake	Protein shake

Sample Menu III

Breakfast	Lunch	Dinner
½ cup cottage cheese	Protein shake	Protein shake
Morning Snack	Afternoon Snack	Evening Snack
Cheese stick	½ cup cottage cheese	Protein shake

- Count fluid and protein intake daily.
- **Protein goal:**
 - » Women: 70–85 grams per day
 - » Men: 80–100 grams per day

Bariatric Soft Protein and Produce Diet (fork-mashable)

- Begin this diet once you are able to meet daily protein goals.
- Remember to stop drinking 5 minutes before, during, and 30 minutes after meals.
- Drinking with your meals pushes your food through quicker, causing you to be hungry.
- **Portion sizes are approximate.**
- Continue to use high-protein liquids as needed to meet daily goals.

Foods/beverages allowed:

- **High-protein foods (consume these first):** eggs; low-fat cottage cheese; low-fat string cheese; low-fat yogurt; canned chicken, tuna, and salmon; hummus; tofu; or fat-free refried beans
- **Low-protein foods (limit these):** sweet potato, no-sugar-added canned fruit, banana, no-sugar-added applesauce, well-cooked vegetables
- Avoid fibrous foods and foods with strings and skins such as celery, iceberg lettuce, asparagus, Brussels sprouts, pineapple, grapes, stems and stalks of broccoli and cauliflower.

Sample Menu I

Breakfast	Lunch	Dinner
1 scrambled egg with low-fat cheese	2 oz. canned tuna with light mayonnaise, steamed broccoli	Baked fish, green beans
Morning Snack	Afternoon Snack	Evening Snack
Greek yogurt	Cottage cheese with no-sugar-added soft canned fruit/applesauce	String cheese

Sample Menu II

Breakfast	Lunch	Dinner
Greek yogurt	Bean soup with vegetables	Baked chicken, cauliflower
Morning Snack	Afternoon Snack	Evening Snack
String cheese, banana	Cottage cheese	Protein shake

Sample Menu III

Breakfast	Lunch	Dinner
Cottage cheese with fruit	Chicken salad and cucumbers	Pork tenderloin with cooked carrots
Morning Snack	Afternoon Snack	Evening Snack
Protein shake	String cheese	Greek yogurt

- Count fluid and protein intake daily.
- **Protein goal:**
 - » Women: 70–85 grams per day
 - » Men: 80–100 grams per day

Bariatric Regular Protein and Produce Diet

- Begin this diet once you have been cleared by your surgeon.
- Remember to stop drinking 5 minutes before, during, and 30 minutes after meals.
- Portion sizes are approximate.
- Continue to use high-protein liquids as needed to meet daily goals.
- Never eat more than 1 cup of food at mealtime.

Foods and beverages allowed:

- **High-protein foods (consume these first):** Lean meats, chicken, fish, eggs, low-fat cheese, and yogurt
- **Low-protein foods (limit these):** Fruits and vegetables, sweet potato, quinoa, and couscous

Sample Menu I

Breakfast	Lunch	Dinner
Egg with low-fat cheese, banana	Fish/chicken, lettuce, diced onion and peppers, 1 tbsp. low-fat dressing	Meat/chicken/fish, cooked vegetables, sweet potato
Morning Snack	Afternoon Snack	Evening Snack
		Low-fat cottage cheese

Sample Menu II

Breakfast	Lunch	Dinner
Greek yogurt, ½ grapefruit	Chicken salad with light mayonnaise, sliced carrots, and cucumber	Meat/chicken/fish, quinoa, cooked vegetable
Morning Snack	Afternoon Snack	Evening Snack
		Cheese stick and almonds

Sample Menu III

Breakfast	Lunch	Dinner
Egg, cheese, and diced vegetable omelet	Grilled chicken on spinach leaves, 1 tbsp. low-fat dressing, 1 tbsp. sunflower seeds	Meat/chicken/fish, cooked vegetables, grapes
Morning Snack	Afternoon Snack	Evening Snack
		Cashews and apple

- Count fluid and protein intake daily.
- **Protein goal:**
 - » Women: 70–85 grams per day
 - » Men: 80–100 grams per day

High-protein, Low-sugar, Low-carb, Low-fat Diet

A high-protein, low-carb, low-fat diet is suggested as a healthy eating plan long term. Any changes that you can make to your diet before surgery will help you to adjust to a lower-fat diet after surgery. Remember to eat your protein foods first, vegetables and fruits next. Focus on proteins and produce. Limit starches and fats, which are the last to add to your diet plan.

Food Groups	Foods Allowed	Foods to Omit/Limit
Protein and meats	Chicken and turkey without skin, fish, eggs, lamb, lean beef (round, loin), lean pork (loin, chops), turkey, pepperoni, sausage, bacon, lunch meats that contain no more than 4 grams of fat per serving, low-fat cheese, and cottage cheese	Fatty/highly marbled cuts of meat, deep-fried meats/fish/chicken, regular lunch meats, hot dogs, regular cheese, salami, pepperoni, sausage, bacon
Vegetables	Any vegetable tolerated except those on the omit list	Fried, scalloped, or creamed vegetables
Fruits	All fruits. Limit 100% fruit juice to 4 ounces daily diluted by half with water.	None
Potatoes and substitutes	Sweet potato, brown rice, whole-grain noodles, quinoa, couscous, small amount of white potato	White potatoes, fried potatoes, french fries, potato chips, hash browns, scalloped potatoes
Breads and cereals (limit amounts)	Whole-grain or light enriched breads, flatbread, English muffins, cereals, crackers	Sweet rolls, donuts, pancakes, waffles, muffins, croissants, French toast
Beverages and soups	Skim or 1% milk, almond/soymilk, low-fat buttermilk, sugar-free fluids, cream soups made with low-fat/almond milk, broth	Whole milk, chocolate milk, 2% milk, regular-fat cream soups
Fats (limit to 3 servings per day)	1 tsp. butter/margarine, 1 tsp. mayonnaise/Miracle Whip, 1 tbsp. low-fat mayonnaise/Miracle Whip, 1 tsp. oil, 1 tbsp. salad dressing, 2 tbsp. low-fat salad dressing, 2 tbsp. light cream, 1 tbsp. heavy cream, 6 small nuts, 10 small/5 large olives, 2 tbsp. coconut, ½ avocado	Any fat in excess of three servings per day
Desserts	Sugar-free frozen yogurt, sugar-free pudding, low-fat, sugar-free ice cream, sugar-free sorbet, sugar-free Jell-O	Cakes, cookies, brownies, pies, ice cream, donuts, custard, chocolate
Dining out foods	Grilled chicken, beef or other meats, baked, non-breaded fish, steamed vegetables, low-fat chili.	Fried foods, sandwich/sub breads, fried wings, french fries, pasta/noodles, pizza

Tips for Eating Out

- Plan ahead.
- Order a half portion, children's portion, or senior's portion.
- Avoid breaded, fried, and creamed foods.
- Choose poached, roasted, broiled, steamed, or stir-fried foods.
- Avoid high-calorie drinks, alcohol, cappuccinos, and flavored coffees.
- Caution at the salad bar! Dressings, toppings, and creamy salads are high in calories.
- Avoid the bread basket.
- Get a "to-go" box at the beginning of your meal.
- Share a meal.

Quick Tips to Hang On Your Refrigerator Door

- ☒ Drink **64 oz.** of fluid daily. Try to drink 20 oz. of fluid between meals and snacks.
- ☒ Consume **70-100 grams** of protein daily.
- ☒ Take vitamin supplements daily.
- ☒ No straws.
- ☒ No carbonated beverages.
- ☒ Do not eat and drink at the same time.
- ☒ Stop drinking **5** minutes before and do not drink for **30** minutes after meals. Drinking with meals will push the food through too fast.
- ☒ Stop eating at the first sign of fullness.
- ☒ Introduce new foods one at a time.
- ☒ Fresh fruits and raw vegetables may be added after your surgeon says you may start the regular diet.
- ☒ Read food labels.
- ☒ Remember: **no more than 5-7 grams** of sugar per serving.
- ☒ The best choices are good-quality foods.
- ☒ Eat your protein first.
- ☒ Eat slow; chew to applesauce consistency.
- ☒ Sip! Don't gulp.
- ☒ Walk! Walk! Walk!

Please make a copy of this page for your supportive family and friends so they understand your new lifestyle.

Protein Content of Foods

Food	Portion Size	Protein Grams
Cheese		
2% American	1 ounce	7
Low-fat cottage cheese	¼ cup	7
Mozzarella string cheese	1 stick	8
Milk		
Skim/fat-free milk	½ cup (4 ounces)	4
Soy milk	½ cup (4 ounces)	3
Low-fat yogurt	½ cup (4 ounces)	4
Egg		
Egg, whole	1 large	6
Beef		
Beef, eye of round	1 ounce	7
Lean ground beef	1 ounce	7
Liver	1 ounce	6
Sirloin	1 ounce	6
Poultry		
Chicken, white breast meat, no skin	1 ounce	9
Chicken, leg, no skin	1 ounce	8
Chicken, thigh, no skin	1 ounce	7
Turkey, lunch meat	1 ounce	5
Turkey, white meat	1 ounce	7
Pork		
Ham, lean boneless	1 ounce	6
Ham, lean lunch meat	1 ounce	6
Pork, loin chop	1 ounce	8
Pork, tenderloin	1 ounce	8

Protein Content of Foods

Food	Portion Size	Protein Grams
Seafood		
Crab, steamed	1 ounce	6
Imitation crab	1 ounce	4
Salmon, baked	1 ounce	8
Shrimp, steamed	4 jumbo	12
Tilapia, baked	1 ounce	7
Tuna, packed in water	1 ounce	7
Beans, Nuts, and Seeds		
Almonds	1 ounce (about 22 nuts)	6
Cashews, dry roasted	1 ounce (about 18 whole nuts)	4
Chickpeas	¼ cup	3
Kidney beans	¼ cup	4
Peanut butter, creamy	1 tablespoon	4
Peanuts, dry roasted	¼ cup	9
Pistachios, dry roasted	1 ounce (about 49 kernels)	6
Soybeans, green, edamame	½ cup	11
Soy nuts, dry roasted	¼ cup	17
Sunflower seeds	¼ cup	6

Emotional Aspect of Weight Loss

What to Expect

- A change in body image
- A change in feelings about yourself, your body, and your life
- Changes can seem overwhelming.
- Everyone's experience through this weight loss journey is different.
- **The pre-surgical evaluation process is only the beginning of your relationship with weight loss surgery. If you ever feel you need help making a physical or emotional adjustment to weight loss, we are here to help you every step of the way.**

Body Image

- After the rapid weight loss following surgery, your body may seem unfamiliar to you.
- You may not recognize yourself, feeling like you are walking around in someone else's body.
- If you were obese as a child, you may never recall a time in your life when you thought you were thin.
- If your weight gain began in adulthood, this change will likely feel less drastic, but you can still expect some adjustment to your new body.

Depression

Depression after weight loss surgery is not uncommon and can occur for several reasons, including:

- You may miss eating (food grief), or you miss the freedom of eating when and what you want.
- Feelings of regret, such as thoughts like, "What have I done to myself?" This is especially true if there were complications in the procedure or your healing process.
- Feelings of disappointment, especially if the expectations you had before surgery were not met. You expect to lose weight, but you may expect to feel happier, have more energy, and be able to do more things that you could not do before. Although this is possible, these things do not always happen on their own.

Medications

- **Do not** stop taking any medications for anxiety, depression, or other mental health conditions without talking to your doctor first.
- Some medications for anxiety, depression, or other mental health conditions may have effects on your appetite and/or weight loss. Please ask your doctor and/or pharmacist if you have questions about medication side effects.
- **After talking with your doctor, you may need to change medications to reduce side effects after bariatric surgery.**

Coping-Style Adjustment

- Some people use food as a way to cope with stress, boredom, or being in social gatherings. **The stress in your life will not disappear when the weight disappears.**
- In the early period after surgery, feeling many different emotions and having crying episodes may be normal.
- Develop a hobby or interest you may already have. Reconnect with friends or groups you haven't seen for a while. Consider combining an activity (like walking, aerobics, fitness) with socializing.
- Food is not off limits. It just takes a back seat to new hobbies and activities.

Relationship Adjustment

- Any change in a relationship, good or bad, can cause disruption.
- Family and friends will have different reactions to your surgery and weight loss—some positive, some negative.
- Losing weight can disrupt friendships. You are changing daily, and you may find your friends are having a hard time accepting or adjusting to these changes. Some may even be jealous of your weight loss or success.
- Because your partner is used to you being obese, they may be resistant to change. This may take the form of disagreements, mood swings, or refusal to support your dietary or other restrictions.

- Your spouse/significant other may have feelings of insecurity because of your weight loss. Maybe you were your partner's excuse for overeating. They may feel guilty about their own eating behaviors and want to pass that guilt onto you in the form of blame.
- If you were the caretaker of the family and your new focus is on your own needs, your partner and family may have feelings of insecurity and resentment.
- Everyone, including yourself, has expectations about your increased energy and activity. Because of the increase, your partner and friends may have high expectations that are often unrealistic.

Divorce

- The divorce rate is high among couples in which a partner has had weight loss surgery.
- The self-confidence you may gain with weight loss can make your partner feel insecure or jealous.
- Interests and priorities can change.
- Flexibility is important, and sometimes professional counseling is needed.

Follow-up

- Follow-up appointments allow you to tell us about your progress so we may offer support and help you maintain your weight loss.
- Follow up at Kettering Health Weight Loss for up for one year at no additional cost.
- Follow up with your surgeon for a lifetime.
- Follow up with your primary care provider within two weeks after your surgery.

Where to Find Support

Group Meetings:

- Are open to patients who have had weight loss surgery and their support persons
- Meet regularly. For support-group meeting dates and times, call us at **(937) 439-4145** or visit **ketteringhealth.org/weightloss/support**
- Include a group leader who is a professional, such as a nurse, psychologist, or counselor
- Provide support, education, and problem-solving ideas
- Are a great opportunity to make new friends and be with others who are experiencing the same things you are experiencing.
- **Studies have shown that patients who attend regular support-group meetings have more successful long-term weight loss and mental adjustment.**

Counseling:

- Do not hesitate to request counseling. Occasionally, personal adjustment or relationship problems will occur or may continue after surgery. Professional counseling can be a positive step toward a healthier adjustment. We can help recommend counselors who are qualified and experienced in working with people who have had weight loss surgery.

Please contact Kettering Health Bariatric Surgery at (937) 439-4145 for assistance.



Fitness and You

Why Is Exercise Important?

- Regular exercise is an important component of a healthy lifestyle.
- Physical activity increases your fitness level and how much you are able to exercise.
- Benefits of regular exercise may be seen without losing weight.
- Exercise can help prevent cardiovascular disease.
- **Exercise may reduce or eliminate some of the following risk factors:**
 - » High blood pressure
 - » Alcohol, tobacco, and drug use
 - » Low levels of high-density lipoprotein cholesterol
 - » High triglyceride levels
 - » Diabetes
 - » Obesity

How Often Should You Exercise?

- The Surgeon General recommends 30–60 minutes of physical activity on most days of the week.
- For people who have had weight loss surgery, exercising at least three days per week and at least 30 minutes per session is recommended. Thirty minutes may be broken up throughout the day.
- Exercise program should include cardiovascular training and resistance training.

What Should Your Exercise Program Include?

- **Cardiovascular training**
 - » May be done every day of the week
 - » Training of the heart and lungs
 - » Based on the body's ability to use oxygen
 - » Benefits include decreased resting heart rate, increased cardiac output, lower blood pressure, and lower risk of cardiovascular disease.
 - » Examples of cardiovascular exercise include biking, walking, swimming, running, and any sports activity.
- **Resistance training**
 - » May be done two to three times per week
 - » Specific muscles are trained against resistance.
 - » Resistance training examples include using free weights, weight machines, bands, and medicine balls.
 - » Benefits include increased muscle strength and endurance, increased bone strength, lower body fat percentage, and lower risk for cardiovascular disease.

Exercise Tips

- Do something fun.
- Exercise with a partner or a class.
- Be consistent. Consistency is the most important part of an exercise program.
- Listen to music.
- Start slow and progress to more vigorous activity.
- Keep an exercise journal.
- Use the internet as a resource for fitness tips and exercise journals.
- Choose indoor and outdoor activities you enjoy.
- Include a variety of activities so you don't get bored.
- Schedule exercise time the same way you do other appointments.

Surgeon General's Report on Exercise

According to the Surgeon General, exercise helps:

- Lower the risk of early death
- Lower the risk of heart disease
- Lower the risk of developing diabetes
- Lower the risk of developing colon cancer
- Lower the risk of developing high blood pressure
- Build and maintain healthy bones, muscles, and joints
- Reduce feelings of depression and anxiety
- Reduce digestion complications

Follow-up Appointments

- Don't forget your follow-up appointments with the exercise physiologist.
- Follow-up appointments are your time to tell us about your current exercise program.
- The exercise physiologist will work with you to design a custom exercise program that meets your needs.



Your Pulse and Your Target Heart Rate

- Your pulse is the number of times your heart beats in 1 minute.
- Your pulse is lower when you rest and increases when you exercise.
- Knowing how to take your pulse can help you check your exercise program.

How to Take Your Pulse

1. Place the tips of your index, second, and third fingers on the palm side of your wrist, below the base of your thumb. Or, place the tips of your index and second fingers on your lower neck, on either side of your windpipe.
2. Press lightly with your fingers until you feel the pulsing beneath your fingers. You may have to move your fingers up and down until you feel the pulsing.
3. Count the beats you feel for 10 seconds. Multiply this number by six, or count for a full minute without multiplying to get your heart rate.

Your maximum heart rate is the highest your pulse can go. To calculate your maximum heart rate, use this formula.

$$220 - \text{your age} = \text{maximum heart rate}$$

Your target heart rate is the rate you should maintain when exercising. To calculate that rate, use this formula.

Your maximum heart rate \times 65% to 85% (this is your target heart rate range)

Some medications may affect your heart rate.

If you have questions about any side effects of your medications, please ask your doctor and/or pharmacist.



When beginning an exercise program, you may need to work up to a level that is within your target heart rate zone, especially if you haven't exercised regularly before.

To find out if you are in your target zone, stop exercising and check your pulse for 10 seconds. If your pulse is below your target zone, exercise a bit faster. If your pulse is above your target zone, exercise a bit slower.

Target Heart Rate								
Age	At 65%	At 85%	Age	At 65%	At 85%	Age	At 65%	At 85%
18	131	172	38	118	155	55	107	140
19	131	171	39	118	154	56	107	139
20	130	170	40	117	153	57	106	139
21	129	169	41	116	152	58	106	138
22	129	168	42	116	151	59	105	138
23	128	167	43	115	150	60	105	136
24	127	167	44	114	150	61	103	135
25	127	166	45	114	149	62	103	134
26	126	165	46	113	148	63	102	133
27	125	164	47	112	147	64	101	133
28	125	163	48	112	146	65	101	132
29	124	162	49	111	145	66	100	131
30	124	162	50	111	145	67	99	130
31	123	161	51	110	144	68	99	129
32	122	160	49	111	145	69	98	128
33	122	159	50	111	145	70	98	128
34	121	158	51	110	144			
35	120	157	52	109	142			
36	120	156	53	109	142			
37	119	156	54	108	141			

Bariatric Surgery Website Resources

Bariatric websites and support groups can help you become more aware of your life and lifestyle changes to help you to have successful long-term weight loss after bariatric surgery. **Remember, do not assume the information you find online is correct or applies to your situation.** Information you find online is additional, but **always follow our recommendations as your guide.**

Phone Apps

- Baritastic
- MyFitnessPal
- Fooducate
- Waterlogged
- My Diet Coach
- Happy Scale
- Calorieking
- Nexercise

Websites and Support Groups

- barixclinicsstore.com
- BariatricEating.com
- BariatricPal.com
- BariatricGirl.com
- MyBariatricLife.org
- DailyStrength.org
- ObesityHelp.com

Nutrition Information

- CalorieKing.com
- MyFitnessPal.com
- LiveStrong.com
- Fitday.com
- FitnessJournal.com
- SparkAmerica.com
- nhlbi.nih.gov

Recipes

- Pinterest
- BariatricFoodie.com
- BariatricEating.com
- theworldaccordingtoeggface.blogspot.com
- CookingLight.com
- HungryGirl.com
- SkinnyTaste.com
- SkinnyKitchen.com
- FoodHero.org

Protein Shakes, Vitamins, and Minerals

- BariatricFusion.com
- BariatricAdvantage.com
- CelebrateVitamins.com
- VitaCost.com
- BariatricChoice.com
- Unjury.com
- JayRobb.com

Frequently Asked Questions

What is the frothy stuff I spit up?	Frothy spit-up is usually mucus that is produced in the throat and esophagus as a response to move food through the stomach. This tends to occur more frequently if the stomach is narrow or swollen, especially in the first months after surgery. You may try drinking warm fluids first thing in the morning, throughout the day, or when you have found that spitting up is the worst to help break this mucus down. It should get better as your body adjusts to your new digestive system. If you experience this, please discuss it with your surgeon.
How long will I feel weak and tired?	This will vary from person to person. After the sleeve gastrectomy surgery, patients report feeling much more like themselves after three months. Your body is working very hard to burn the fat stores you have, and you are trying to adjust to an entirely new way of eating and drinking. It takes time for your body to adjust.
What can I take for nausea?	<p>Expect some nausea after your operation. If you have any questions, discuss them with your surgeon at your next appointment.</p> <p>Eating too fast, not chewing enough, or taking too big a bite may cause nausea. You may need to puree your foods for awhile (baby food consistency) until you learn how to chew your foods to applesauce consistency. Overeating can also cause nausea. Eating slowly helps your body recognize fullness after small portions.</p> <p>We may recommend medication, but we prefer not to use medications because some may have side effects or cover up new symptoms. The nausea usually resolves itself once you learn how to eat with your new digestive system.</p>
Why am I burping so much?	Your stomach is much smaller after surgery, so you don't have as big a reservoir for the air you swallow on a daily basis. You swallow air when eating, breathing, drinking, talking, and sleeping. Burping is one way your body gets rid of excess air or gas from your stomach. It may get better as you adjust to your new digestive system. Stay away from straws and carbonation, which can increase the amount of air in the stomach.
What is the drainage coming from my abdomen?	Drainage around the JP drain and the OnQ pain pump occurs commonly. Keep these areas covered with an absorbent pad until drainage stops. If areas begin to look infected, call your surgeon.
What can I take for gas?	Gas is very common initially after surgery. Some patients who have had sleeve gastrectomy surgery complain of strong odors with their gas, as they get further out from their surgery date. The exact cause of this is unknown other than it is probably because your new digestive system does not absorb food the same way after surgery. You may try liquid or chewable Gas-X, Mylicon, or Simethicone. You can also try probiotics, which may help break down foods with the good/natural bacteria in your gut. Also pay attention to which foods you are eating. Eating the wrong foods may increase the amount of gas in the gut. Sometimes, patients develop lactose intolerance, gluten intolerance, etc., which can cause excess gas in the intestine.

Why have I stopped losing weight?	<p>Your body will reach plateaus throughout the weight loss process. This is normal. You may be losing inches even though the numbers on the scale haven't moved. Take pictures of yourself every three months, and compare them when you get frustrated during these times.</p> <p>Many factors can contribute to your weight loss success. Are you following the nutrition plan? Are you drinking 64 ounces of noncaloric fluids every day? Are you exercising? Are you doing strength training or weight lifting? Are you getting too many calories or not enough calories? Target caloric intake for the day is 1,000-1,200 calories. Have you introduced more sugars and carbs into your diet?</p> <p>Your body will reach a point where the weight loss does indeed stop. You then begin the process of maintaining your weight. The time frame for this is generally 18 months after surgery but varies with each individual and depends on calorie intake and exercise.</p>
How long after bariatric surgery will I have to be off work?	<p>You should consider being off work for four weeks. If you have a desk job, you will likely be able to return to work earlier. If your job is physically demanding and requires heavy lifting or physical activity, you may need to be off work longer. If you have questions, talk to your surgeon.</p>
When can I start exercising again after surgery?	<p>Walking is encouraged early after surgery and, thereafter, on a regular basis to increase your physical activity level. Aerobic activities, such as brisk walking, stationary biking, and elliptical machines can be done almost immediately after surgery and are limited generally by the degree of discomfort you feel. You can start swimming once your surgeon has determined that the wounds have healed sufficiently. Activities that are more strenuous or that involve lifting weights are generally discouraged for four weeks after surgery. This can vary, so talk to your surgeon first.</p>
Can I ever take NSAIDs again?	<p>These drugs are associated with stomach ulcers. Even topical creams have the potential to cause ulcers. Because of this risk, it is generally considered unsafe to use NSAIDs after gastric bypass; however, in some cases, the benefits of NSAIDs may outweigh the risks. Talk to your surgeon before taking NSAIDs.</p>
What follow up schedule can I expect?	<p>You will visit your surgeon about one week after surgery. At this time your staples and drain should be removed. After that, expect to see your surgeon at one month, three months, six months, nine months, one year, and then yearly thereafter. The team at Kettering Health Weight Loss would like to see you several times during the first year.</p>
What can I expect for lab draws?	<p>You can expect blood tests at 3, 6, 9, 12, 18, and 24 months, then yearly.</p>

My Bariatric Planner

Today's date _____

Goals or Things to Accomplish Today

<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

Food Journal

	Food/Beverage	Protein	
Breakfast			
Snack			
Lunch			
Snack			
Dinner			

Exercise Journal

Description:		Minutes:	
--------------	--	----------	--

Fluid Journal

Check off:	       
------------	--

Notes

[illegible]

[illegible]

Notes

[illegible]

[illegible]

