BARIATRIC Surgery

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Lakewood HEALTH SYSTEM

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Welcome

Welcome to the Bariatric Program at Lakewood Health System! Our team is dedicated and driven to improving your life through weight loss. Obesity is a disease that is growing exponentially in the United States. If you struggle with obesity, the staff at Lakewood want to help you meet your weight loss goals, and live a better life.

We have a team of registered and licensed dietitians, behavioral health specialists, registered nurses and bariatric surgeons whose desire is to help you meet your goal. Treatment options include one-on-one counseling and coaching, a specially-designed diet and exercise plan created to fit your lifestyle needs, and support systems to aid in your progress. The gastric sleeve surgery has proven to be a safe and effective weight loss tool, however, if you decide that's not for you, we are still here to help in other ways.

Please give us a call with any questions, or to get started with your weight loss journey.

Sincerely,
Lakewood Health System Bariatric Team

Lakewood
HEALTH SYSTEM

General surgeons: Drs. Jay Lenz and Craig Henson

*This book contains general recommendations and statements for weight loss surgery patients. You and your team will work to create an individualized plan that works for you, based on your unique needs.

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Making the Decision

Making the decision to have weight loss surgery is not an easy one. If you are thinking about bariatric surgery and are having doubts whether it is right for you, you are not alone. Bariatric surgery is a life-changing procedure and making that decision requires research and a good amount of reflection. It takes resolve to face the challenges, and educate yourself about the risks and benefits, so you can make an informed decision.

This guidebook is designed to provide you with the information and resources you need to help make your decision, and guide you on your weight loss journey.

Obesity is having a body mass index (BMI) greater than 30. BMI compares a person's weight to his/her height. A normal BMI is 19-24, and a BMI of 25-29 is considered overweight.

The National Institute of Health (NIH) has guidelines for surgery to treat severe obesity. They include:

- BMI greater than 40
- BMI greater than 35 along with weight-related health problems

Body Mass Index Chart

HEIGHT	BMI 35	BMI 40
5'0"	180 lbs.	205 lbs.
5'2"	190 lbs.	220 lbs.
5'4"	203 lbs.	231 lbs.
5'6"	215 lbs.	245 lbs.
5'8"	227 lbs.	260 lbs.
5'10"	240 lbs.	275 lbs.
6'0"	255 lbs.	292 lbs.
6'2"	296 lbs.	308 lbs.
6'4"	284 lbs.	325 lbs.

We will calculate your BMI in the clinic.
By going to http://nhlbisypport.com/bmi, you can also calculate your own.

Weight-Related Health Problems

Obesity leads to many serious illnesses and health conditions. Weight loss has been proven to significantly improve these issues. According to the Surgeon General, obesity has been linked to each of the conditions below:

Arthritis: For every two-pound increase in weight, the risk of developing arthritis goes up by 9-13%. Many obese people suffer from chronic back pain, limits on their activities, and swelling of the legs.

Cancer: Being overweight increases the risk for some types of cancer. These include cancer of the colon, breast, prostate, kidney, gallbladder, and the lining of the uterus.

Diabetes: A weight gain of 11-18 pounds increases a person's risk of developing type 2 diabetes. More than four out of five people with type 2 diabetes are overweight or obese. Obesity leads to high insulin resistance, which results in poor glucose control.

Heart disease: Obese people have a higher risk for heart disease just from their extra weight, and most have other risk factors, too. Risk factors include smoking, high blood pressure, high cholesterol and lipids, physical inactivity, and family history of early heart disease.

High blood pressure: Obesity more than doubles the risk of high blood pressure. About seven out of ten obese men and women have high blood pressure.

High cholesterol and lipids: Obesity is linked with high levels of fat in the blood and lower levels of HDL ("good cholesterol").

Reflux (GERD): This is also known as "heartburn" and is common among obese people. Studies show that as BMIs rise, reflux symptoms also increase.

Reproductive complications: Obesity raises the risk of irregular menstrual cycles and not being able to get pregnant. It also increases problems in pregnancy such as gestational diabetes. Obese women are more likely to die in childbirth and to have babies with birth defects.

Sleep apnea: A person with sleep apnea repeatedly stops breathing for short periods of time while sleeping. Too much fatty tissue can cause narrowing of the airways. People who snore and are very sleepy during the daytime may have obstructive sleep apnea. (Diagnosis of sleep apnea is based on the results of a sleep study.)

Urinary stress incontinence: Belly fat puts more pressure on the bladder area. This increases the risk of not being able to control your bladder. The greater one's BMI, the higher his or her risk of leaks and "accidents."
The latest data from the National Center for Health Statistics show that almost one third of U.S. adults 20 years of age and older–over 60 million people—are obese.

This increase in the prevalance of obesity is not limited to adults. The percentage of young people who are overweight has more than tripled since 1980. Among children and teens aged 6-19 years, one in every six (over nine million young people) is overweight.

According to the Surgeon General:

- Obesity causes around 300,000 deaths per year.
- The risk of death rises as weight increases.
- Even a little extra weight (10-20 pounds for a person of average height) increases the risk of death, especially among ages 30-64.
- Persons who have a BMI higher than 29 have a 50-100% increased risk of early death from all causes, compared to those with a healthy weight.

The Surgical Procedure

There are several surgical weight loss procedures available and some are more common than others. The American Society for Metabolic Bariatric Surgery (ASMBS) lists two ways bariatric surgery works:

1. Restrictive procedures restrict the amount of food the person eats.
2. Malabsorptive procedures change digestion so that the body absorbs only part of the food. The result is that more of the food leaves the body in the stool.
3. Surgeons at Lakewood Health System currently perform the sleeve gastrectomy procedure.

Sleeve gastrectomy

- Involves removing ¾ of the stomach
- Small amounts of food satisfy at one time (about 4 oz.)
- No intestinal re-routing
- No implanted medical device
- Very low risk of malnutrition
- No dumping syndrome

Risk and complications of the sleeve gastrectomy

- Those associated with any large operation
- Nausea/Vomiting
- Dehydration
- Constipation
- Leak
- Gastrointestinal swelling/obstruction

Goals and Benefits of Weight Loss Surgery

Weight loss improves the quality of a person's life. It can also lengthen a person's life by improving his/her health in other ways.

Weight loss surgery has many benefits, including:

- Control of one's appetite. It gives you a feeling of fullness much sooner and lasts longer.
- Weight loss and maintenance of a healthy body weight.
- Improvement of weight-related health problems, such as:

Arthritis: Less weight on the joints helps reduce arthritis pain. Losing weight also allows one to be more physically active. This can also help painful joints.

Asthma: Patients may need their inhalers less often. Most people with asthma find that they have fewer attacks or sometimes none at all. Attacks are likely to be less severe.

Depression may improve, but it does not "go away." Those with depression or other psychiatric illnesses will still need lifelong follow-up.

Diabetes: With weight loss, some people are able to decrease or stop all their diabetes medicines. Those who have taken insulin for less than six years are usually able to stop their insulin once weight loss begins.

Heart disease: Because weight loss improves risk factors such as high blood pressure and high cholesterol, it also helps reduce a person's risk of heart disease.

High blood pressure: People who take several blood pressure medicines may be able to control their blood pressure with just one medicine. Those who take only one medicine may not need it once they lose weight.

High cholesterol/lipids: Most cases of high cholesterol and lipids are improved by weight loss, healthier food choices, and physical activity. Medicines can usually be stopped once lipids are under control.

Reflux (GERD): Most times, symptoms get better.

Reproductive complications: Women experience fewer infertility problems after weight loss.

Sleep apnea: Symptoms of sleep apnea and the need for a CPAP machine usually decrease once weight loss occurs. Some people are able to get rid of their CPAP altogether.

Urinary stress incontinence: This problem improves with weight loss.

- Weight loss surgery is considered successful when 50% of excess weight is lost and kept off for up to five years. For example, a patient who is 100 pounds overweight can expect to lose at least 50 pounds. A patient who is 200 pounds overweight can expect to lose at least 100 pounds. Almost all are able to keep the weight off for the following five years.
- Recent studies show that the risk of an early death for those struggling with obesity is twice that of a non-obese person. With treatment, there is a better chance for enjoying good health and a longer life.

Risks of Weight Loss Surgery

Every surgery has risks. Problems can arise around the time of surgery or even years later. Many of the complications are similar to those of other operations on the abdomen. The table below describes the risks of weight loss surgery and the steps taken to reduce such risks.

RISK (EARLY - FIRST TWO MONTHS)	WAYS TO REDUCE RISK
Blood clot in the lung	• Often starts from a blood clot formed in the leg • #1 cause of death in weight loss surgery • Compression devices squeeze legs to encourage good blood flow • Early walking • Low dose of blood thinner • Special tools (such as IVC filter) can be used in very high-risk patients
Anastomotic leak (suture or staple line)	• Test for leaks during surgery
Bowel obstruction	• Special suturing techniques
Bleeding	• Risk is actually increased a bit with blood thinner
Infection	• Antibiotics are given around the time surgery begins • Sterile technique is used • You will receive instructions to care for your incision
Pneumonia	• Early walking • Good pain control • Spirometer helps patient take deep breaths and cough
Heart attack	• Pre-op screening for heart disease and risk factors • Beta-blockers in select patients
Dehydration	• Patients should drink at least 40 oz. of water in the 24 hour period before leaving the hospital • Continue to drink at least 40 oz. of water daily (ideally 64 oz.)
Kidney stones	• Drink plenty of water
Ulcers	• No NSAIDs such as aspirin, ibuprofen, Aleve, Advil • No smoking
Bowel blockage due to:	• Hernia • Stenosis • Adhesions • Unchewed food • Watch for symptoms such as nausea, vomiting, sudden or severe fullness • Contact your surgeon right away if you have any of these symptoms • Always remind ER and other medical providers of your surgery
Malnutrition and weight regain	• Multivitamins • Follow-up with your surgical team, including your dietitian, as directed or as needed
Skin fold problems	• Exercise regularly to help tone the muscles and the skin • May require plastic surgery to get rid of the extra skin

Notes

Getting Started

There are many steps in a weight loss surgery program. This surgery will be a life-changing event and it is important to get all of your questions answered so you know what to expect.

Informational session

- Potential patient registers with Lakewood team member prior to the next informational session, which occurs once or twice a month
- Patient attendance is recorded at session by filling out registration form
- Patient receives a folder with program information, questionnaire, handbook, and brochure
- Patient fills out registration form with insurance information
- Patient insurance information is sent to Pre-Encounter Team to verify coverage and eligibility for surgery
- Patient is contacted regarding coverage and instructed to schedule appointment with surgeon

Surgeon consult

- Appointments are scheduled with surgeon through Specialty Scheduling
- Patient brings weight loss surgery health history questionnaire to session
- Patients who meet the program criteria, and deemed suitable candidates, are referred to begin their nutrition and psychological assessments
- The Bariatric Protocol Program and Bariatric Care Pathway are initiated for each patient at their visit

Nutrition visits

- Each patient is required to complete the minimum number of nutrition visits as mandated by their insurance company and our facility
- Additional visits may be required based on patient need, and dietitian recommendations
- Patients receive the Bariatric Guidebook if they do not get one at the informational session
- Pre- and Post-surgical diet is reviewed at nutrition visits
- Nutrition visits cover a variety of topics, all pertaining to lifestyle change needed for weight loss success, both pre- and post-surgery

Psychological assessment

- Each patient must undergo a pre-surgical psychological evaluation
- The number of visits required are determined by the behavioral gealth team

Additional requirements

- Patients must complete additional insurance requirements. I.e. Phone consults, possible procedures, lab tests, etc.

Core team assessment

- Once a patient has completed the required info session, surgeon consult, nutrition visits, psychological review, and other insurance/facility requirements, a brief chart review is conducted by the program coordinator, and the patient is then placed on the agenda for the next core team review
- The core team is a multidisciplinary team comprised of surgeons, surgical nurse, dietitians, a member of the behavioral health team, and any other pertinent healthcare team members who are deemed appropriate

- The core team meets monthly
- Chart review form is completed
- If patient is approved by the team, the review will be sent to the Pre-Encounter Team to submit for prior authorization with the insurance company. The patient is contacted to let them know the status. Prior auth may take up to 30 days

Surgery

- After approval, the bariatric CMA contacts the surgical nurse as well as the patient, to inform of approval
- Surgery date and H&P is coordinated by the bariatric CMA and the surgery case managers. H&P must happen sooner than 30 days prior to surgery and no later than 14 days prior to surgery
- Patient is contact by the bariatric CMA to relay finalized dates and remind patient of two week pre-surgery liquid diet. If patient still has dietary concerns or questions, a dietitian will contact the patient via phone, or schedule an office visit
- Dietitian will also visit with patient during appointment with surgical case manager to answer any remaining questions
- Surgery time is set separately, and patient is contacted the day before
- Standardized order sets and home care instructions are in place for each surgery
- Surgery stay is typically one day

Post-surgery

- Patients are sent home on a full liquid diet, unless otherwise indicated. Full liquid is two weeks
- Diet progresses to pureed, and then soft foods at two week intervals after that
- Every patient attends a two-week follow-up with the surgeon, and is encouraged to attend a two-week follow-up with nutrition as well
- Surgical nurse will coordinate surgical follow-ups
- Bariatric CMA will coordinate nutrition follow-ups to coincide with surgical follow-ups

Support group

- Patients are highly encouraged to attend bariatric surgery group post-surgery
- Group meets monthly, and topics vary
- Various healthcare professionals will speak during the group, but overall, the group is coordinated and facilitated by the bariatric program coordinator

Team Review

Once you make the decision to undergo weight loss surgery, you must complete several steps before your file can be reviewed at a team review. The following steps **must** be completed before the team can review your case:

- ☑ Attend an information session. (Be sure to sign in at the meeting.)
- ☑ Complete the screening and the provider consult.
- ☑ Complete the psychological evaluation. (Depending on your evaluation, some patients will need individual therapy for a period of time before they will be approved for surgery).
- ☑ Complete all required visits with the dietitian. Typically, monthly visits for six consecutive months. The dietitian may require more visits depending on completion of the pre-surgery nutrition requirements and weight requirements.
- ☑ Be nicotine-free for at least six weeks.

Some patients may need more tests depending on their past medical history. Your provider will tell you if you need any other exams. The exams may include, but are not limited to:

Cardiac studies: Those with a history of heart problems may need extra testing. You may be asked to have an EKG, chest X-ray, or stress test around the time of your pre-op exam. Your surgical team and/or regular provider will order the tests you need.

Colonoscopy: Anyone over the age of 50 should have a colonoscopy. People with a history of inflammatory bowel disease (such as Crohn's or ulcerative colitis), chronic diarrhea, or blood in the stools may also need a colonoscopy before surgery.

EGD: Upper endoscopy. People with chronic reflux or history of ulcers may need an EGD. An EGD examines the lining of the esophagus, stomach, and upper small intestine with a small camera (flexible endoscope).

Gallbladder ultrasound: People with symptoms of gallstones (pain after eating, bloating, feeling ill after eating fatty foods, belching, gas, indigestion, nausea, vomiting) may be asked to get an ultrasound. The gallbladder may be removed during some weight loss surgeries.

Sleep study: People who snore a lot, are sleepy during the day, and whose sleep is frequently interrupted may be asked to undergo a sleep study to check for possible sleep apnea.

Weight-Loss Factors

There are certain situations that affect your ability to have weight loss surgery. These factors will be considered:

- Your BMI needs to be less than 60 for females, or less than 55 for males, before you will be considered for surgery.
- The surgeon may discuss certain other medical conditions with you.
- Age limitation:
  - You must be age 18 of more to be eligible for sleeve gastrectomy
  - You must be under 65 years of age at the time of the surgery

Once a person has been accepted in the review team, you will be contacted by Lakewood Health System. This office will set up a pre-op exam with your primary care provider, pre-op visit with your dietitian and pharmacist, and the date for surgery.

Who to Call with Questions

Any time you have questions, please do not hesitate to call our office.

- General procedure questions before or after surgery:
  - Bariatric Program Coordinator: 218-894-8526
- Insurance questions:
  - Lakewood Health System Pre-Encounter Team: 218-894-8050.
  - It is always recommended that you call your individual insurance plan when you have questions about coverage.
  - If you are approaching the end of the calendar year and/or you know that your insurance plan is changing, you will want to contact the new plan for specific coverage details.
  - IT IS VERY IMPORTANT you communicate any insurance plan changes to the Pre-Encounter Team at Lakewood Health System.

Checklist to Surgery

Use this checklist to help you keep track of what needs to be done before surgery:

- ☐ Attend an informational session presented by Lakewood Health System's bariatric team.
- ☐ Please call your insurance and complete the insurance checklist, along with the health history packet.
- ☐ Attend consult appointment with Dr. Lenz.
- ☐ The nutritional evaluation will be done by a Lakewood dietitian. These appointments will be scheduled after you have seen the surgeon.
- ☐ Your insurance company requires a minimum of _____ months of nutrition visits. One visit per calendar month for _____ consecutive months. The requirement is for successful completion and implementation of nutrition and exercise recommendations. Additional visits may be required.
- ☐ You must complete a psychological evaluation by a licensed behavioral health professional. Referral will be sent after your consult appointment, and you will be contacted by Lakewood to schedule.
- ☐ You will be encouraged to begin a regular exercise program, exercising a minimum of 150 minutes per week for the remainder of the program.
- ☐ If you are currently using tobacco products, you will need to be tobacco-free for six weeks prior to surgery.
- ☐ You must receive a recommendation for surgery from both the nutritional and psychological areas of the program prior to being considered for surgery.
- ☐ Once the medical, nutritional, and psychological requirements are met, your records will be compiled and presented to the Core Team for final surgery recommendation.
- ☐ Following approval by the Core Team, your notes will be sent to your insurance company for prior authorization. Your insurance company has up to 30 days in which to respond. After we receive your insurance's prior authorization, you will be contacted by our office to discuss scheduling your surgery.
- ☐ Scheduling surgery includes a pre-operative history & physical (H&P) with your primary care provider; appointments with your dietitian to discuss the required two-week pre-operative liquid diet; possibly meeting with a pharmacist to discuss any medication changes that will need to be made prior to/following surgery; and your tentative surgery date.
- ☐ Two weeks following surgery, you will see Dr. Lenz for your first surgical follow-up. Further follow-up appointments will be scheduled at six weeks post-op, and then every three months for the first year, every six months for the second year, and annually thereafter.
- ☐ You will be enouraged to attend regular follow-up appointments post-operatively with the dietitian, as well as a psychologist as recommended.
- ☐ You will be encouraged to register for, and attend, the bariatric weight loss support group.

***Please bring this guidebook to all your appointments.**

SMART Goals

- Specific
- Measurable
- Achievable
- Relevant
- Time-bound

Pre-surgery Nutrition Requirements/Agreement:

Positive Nutrition Practices

I, _____, have reviewed the Positive Nutrition Practices goal sheet.

- ☐ I understand that achieving these goals prior to surgery will lead to positive results in my weight loss plan.
- ☐ I understand that the risk of not following these goals will lead to a delay in the weight loss surgical process.
- ☐ Keep daily food journals and bring to monthly dietitian appointments.
- ☐ Eat 3 meals daily; allow up to 30 minutes for eating a meal. Do not graze. (Aim to eat every 4 to 6 hours.)
- ☐ Avoid snacking, unless directed to do so by your dietitian.
- ☐ Consume at least 64 oz. water (or equivalent) daily.
- ☐ Avoid beverages with calories/caffeine/carbonation.
- ☐ Do not drink beverages with meals.
- ☐ Take a chewable multivitamin/mineral supplement daily.
- ☐ Include a protein food at each meal.
- ☐ Be nicotine-free 6 weeks prior to surgery.
- ☐ Include fruit and vegetables daily.
- ☐ Avoid fried foods, and sweets/desserts.
- ☐ Chew thoroughly, to consistency of applesauce (20-30 chews/mouthful).
- ☐ Include exercise or activity daily plan; goal is 30-60 minutes per day, starting with 10 minutes, and increase as tolerated (depending on physical limitations).
- ☐ If you have diabetes your A1c should be 8% or less prior to surgery.

Patient signature:_____ Date: _____

Sample Food Journal

SUNDAY	MONDAY	TUESDAY	WEDNESDAY
Breakfast Protein/whole grains/fruit	Breakfast Protein/whole grains/fruit	Breakfast Protein/whole grains/fruit	Breakfast Protein/whole grains/fruit
Snack	Snack	Snack	Snack
Lunch Protein/whole grains/fruit/vegetable	Lunch Protein/whole grains/fruit/vegetable	Lunch Protein/whole grains/fruit/vegetable	Lunch Protein/whole grains/fruit/vegetable
Snack	Snack	Snack	Snack
Dinner Protein/whole grains/fruit/vegetable	Dinner Protein/whole grains/fruit/vegetable	Dinner Protein/whole grains/fruit/vegetable	Dinner Protein/whole grains/fruit/vegetable
Snack	Snack	Snack	Snack
Water ○○○○○○○○ Mulitvitamin ☐ Ca+Vit D ☐ High protein drink ☐	Water ○○○○○○○○ Mulitvitamin ☐ Ca+Vit D ☐ High protein drink ☐	Water ○○○○○○○○ Mulitvitamin ☐ Ca+Vit D ☐ High protein drink ☐	Water ○○○○○○○○ Mulitvitamin ☐ Ca+Vit D ☐ High protein drink ☐

*The Sample Food Journal is not necessary for all patients. Please talk with your team to determine if it is useful for you.

THURSDAY	FRIDAY	SATURDAY	WEEKLY GOAL:
Breakfast Protein/whole grains/fruit	Breakfast Protein/whole grains/fruit	Breakfast Protein/whole grains/fruit	
Snack	Snack	Snack	**CHALLENGE:** One challenge for myself this week was:
Lunch Protein/whole grains/fruit/vegetable	Lunch Protein/whole grains/fruit/vegetable	Lunch Protein/whole grains/fruit/vegetable	
Snack	Snack	Snack	**OVERCOMING:** I decided to approach this challenge by:
Dinner Protein/whole grains/fruit/vegetable	Dinner Protein/whole grains/fruit/vegetable	Dinner Protein/whole grains/fruit/vegetable	
Snack	Snack	Snack	**QUESTIONS:**
Water ○○○○○○○○ Mulitvitamin ☐ Ca+Vit D ☐ High protein drink ☐	Water ○○○○○○○○ Mulitvitamin ☐ Ca+Vit D ☐ High protein drink ☐	Water ○○○○○○○○ Mulitvitamin ☐ Ca+Vit D ☐ High protein drink ☐	

Questions to Ask at Your Appointments

Plan your questions in advance. When you think of one, write it down here. Bring this manual to your appointments and write down the answers the doctor or other healthcare professionals give you. There is a lot to keep track of and this log will help you make the most of your conversations with your surgical team.

Date Questions/Answers

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

Notes

Preparing for Surgery

Here are some helpful reminders before surgery:

- See your primary care provider before surgery, for a pre-op exam and complete review of your medicines.
  - Talk to your provider about the use of multivitamins.
  - Plan/schedule an after surgery follow-up appointment to review your progress.
- Make a plan for after surgery care and recovery.
  - Discuss this with your regular doctor, the weight loss team, and your family.
  - Plan for two-six weeks away from work (depending on the type of procedure you have).
- Meet with the dietitian and pharmacist two to three weeks before surgery for pre-op teaching.
  - Understand the Pre-Surgery Liquid Protein Diet. (Talk to your team about your specific needs.)
  - Start the liquid protein diet two weeks before surgery.
  - Understand the type of food you will be served during your hospitalization.
  - Understand the Post Surgery Diet Progression.
  - Stay hydrated. (Hydration needs may vary based on individual plans. Talk with your team about guidelines for maintaining your hydration needs.)
  - Be sure to make after surgery follow-up session to understand the diet progression appropriate for your individualized plan (two to four weeks following surgery).
  - Medicine list review.

NOTE: You must have no active infections at the time of surgery. Please tell the surgical team of any current infections or fevers.

What to Expect the Day of Surgery

- Do not eat or drink anything before surgery starting the evening before surgery.
- You can take some medicines the day of surgery with small sips of water. Your doctor will decide which medicines you should take.
- Bring all your medicines with you.
- Be sure to monitor the medications that are given to you while you are hospitalized; they may need to be crushed and/or a liquid form.
- Please note that the hospital liquid diet is slightly different than the “at home liquid diet”. Be sure to talk to your dietitian about the differences between the hospital diet and home diet.
- The nurse will ask you to keep a log of all liquids consumed during your hospital stay.
- Bring your guidebook with you to refer to as needed.
- If you have a CPAP machine, bring it with you to use at the hospital.
- Arrive at the hospital as instructed.

What to Expect After Surgery

Hospital stay: You can expect to stay one to three days.

Diet: You will need to follow your liquid protein diet for the next two weeks.

- It is important during this time to drink as much water as you are told to drink. The liquid goal is to drink 40 to 64 ounces daily.
- Your dietitian will go over the puree and soft diet progression following your two week liquid diet. A two week follow-up surgery appointment should be scheduled to individualize the diet progression.

Activity limitations: Activity will depend on whether or not you had an open or laparoscopic procedure. Open procedures may take up to six weeks to heal; laparoscopic may take only two to four weeks. Pay attention to your body. Do not do high-impact activities that may cause intense pain. You can expect some pain with low-impact activities, but please use caution and common sense.

Lifting: Restriction of 30 pounds, for three weeks, or as determined by you provider.

Return to work: Returning to work depends on what you do at work as well as whether you had an open or laparoscopic procedure. (Most procedures will be performed laproscopically.) You can expect to return to work in two to six weeks. Keep in mind it may take up to three months to regain your energy, but that is common with any major surgery. Some patients may return to work earlier.

Pain control: You will receive pain medicines through an IV in the hospital. You will also go home with a prescription for pain medicines. It is important for you to let us know if you are having any pain so we can treat you properly.

Nausea: It is very common to feel a little nausea after weight loss surgery and even in the weeks that follow. Pain medicines can also make a person feel nauseous. You will receive an anti-nausea medicine in the hospital through an IV. When you leave the hospital, you may get a prescription for anti-nausea medicine if needed.

Walking: You will be asked to walk at least twice the day of surgery and twice a day after that. Walking helps prevent blood clots from forming in your legs and it also helps prevent other complications such as pneumonia. It is important to continue being as active as you can after you leave the hospital in order to reduce your risks as well.

Incentive spirometer: This device helps people take in deep breaths so the air sacs in the lungs do not collapse. Collapse of the air sacs can cause pneumonia.

Possible Complications After Surgery

In any surgery, there is always a chance for complications. Please do not hesitate to call us with any questions.

- Listen to your body.
- If you get the feeling that "something is wrong," that is enough for you to call us!
- Take action early and to not wait until the problem gets worse.
- If needed, go to the Emergency Department!

WATCH FOR THE FOLLOWING SYMPTOMS!

Especially in the first 30 days after surgery, the following signs and symptoms require immediate EMERGENCY CARE:

1. Sustained heart rate greater than or equal to 120 beats per minute
2. Uncontrollable vomiting
3. Persistent or increasing abdominal pain

The signs and symptoms listed above can be indicative of the following **early complications:**

Dehydration: This is the most common complication after surgery. Symptoms may include fatigue, headache, nausea, and feeling run down. If you are not able to keep down liquids for more than 24 hours seek medical attention immediately.

Leak: A leak can occur at suture or staple sites in the stomach. This is a serious complication that can occur in the first few days after surgery. Another operation is usually required to fix this problem. This is the complication that is most likely to lead to death after sleeve gastrectomy surgeries. A leak occurs more often in extremely obese patients (BMI more than 60). Signs can include nausea, elevated heart rate, increasing abdominal pain, bloating and loss of appetite. (All may be non-specific.)

Pulmonary embolism: This is a serious complication that, fortunately, is rare (less than 1 out of 100). A pulmonary embolism is a blood clot that becomes trapped in a blood vessel to your lungs. Usually it starts deep in your leg and breaks off into your blood stream. We will start you on a blood thinner while you are in the hospital. You will also have special stockings that squeeze your legs. The blood thinners and stockings reduce the chance that this complication will happen. Symptoms include leg pain and swelling, increasing shortness of breath, and chest pain.

Bowel obstruction: After any operation in the abdomen, scars called adhesions can form. These adhesions can sometimes cause a bowel obstruction (blockage). Signs of blockage may include severe stomach cramps, nausea, or vomiting. Seek medical attention and contact your surgical team immediately.

Infection: This occurs about 5% of the time after laparoscopic sleeve gastrectomy. Because the incisions are so small, these infections are usually easy to treat. Contact your surgical team if:

- Redness around the incision is spreading
- The incision is hot or painful to the touch
- There is pus-like, foul-smelling drainage
- You have chills or fever greater than 101 degrees

Other symptoms or concerns: Should you develop a respiratory cold, cough, or other seasonal infection or seasonal allergy that results in cold-like symptoms, please call our surgery office and talk with the medical assistant. These symptoms could affect the weight loss surgery healing process.

Long-Term Complications

- It is important to wear medical alert bracelets or use emergency medical cards. Please notify us of any problems in your abdomen. Don't be afraid to ask that we be consulted.
- Follow up as instructed. Weight loss surgery is a lifelong process that requires ongoing follow-up.

Notes

Follow-Up Care

Follow-up with your surgical team is important to your recovery and your weight loss success. You will see your team often during the first year. After that, visits will be less frequent. Eventually visits will only be once a year.

Your appointment schedule is likely to be similar to this (your visits may be individualized):

Surgeon Follow-Ups:

- Two weeks
- Six weeks
- Three months, for one year
- Annually thereafter
- Your primary provider may wish to see you more often, or do lab work

Nutrition Follow-Ups:

- Recommendation to follow surgeon follow-up schedule

If you see someone outside of the clinic for follow-up visits, please ask him or her to send us your medical records. We want to make sure all of our patients are safe after surgery. A few complications can arise later and we want to make sure you receive the best possible care.

How to Deal with Possible Problems in the Future

Weight loss surgery is a life-changing event. There are many medical complications and annoyances that may occur after your surgery. Some problems are more common than others; some may last for only a short period of time, while others may be everyday nuisances. Possible problems may include:

Compulsive behaviors: Sometimes after surgery, people develop other compulsive behaviors such as drinking, gambling, or smoking to take the place of over-eating. It is important to be aware of your compulsions. Your psychological evaluation or individual therapy may help you identify and gain control of these behaviors.

Constipation is very common after weight loss surgery and is more likely to occur if you do not drink enough fluids, or if you take iron supplements. It is important to prevent constipation to avoid hemorrhoids, hernias, and blockages.

If you take an iron supplement, you may need a stool softener for the first month or so, until you can drink more fluids and eat more fiber. Stool softeners such as Colace, Pericolace, or Senokot are available over-the-counter. Do not take laxatives on a regular basis. Other ways to improve regularity are:

- Hydrate: Drink plenty of water.
- Activity: Exercise regularly.
- Essential nutrients: It is important to add fruits and vegetables (pureed for the first four weeks) at every meal.
- Fiber: Please talk to your surgeon or registered dietitian about when to add a fiber supplement such as Konsyl, Metamucil, Fibercon, Benefiber, or Citrucel to your diet on a regular basis. Some patients may need to start a fiber supplement right away post-surgery; while others may add as needed.

Emotional stress: Weight loss surgery is life-changing. Anytime a person has a major change in his or her life, there is bound to be some stress involved. Not only will your body be undergoing a huge makeover, but your overall sense of self will change as well. It is important to find support from family, friends, or a support group.

Family and friend adjustment: It may take some time for your family and friends to adjust to the new you. Be patient. Keep in mind that it is sometimes hard for people to adjust to such a dramatic change.

Food sticking: There are certain foods that may be hard to swallow. These include red meats, chicken, lettuce (fibrous foods), and bread. It is important to chew your food well before swallowing. If you are having problems with continued food sticking, please address this with your surgeon.

Gallstones may develop in up to three out of ten people during rapid weight loss after surgery. Not all patients with gallstones will develop symptoms, but some may have a lot of pain and may need to have their gallbladder removed.

Hair loss: Some short-term hair thinning may occur during periods of rapid weight loss. This may begin several months after surgery and continue for several months. If your hair starts to thin, it should grow again when your weight loss slows down. You can reduce hair loss by taking vitamins, and/or eating enough protein.

Kidney stones result from rapid weight loss, along with not drinking enough liquids. You can avoid kidney stones by drinking lots of water to flush out the waste products.

Malnutrition: This is more common among gastric bypass patients than sleeve gastrectomy patients. However, all weight loss patients should take a multivitamin daily, for life.

Medicine adjustment: You may need to change your long-acting medicines to short-acting medicines. (Most gastric sleeve patients tolerate their long-acting medications.) You may not need some of your medicines once weight loss occurs. Please talk with your provider and surgical team about your medicines.

Nausea and vomiting has many causes:

- Eating too fast or not chewing well (You need to chew at least 20 times before you swallow.)
- Eating the wrong foods (foods high in fat or sugar or too dry)
- Eating too much
- Drinking liquids with meals

Notes

DIET PROGRESSION

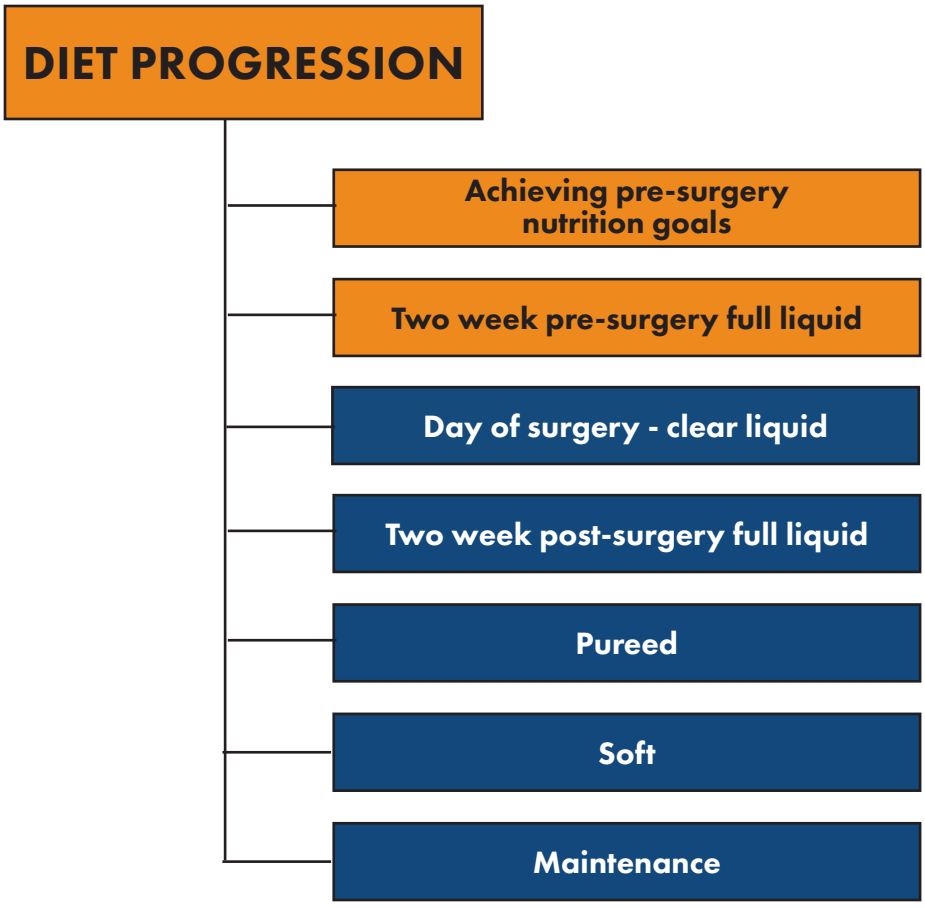
Post-Surgery Diet

The first few months after surgery, you will be advancing your diet slowly to accommodate the change in size of your stomach and to allow time for your body to heal. Initially, you will be eating approximately ½ cup volume at each meal with high protein foods being a part of each meal.

It is important that you measure out ½ cup total volume per meal to avoid overeating.

Due to the reduced size of your stomach you will feel satisfied with these small amounts. This is all your body will need at this point.

Your average calorie intake will be about 700-1000 calories daily and you will need 60 to 100 grams of protein per day. Because you are eating small amounts from food, a protein supplement will need to be incorporated into your daily meal plan for at least the first six weeks after your surgery. Please note: the advancing of each diet is based on recommendations of the dietitian or surgeon.



FOOD ISSUE	SLEEVE GASTRECTOMY
Liquid diet	Two weeks before and after surgery
Pureed diet	Two weeks after liquid diet
Soft diet	Two weeks after pureed diet
Maintenance diet	Lifelong

FOOD ISSUE	SLEEVE GASTRECTOMY
Protein	At least 60 grams total daily (Ask your dietitian if you need more.)
Fluid	40 to 64 ounces daily
Fluids with solids	Do NOT drink with your meals
Multivitamin	One chewable daily
Meal timing	Three to six smalls meals daily NO grazing

Helpful Kitchen Supplies:

- Blender
- Food processor
- Immersion hand blender
- Non stick cook ware
- ¼ cup and ½ cup dishes (ramekins)
- Herbs and spices
- Artificial sweeteners
- Cooking sprays
- Lemon juice
- Blended soups
- Calorie free beverages
- Low sodium broths
- Smaller dinner plates or salad plates
- Measuring cups and spoons

Full Liquid Diet: Two Weeks Before and After Surgery Diet

Liquid Diet

Include five liquid meals of your choice in your diet each day, such as from the following selections/recipes (if lactose-intolerant, use lactose-free milk or appropriate substitution). These recipes are only options. Please discuss alternatives with your dietitian.
General guideline, for 8 ounce serving: 150-200 calories, 15-20 grams protein.

Option #1

Sugar-Free Carnation Instant Breakfast complete nutritional drink (CIB)
In a large glass, mix:
1 packet sugar-free Carnation Instant Breakfast
1 cup (8 ounces) 2% milk
Non-fat dry milk or protein powder equal to 4 grams of protein
CIB should have 12 grams of total carbohydrates per packet. Check the nutritional facts to be sure you have the right product. This is available in a variety of flavors, and can be found at most large grocery stores.
Made with non-fat dry milk this recipe provides:
220 calories, 17 grams protein, and 5.5 grams fat

Option #2

Sugar-free, high-protein shake
In a blender, mix:
1 cup 2% milk
Non-fat dry milk or protein powder equal to 10 grams of protein
Sugar substitute
Vanilla or other flavoring
Variations: Chocolate milk: Add unsweetened cocoa powder to the recipe before mixing.
Made with non-fat dry milk this recipe provides:
200 calories, 18 grams protein, and 5 grams fat

Option #3

Sugar-free hot chocolate beverage
1 packet sugar free hot cocoa/chocolate mix
1 cup 2% milk
Non-fat dry milk or protein powder equal to 10 grams of protein
Mix cocoa and sweetener in cup or mug. Add ¼ cup milk and stir to make a paste. Heat remaining milk in microwave for 45 seconds to 1 minute or until hot. Add hot milk to cocoa mixture and stir until smooth.
Variations: Add cinnamon, instant decaf coffee, vanilla, or almond extract.
Made with non-fat dry milk this recipe provides:
200 calories, 20 grams protein, and 5 grams fat

Option #4
High-protein fruit punch
In a blender, mix: 8 ounces sugar-free powdered fruit drink (such as Crystal Light or sugar-free Kool Aid)
Non-fat dry milk or protein powder equal to 20 grams of protein
4 ice cubes
Made with non-fat dry milk this recipe provides:
200 calories, 20 grams protein, and 0 grams fat

Option #5
Creamy low-fat tomato soup
1 cup low-fat tomato soup made with milk
12 grams protein powder
Made with non-fat dry milk this recipe provides:
174 calories, 15 grams protein, and 0 grams fat

Option #6
Pre-packaged protein shake; calories vary. Choose 20-30 grams of protein and 5 grams of sugar per serving

Additional fluids
In addition to the five liquid meals, sip calorie-free liquids all day long to meet your fluid needs. Include at least 40 oz. per day. Choose from the following:

- Water
- Broth (low sodium, i.e. Herb Ox)
- Caffeine-free, sugar-free drink mixes
- Sugar-free gelatin
- Decaffeinated herbal tea
- Diluted decaffeinated coffee
- Sugar-free lemonade
- Sugar-free popsicles

Two Week Pureed Diet

This diet includes foods that have been pureed in a blender to a smooth texture. Following a pureed diet is an important step in helping your stomach heal properly. Please note you will probably need to add protein powder to any baby food products, as they may not contain adequate protein. Please check labels. Prepared baby food is also an easy option for menu planning post surgery. Eating foods that are not pureed may cause a blockage in your new stomach or uncomfortable symptoms such as vomiting or stomach cramps. You may slowly begin to add these foods to your diet:

Protein

Allowed:

- Pureed lean meat or poultry
- Low fat cottage cheese that has been mixed in a blender
- Milk, sugar free pudding, and lite fat free yogurt

Not recommended: Fried or high fat meats, fried eggs, highly seasoned or spicy meats, skin of meats and tough meats. Avoid red meat during the first six months.

Carbohydrate

Allowed:

- Cooked refined cereal without added sugar (in small quantities!)
- Mashed potatoes

Not Recommended: White flour breads, pastas, rice, pastries, donuts, muffins, any sugar coated cereal, coarse bran cereal, AVOID all starches made from refined flour and /or added sugar.

Fruits

Allowed:

- Unsweetened strained or pureed fruit (no sugar added)

Not Recommended: Fruits or fruit juices canned in syrup, dried fruits, in first six months, pineapple, melons and raw apples may cause gas distress.

Vegetables

Allowed:

- Strained or pureed vegetables
- Vegetable juice (low sodium options are preferred)

Not Recommended: Any vegetable with tough skin or seeds (i.e. tomato, corn, celery, potato skins) in first six months. Cabbage, cauliflower, broccoli, squash, vegetable juice and raw brussels sprouts may cause gas distress.

Soups

Allowed:

- Broth
- Bouillon
- Low-fat cream soup that has been strained or mixed in a blender

Not Recommended: Soups prepared with heavy creams or made with high fat ingredients, or with chunks of food.

Fats

Allowed:

- Small amount of non-hydrogenated margarine or vegetable oil may be used
- Low-fat salad dressings, non-fat/low-far mayonnaise, sour cream, peanut butter and cream cheese

Not Recommended: Regular mayonnaise, sour cream, peanut butter, salad dressings, pudding, ice cream or sorbet

Sweets

Allowed:

- Sugar substitute

Not Recommended: All sweets and desserts, especially those made with chocolate or dried fruits. Don't eat sweets on an empty stomach!

Beverages

Allowed:

- Decaf coffee, tea
- Water
- Crystal Light
- Skim milk or Lactaid skim milk

Not Recommended: Alcohol, sweetened fruit drinks, juice or whole milk

Miscellaneous

Allowed:

- Iodized salt
- Pepper
- Herbs and strongly flavored seasonings as tolerated
- Light mocha mix or other non-dairy low-fat substitutes

Not Recommended: Jalapenos, nuts, seeds, tough skins for at least six months post-op

Two Week Soft Diet

If you have any questions about your diet, please contact your registered dietitian. In this diet phase, foods are becoming more solid. This is truly where we begin to separate out the solids from the liquids.

Protein

Allowed:

- Finely diced lean meat, chicken or turkey
- Eggs
- Fish
- Low-fat milk or Lactaid
- Tofu
- Low-fat cottage cheese
- Plain or artificially sweetened low-fat yogurt
- Casseroles made with ground meat or poultry

Not recommended: Fried or high fat meats, fried eggs, highly seasoned or spicy meats, skin of meats and tough meats. Avoid red meat during the first six months.

Carbohydrate

Allowed:

- Refined cooked or dry cereal
- Potatoes without skin
- Cooked pasta and rice (without added sugar, in small quantities)

Not Recommended: White flour breads, pastas, rice, pastries, donuts, muffins, any sugar coated cereal, coarse bran cereal, AVOID all starches made from refined flour and /or added sugar.

Fruits

Allowed:

- Unsweetened canned fruits (in juice or water packed)
- Soft, fresh fruits as tolerated

Not recommended: Fruits or fruit juices canned in syrup, dried fruits, for first six months; pineapple, melons and raw apples may cause gas distress. Grapes, oranges and grapefruit may also cause problems.

Vegetables

Allowed:

- Soft, cooked fresh, frozen or canned vegetables (ie. carrots, beets, mushrooms, spinach, most soft vegetables tolerated after three-six months)

Not recommended: Any vegetable with tough skin or seeds (ie. tomato, corn, potato skins) in first six months. Cbbage, cauliflower, broccoli, squash, vegetable juice and raw brussel sprouts may cause gas distress.

Soups

Allowed:

- Soups made with allowed foods
- While you are restriced to liquids after meals, strain and eat solids only (Note: This is a change from the pureed diet.)

Not recommended: Soups prepared with heavy creams or made with high fat ingredients

Fats

Allowed:

- Small amount of margarine or vegetable oil
- Non-fat/low-fat salad dressings, mayonnaise, sour cream, peanut butter and cream cheese

Not recommended: Regular mayonnaise, sour cream, peanut butter and salad dressings

Sweets

Allowed:

- Sugar substitute

Not Recommended: All sweets and desserts, especially those made with chocolate or dried fruits.
LONG TERM- Don't ever eat sweets on an empty stomach!

Beverages

Allowed:

- Decaf coffee, tea
- Water
- Crystal Light
- Skim milk or Lactaid skim milk

Not Recommended: Alcohol, sweetened fruit drinks, juice or whole milk

Miscellaneous

Allowed:

- Iodized salt
- Pepper
- Herbs and strongly flavored seasonings as tolerated
- Light mocha mix or other non-dairy low-fat substitutes

Not Recommended: Jalapenos, nuts, seeds, tough skins for at least six months post-op

Maintenance Diet

- Eat small meals daily or as recommended by your dietitian. No grazing.
- Take your chewable multivitamin and calcium as prescribed.
- Limit meals to ½ cup. Initially you may want to measure.
- Meals should consist of protein, cooked vegetables and a fruit. (Eat protein foods first.)
- Add in new foods one at a time to see if your body will be able to tolerate it. If your body doesn't tolerate a food now, it may in a couple of weeks.
- Drink at least eight, 8-ounce glasses of water or other no-calorie, non-carbonated beverages each day.
- No more than one caffeinated beverage per day.
- Except for milk or protein drinks, drink no liquids that have calories. Avoid juice, soda, alcohol, or carbonated beverages.
- Do NOT drink while eating – Avoid liquids 30-60 minutes before and after each meal.
- Chew, chew, and chew! Chew each bite at least 20-30 times before swallowing depending on the food. Chew to applesauce consistency. You cannot chew too much.
- Eat slowly – take about 30 minutes for a meal. Put your fork or spoon down between each bite.
- Eat mindfully – Listen for signals that you are satisfied. Stop eating as soon as you no longer feel hungry.
- Use caution with tough, gristly meats such as steak, shrimp, pork chops, bacon, sausage, and beef jerky.
- Avoid fibrous foods such as asparagus, pineapple, rhubarb, celery, corn, and many raw vegetables.
- Use caution when consuming popcorn and nuts.
- Avoid doughy or sticky foods like untoasted bread, pasta, and rice.

Notes

Protein Powder Supplement

During the first six weeks after surgery, you will need additional protein supplement in your diet (for example: non-fat powdered milk or whey protein powder). You will need to add the appropriate amount to each liquid meal as directed. Please note that this amount is included in the recipes provided.

Your total volume of protein should equal at least 60 grams per day. Please discuss this with your registered dietitian. This section also contains some recipes will help you achieve the additional protein.

Suggestions for Increasing Protein

If you find it hard to eat enough protein, your dietitian will help you. Listed below are some suggestions to help increase the amount of protein you eat each day. (Note: These are only suggestions.)

- You can double the amount of protein in your skim milk by adding ¼ cup of non-fat dry milk powder to one cup of skim milk.
- When cooking hot cereal or hot soup, use skim milk instead of water. Boost the protein content by adding two tablespoons of dry milk powder or protein powder during cooking.
- You can melt low-fat cheese on a baked potato or vegetable.
- Eggs, omelets, and yogurt (no sugar added) are good sources of protein.
- Cottage cheese mixed with unsweetened canned fruit is an easy meal.
- Chicken or tuna salad made with low-fat mayonnaise, along with a few crackers, is a simple meal.

Vitamin and Mineral Supplements

You mayl need to take a multi vitamin daily. Discuss other vitamin/nutrition needs with you provider. Some people may have special nutrient needs.

Tips for Taking Vitamin and Mineral Supplements:

- Do not take vitamins and minerals on an empty stomach.
- Take calcium with a source of vitamin D to absorb it properly.
- If you take extra iron, take it at least four hours from the time you take your calcium.
- Do not take calcium and synthroid at the same time take them four hours apart. (Talk to your primary provider.)
- Do not take vitamins and minerals with tea or coffee.

Bariatric Liquid Protein Supplements

How to Choose a Supplement:

- At least 15 grams (g) of protein per 8 oz. (1 cup) serving (*No more than 30 grams per serving.)
- Less than 20 grams total carbohydrate per 8 oz. serving
- Less than 5 grams fat per 8 oz. serving

Do not choose any of the following supplements; they are too high to carbohydrates::

- Regular Carnation Instant Breakfast
- Ensure
- Slim-Fast
- Boost

RECIPES

High-Protein Milk

- In blender, mix:
  - 1 cup skim milk
  - 2 scoops (1 oz.) Carb Solutions or other protein powder
  - Sugar substitute
  - Vanilla or flavoring
- 190 calores
- 28 grams protein
- 2 grams fiber

To make choclate milk, add unsweetened cocao powder to the recipe before mixing. To make hot chocolate, heat the chocolate milk. Sip slowly.

High-Protein Fruit Punch

- In blender, mix:
  - 6 oz. any flavor sugar-free Crystal Light or Kool Aid type beverage
  - 2 scoops (1 oz.) protein powder
  - 4 ice cubes
- 110 calories
- 20 grams protein
- 4 grams carbohydrate
- 2 grams fat

High-Protein Cream Soup

- 1/3 cup nonfat dry milk powder
- 1 teaspoon chicken or beef bouillon
- 3 tablespoons protein powder
- Mix ingredients. Add enough hot water to equal 1 cup. Mix well. Eat soup when it is lykewarm,not hot.
- One cup of soup has:
  - 200 calories
  - 24 grams protein
  - 20 grams carbohydrate
  - 2 grams fat

Have a Smoothie

These recipes may be used to increase the taste of your protein supplement and may prevent taste fatigue. Not all recipes may be appropriate during the full liquid diet.

Double deluxe chocolate fudge
Mix 1 chocolate protein supplement according to directions. Add 1 packet of Swiss Miss fat-free and/or sugar-free hot cocoa mix and 3 ice cubes. Blend at high speed for 45 seconds.

Frozen fruit dream
Mix 1 vanilla protein supplement according to directions with 3/4 water and 1/3 orange juice. Add 1/2 ripe banana, 3 frozen strawberries and 3 ice cubes. Blend at high speed for 45 seconds.

'Nana split
Mix 1 vanilla or chocolate protein supplement according to directions. Add 1/2 ripe banana, 1/4 cup chopped pineapple, 3 frozen strawberries and 3 ice cubes. Blend at high speed for 45 seconds.

Chocolate mint mocha
Mix 1 chocolate protein supplement according to directions. Add 1 1/2 tbsp. General Foods Coffees Swiss Mocha sugar-free, fat-free instant coffee, 4 drops of peppermint extract and 3 ice cubes. Blend at high speed for 45 seconds.

Chocolate peanut butter cup
Mix 1 chocolate protein supplement according to directions. Add 1 tbsp. all-natural peanut butter and 3 ice cubes. Blend at high speed for 45 seconds.

Protein cup of joe
Mix 1 vanilla or chocolate protein supplement with 50% prepared decaf coffee and 50% skim milk. Add 2 tsp. sugar-free cocoa and 3 ice cubes. Blend at high speed for 45 seconds.

Vanilla-maple drink
Mix 1 vanilla protein supplement according to directions. Add 1 tsp. of pure maple extract and 3 ice cubes. Blend at high speed for 30 seconds.

Lemon crystal
Mix 1 vanilla protein supplement according to directions, substituting water with Crystal Light lemon flavored drink. Add 3 ice cubes and blend at high speed for 30 seconds.

Other Food Options

Raspberry tea chiller
Mix 1 vanilla protein supplement according to directions, substituting water with sugar-free raspberry flavored fruit tea. Add 1/2 tsp. of rum flavoring and 3 ice cubes. Blend at high speed for 30 seconds.

Broccoli soup (makes 3 servings)
1 1/2 c. chopped broccoli
1/4 c. chopped onion
1 c. chicken broth, fat-free
1/2 c. grated fat-free cheese (cheddar or Swiss)
2 c. skim milk
2 tbsp. cornstarch
Dash of pepper
2 scoops of protein
Boil vegetables and broth in large saucepan. Reduce heat and cover until tender (about 10 minutes). Add milk, pepper and cornstarch. Stir until soup thickens. Remove from heat and add cheese, stirring until melted. Cool, then add protein.

Protein pudding
Mix 1 vanilla protein supplement with approximately 2 oz. less liquid than directions call for. Add 3 tbsp. of sugar and fat-free instant pudding and 5 ice cubes. Blend at high speed for 60 seconds.

Orange pudding
3 oz. boiling water
1 1/2 tsp. (2/3 envelope) orange flavored, sugar-free gelatin
7 oz. sugar-free Tang
Protein powder
Mix well and chill

Slush
Pour 6 oz. of fluid into a measuring cup
Add ice until fluid line reaches 12 oz.
Pour ice mixture into blender
Add flavoring and protein powder
Blend on low speed for 2-3 seconds with quick pulses, then blend on high until it's the consistency of a slush.

Raspberry slush
6 oz. sugar-free raspberry flavored fruit tea and ice. 1/2 tsp. of rum flavoring and protein powder. Blend and serve.

Cocoa
Mix 1 tsp. cocoa with 2 packets sugar substitute, a dash of cinnamon and 9 oz. water with chocolate or vanilla protein powder.

Peppermint cocoa
9 oz. water and vanilla or chocolate protein powder
1 tsp. cocoa
1 tsp. chocolate flavoring
1/8 tsp. peppermint extract
Dash of cinnamon
3 packets of sugar substitute

Mousse
Mix 1/2 c. boiling water into gelatin. Stir vigorously with wire whisk until dissolved. Add remaining ingredients to geletin mixture. Mix well. Pour into container with tight-fitting lid. Put in freezer until set and very cold, but not frozen. Mix with electric mixer on high until peaks form and mixture is lightly fluffy. Serve at once. Limit one per day!

Chocolate mint or almond mousse
1/2 c. boiling water
1/2 envelope Knox unflavored gelatin
2 packets of sugar substitute
Dash of cinnamon
1 tsp. cocoa
1 tsp. creme de menthe extract OR 1/2 tsp. pure almond extract
1/2 c. water and chocolate protein powder

Frequently Asked Nutrition Questions

If I can't control what I eat or how much I eat now, how will I be able to do it after surgery? After surgery, eating high-fat, high-sugar foods or eating too much may cause uncomfortable reactions, such as vomiting or dumping syndrome. These reactions make it easier to avoid these foods. Many people say their tastes change after surgery, and they no longer want unhealthy foods. You may notice that foods you used to love won't appeal to you anymore, and you may develop a taste for new and different foods. After surgery, you will no longer be able to depend on food for comfort. For some people, it can be difficult to fill the void that used to be filled by food. Finding healthy, non-food strategies will be important.

How soon will I start losing weight? You should begin losing weight immediately after surgery. Do not be surprised if you weigh a few pounds more when you go home than you did when you entered the hospital. This can be a result of all the fluids you were given in the hospital. Your weight should decrease at a steady pace as long as you follow the diet guidelines. Temporary plateaus can occur; discuss with your dietitian.

Why can I only consume calorie free liquids? The smaller stomach created by the bariatric surgery will not necessarily limit the amount of liquids you will be able to consume. You could potentially drink more calories than your body needs and be unable to lose weight or maintain your weight loss.

Why do I need to limit caffeine? Caffeine may stimulate your appetite. Caffeine is also known to have a negative impact on your blood pressure.

Why can't I drink carbonated beverages? Carbonation can potentially cause significant discomfort.

Why can't I eat any solid food for two weeks before my surgery? The liquid diet prior to surgery is in part to prepare you for the post-surgical diet progression. It is also to assist with some weight loss and to shrink an enlarged liver which could get in the way during the surgery. It is also not a good idea to have a huge meal the night before you begin the liquid diet.

When can I begin using a fiber supplement? You can begin using a fiber supplement within the first week after surgery. Be sure to sip on fluids throughout the day to get maximum hydration. If you have issues prior to surgery, discuss with your dietitian.

Notes

Physical Activity

In order to keep the weight off, you MUST remain physically active. Make exercise part of your daily routine. Schedule your exercise workouts just like any other appointment. Physical activity simply means any movement that uses energy. There are 1,440 minutes in every day – schedule 30 to 90 of them for physical activity!

Benefits

Being active is a key part in living a longer, healthier, happier life. Physical activity can also help you reach and keep a healthy weight and lower your risk for disease. Exercise burns calories, but, in addition, helps preserve and protect muscle tissue during rapid weight loss. Physical activity may:

- Improve self-esteem and feelings of well-being
- Increase fitness level
- Build and maintain bones, muscles, and joints
- Build endurance and muscle strength
- Improve posture and help you be more flexible
- Help maximize weight loss
- Lower risk of heart disease, colon cancer, and type 2 diabetes
- Help control blood pressure
- Reduce feelings of depression and anxiety
- Improve sleep quality

Activity/duration

Increase as able, to goal of doing moderate intensity aerobic activity for at least 30 minutes total daily. Additionally, do 10 minutes of weight/resistance training 3-4 days per week. This is in addition to your usual daily activities. Increasing the intensity, or the amount of time, can have more health benefits. You may need more activity to control your weight.

Examples of moderate aerobic activity include:

- Walking briskly (about 3½ miles per hour)
- Golf (walking & carrying clubs
- Hiking
- Bicycling (less than 10 miles per hour)
- Gardening/yard work
- Dancing

Examples of resistance exercise include:

- Weight training (light workout)
- Resistance bands
- Push ups
- Yoga

Tips on Being Active

Being physical active is important to improving your overall health.

Benefits include:

- Weight loss
- Building and maintaining muscle mass
- Reduced risk of cardiovascular disease
- Lower blood pressure
- Better blood sugar levels
- Improved self-esteem
- More energy

Goal – at least 30 minutes of moderate physical activity daily

Great exercise ideas

- Walk – great for the whole family
- Swim
- Water aerobics
- Bicycle
- Aerobics
- Strength training
- Yoga

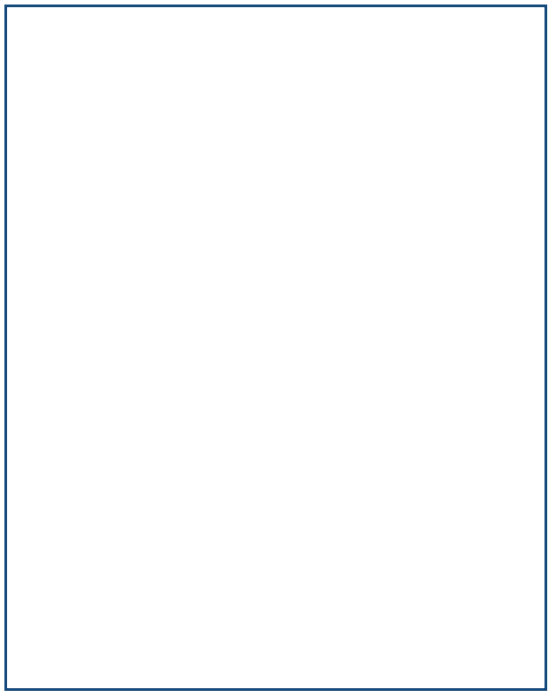
Choose an activity or two that you like to do! You will be surprised by the benefits you receive both physically and mentally.

Simple steps to becoming more active:

- Take the stairs instead of the elevator
- Park farther away from building
- Play with your children
- Get off the bus a few stops early and walk the remaining distance
- Garden – rake leaves, dig in the dirt, mow the law
- Take a walk on your lunch break
- Use the restroom on a different floor of your office building or home
- Dance around the house with your children or spouse
- Clean your house – scrub your tub!
- Walk to your mail box
- Go shopping! – walk the mall
- Contact local recreation department for exercise classes or available walking trails

Picture Page

Many people like to take before and after pictures to record their progress. This page is for you to keep them as part of your journal. We encourage you to take a before and after picture as a visual reminder of all your hard work and success.



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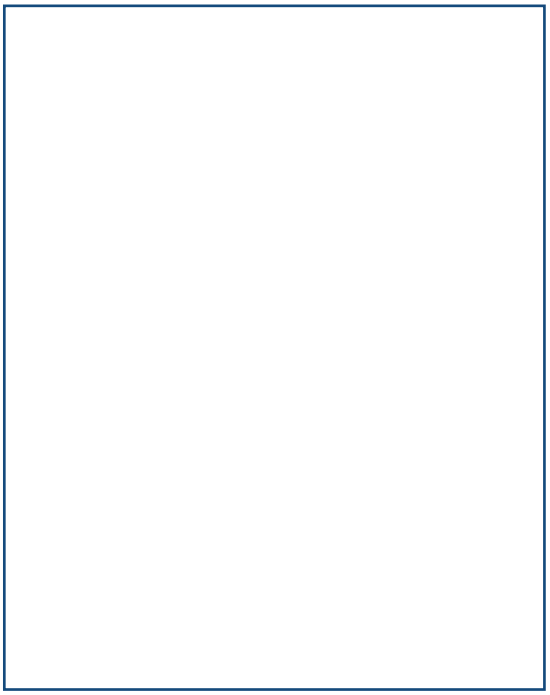

After

Physical Activity Log

Keep a log of your physical activity. Work up to at least 30 minutes of aerobic activity daily. Examples of aerobic activity are walking, biking, running, or swimming.

DATE	TYPE OF ACTIVITY	ACTIVITY DURATION

Other Freqently Asked Questions

How long will I be in the hospital?

One to two days.

How soon can I drive?

You should not drive until you have stopped taking narcotic pain medications associated with surgery and can move quickly and alertly. Usually this takes 7 to 14 days after surgery, but check with your surgeon on what is recommended for you.

Is it possible to regain the weight I lose after surgery?

Yes, it is possible to regain the weight you lose after surgery. Getting the surgery is not a guarantee of lifelong success and it does not automatically make you thinner. Weight loss surgery is only a tool. You must make a lifelong commitment to dietary and exercise changes in order to improve your health and keep the weight off. What you eat, how often you eat, and how much physical activity you get is all very important. You need to follow up with your surgical team and dietitian on a long-term basis. After your weight is stable, you should continue to visit with us at least once a year.

Will I still be able to eat the foods I love?

You will still be able to eat most of the foods you love, but some people will have trouble eating certain foods after surgery.You may have trouble with:

- Sugary foods such as candy, ice cream, syrups, cookies, cakes
- High-fat foods such as chips, fried foods, sausage, and cream soups or sauces
- Starchy foods such as pasta, rice, and doughy breads
- Fibrous foods such as corn, popcorn, and nuts

See “Maintenance Diet”.

What could happen if I don’t follow one or more of the dietary guidelines?

The dietary guidelines in this book are designed to improve your chances of long-term success in weight loss. If you do not follow the guidelines, you may not lose the weight and you may not maintain your weight loss long-term. You could also experience complications such as vomiting, diarrhea, or malnutrition after surgery if you do not adhere to the dietary recommendations for weight loss surgery patients.

How does smoking affect weight loss surgery?

We require that you be smoke-free for six weeks before we will schedule your surgery. We strongly recommend that you stay smoke-free after your surgery. Smoking slows healing time and puts you at higher risk for developing ulcers, and also puts you at significant risk for band erosion.

Will I lose my hair after surgery?

Some short-term hair thinning may occur during times of rapid weight loss. This may begin several months after weight loss surgery and continue for several months. If your hair gets thin, it should grow again when your weight loss slows down. You can reduce hair loss by eating enough protein.

Will I have problems with too much skin? Will I need plastic surgery?

There is no way to predict how much excess skin you may have. Younger patients will have fewer problems with excess skin, but most patients will have some excess skin. Exercise regularly will help to tone the muscles and the skin. Most insurance companies do not cover plastic surgery for excess skin, unless it is medically necessary. We recommend that you wait until your weight is stable before having plastic surgery. Before you have your surgery, your surgical team can tell you how likely you are to need plastic surgery.

Can I drink alcohol after surgery?

BE CAREFUL! After surgery, alcohol goes into your blood stream very fast, so alcohol will affect you much more than it used to.

Yes, you will be able to drink alcohol after surgery, but we recommend that you wait one or two months after surgery before having any alcohol. Right after surgery you will need to work on staying hydrated and alcohol makes it much harder to stay hydrated. REMEMBER: Alcohol-containing beverages contain calories, so limit consumption – this is something you will need to discuss with your dietitian. Beer has a lot of carbonation and will probably make you feel uncomfortable.

Are there any medicines I should NOT take?

Sleeve gastrectomy patients should not take some medicines because they may cause ulcers in your pouch. Do not take any type of non-steroidal anti-inflammatory drugs (also known as "NSAIDs"). Do not take Advil, aspirin, Excedrin, Motrin, Aleve, or ibuprofen. If you are not sure about any medicine, ask the doctor who prescribed the medicine or your weight loss surgical team.

How does weight loss surgery affect pregnancy?

We strongly recommend that you do not become pregnant for 12 to 18 months after surgery. It is important to keep in mind that a woman may become more fertile as she loses weight. We recommend females use two forms of birth control for one year after surgery, such as condoms and BCP.

If you do become pregnant after weight loss surgery, it is very important that you take the right amount of vitamins and minerals. You should consult both our team and your obstetrician during the pregnancy.

Resources

Lakewood Health System Bariatric Team

Call 218-894-8765 with questions or for more information about available resources in our area.

Medical Alert Bracelets

Many patients decide to wear medical alert bracelets or carry a medical alert card in their wallet. Many pharmacies have information about medical alert bracelets and wallet cards.

Websites

www.asmbs.org
An excellent organization with educational and support programs for surgeons and allied health professionals.

www.obesity.org
Leading organization for advocacy and education on obesity.

www.obesityhelp.com
Discusses various weight loss surgeries, success stories, provides diagrams and illustrations of the different procedures, discusses risks and benefits of the various surgeries, offers information about support groups and events, magazine subscription available, etc.

www.baritricsupportcenter.com
Online support group.

www.weightlosssurgery.com

www.thehealthpartner.com

www.bariatricpal.com

Support Organizations

Obesity Action Coalition (OAC)
Mission Statement: The OAC aims to educate patients, family members and the public on obesity and morbid obesity. In addition, the OAC will increase obesity education, work to improve access to medical treatments for obese patients, advocate for safe and effective treatments and strive to eliminate the negative stigma associated with all types of obesity. www.obesityaction.org

American Obesity Association (AOA)
Mission Statement: The mission of the AOA is to act as an agent of change, move society to re-conceptualize obesity as a disease and to fashion appropriate strategies to deal with the epidemic.

Notes