

# Your Weight Loss and Metabolic Surgery Guidebook



Center for Weight Loss and Metabolic Surgery at Meridian Pavilion

# **Table of Contents**

Chapter 1.	Introduction 3
Section 1.	Welcome4
Section 2.	About Obesity
Section 3.	About Weight Loss and Metabolic Surgery7
Section 4.	Your Healthcare Team12
Section 5.	Getting Started14
Section 6.	Getting Active
Chapter 2.	Social Work 21
Section 1.	10 Steps to a Better Body Image22
Section 2.	For Family and Friends23
Section 3.	Emotional Eating25
Section 4.	Mindful Eating27
Section 5.	Non-Scale Goals and Victories28
Section 6.	Positive Thoughts
Section 7.	Thinking Habits
Section 8.	When We Were Young
Chanter 3	Nutrition
chapter of	
Section 1.	
•	
Section 1.	Goal Setting
Section 1. Section 2.	Goal Setting
Section 1. Section 2. Section 3. Section 4.	Goal Setting37Introduction: Planning for Your Journey40Explore Your Current Eating Habits42
Section 1. Section 2. Section 3. Section 4.	Goal Setting37Introduction: Planning for Your Journey40Explore Your Current Eating Habits42Understanding Nutrition49Portions and Meal Planning59
Section 1. Section 2. Section 3. Section 4. Section 5. Section 6.	Goal Setting37Introduction: Planning for Your Journey40Explore Your Current Eating Habits42Understanding Nutrition49Portions and Meal Planning59
Section 1. Section 2. Section 3. Section 4. Section 5. Section 6.	Goal Setting37Introduction: Planning for Your Journey40Explore Your Current Eating Habits42Understanding Nutrition49Portions and Meal Planning59Exercise and Activity64
Section 1. Section 2. Section 3. Section 4. Section 5. Section 6. Section 7.	Goal Setting37Introduction: Planning for Your Journey40Explore Your Current Eating Habits42Understanding Nutrition49Portions and Meal Planning59Exercise and Activity64Preparing for Surgery67
Section 1. Section 2. Section 3. Section 4. Section 5. Section 6. Section 7. Section 8.	Goal Setting37Introduction: Planning for Your Journey40Explore Your Current Eating Habits42Understanding Nutrition49Portions and Meal Planning59Exercise and Activity64Preparing for Surgery67Eating During Recovery69Preventing Problems73
Section 1. Section 2. Section 3. Section 4. Section 5. Section 6. Section 7. Section 8. Section 9. Section 10	Goal Setting37Introduction: Planning for Your Journey40Explore Your Current Eating Habits42Understanding Nutrition49Portions and Meal Planning59Exercise and Activity64Preparing for Surgery67Eating During Recovery69Preventing Problems73
Section 1. Section 2. Section 3. Section 4. Section 5. Section 6. Section 7. Section 8. Section 9. Section 10	Goal Setting37Introduction: Planning for Your Journey40Explore Your Current Eating Habits42Understanding Nutrition49Portions and Meal Planning59Exercise and Activity64Preparing for Surgery67Eating During Recovery69Preventing Problems73Skills for Lifelong Success77Pre-Surgery Nutrition Assessment78
Section 1. Section 2. Section 3. Section 4. Section 5. Section 6. Section 7. Section 8. Section 9. Section 10 Section 11	Goal Setting37Introduction: Planning for Your Journey40Explore Your Current Eating Habits42Understanding Nutrition49Portions and Meal Planning59Exercise and Activity64Preparing for Surgery67Eating During Recovery69Preventing Problems73Skills for Lifelong Success77Pre-Surgery Nutrition Assessment78
Section 1. Section 2. Section 3. Section 4. Section 5. Section 6. Section 7. Section 7. Section 8. Section 9. Section 10 Section 11 Chapter 4.	Goal Setting37Introduction: Planning for Your Journey40Explore Your Current Eating Habits42Understanding Nutrition49Portions and Meal Planning59Exercise and Activity64Preparing for Surgery67Eating During Recovery69Preventing Problems73Skills for Lifelong Success77Pre-Surgery Nutrition Assessment78Nursing80
Section 1. Section 2. Section 3. Section 4. Section 5. Section 5. Section 7. Section 8. Section 9. Section 10 Section 11 Chapter 4. Section 1.	Goal Setting37Introduction: Planning for Your Journey40Explore Your Current Eating Habits42Understanding Nutrition49Portions and Meal Planning59Exercise and Activity64Preparing for Surgery67Eating During Recovery69Preventing Problems73Skills for Lifelong Success77Pre-Surgery Nutrition Assessment78Nursing80Preparing for Your Surgery81

# Chapter 1: Introduction

# UW Medicine



We are here to support you on this important journey.

# **Table of Contents**

# **Page**

Section 1. Welcome	4
Section 2. About Obesity	5
Section 3. About Weight Loss and Metabolic Surgery	7
Section 4. Your Healthcare Team	12
Section 5. Getting Started	14
Section 6. Get Active	16

### Section 1:

# Welcome

To the UW Medicine Center for Weight Loss and Metabolic Surgery

We are looking forward to working with you and your family. You are an important part of the team! To have a successful experience, we need you to take an active role in your care, both before and after surgery.

# **About Your Notebook**

We created the *Guide to Your Weight Loss and Metabolic Surgery* notebook to help you through each step of your surgery. This notebook will help you understand the entire process, starting with your first visit to long-term care after surgery. It includes information about:

- The assessment (evaluation) process
- How you can be an active member of your healthcare team
- The types of surgery we offer
- The changes you will need to make to be successful after surgery

Please keep your notebook with you and bring it to:

- All clinic visits
- The hospital on the day of your surgery
- Your follow-up visits

We will give you more handouts as you go through the program.

# Why Choose UW Medicine?

We have been accredited by the Metabolic and Bariatric Surgery Quality Improvement Program (MBSAQIP) since 2006. This accreditation shows that we meet national standards for providing safe and high-quality care for weight loss surgery patients.

Thank you for choosing us for your healthcare needs!

# Section 2: About Obesity

For patients having weight loss and metabolic surgery

This section explains what obesity is, how it affects your health, and how surgery can help. It also covers other weight loss options and the health benefits of losing weight.



It is important to learn how losing weight can improve your health.

# What is obesity?

*Obesity* is a *chronic* (long-term) disease that can get worse over time. According to the CDC (Center for Disease Control and Prevention), 1 in 5 children and 2 in 5 adults in the United States have obesity.

### How does obesity affect health?

- Obesity can cause:
  - Type 2 diabetes
  - Heart disease
  - OSA (obstructive sleep apnea)
  - Stroke
  - Joint degeneration
  - Cancers
- Obesity is the 2<sup>nd</sup> leading cause of preventable death. The 1<sup>st</sup> cause is smoking.
- About 65% of people with a *BMI* (body mass index) of 27 have at least one health problem caused by obesity. Learn more about BMI on page 6.

### What other problems does obesity cause?

Obesity can affect your quality of life and your ability to do daily activities. It can make it difficult to work. People who have obesity often face discrimination and unfair stereotypes. This can harm their well-being and make it harder for them to get the healthcare they need.

Obesity can also affect your finances. People with obesity pay about \$1,800 more on healthcare each year than people with healthy weight. A 2020 report from the Milken Institute shows that obesity costs the U.S. more than \$1.4 trillion each year in healthcare and other expenses.

# How will losing weight improve my health?

For people who are overweight, studies show that:

- Losing 7% of your body weight can lower your risk of getting diabetes by 50%.
- Losing 5% to 10% of your body weight can improve your blood pressure, cholesterol, and blood sugar levels.

# What is body mass index?

Your *body mass index* (BMI) is a number that shows how much body fat you have. It is based on your height and weight.

To find your BMI, you can use one of the formulas below. There are also many free calculators available online.

- Using pounds and inches: Divide your weight in pounds (lbs) by your height in inches (in) squared. Multiply the result by 705. (BMI = lbs/in<sup>2</sup>, x 705)
- Using kilograms and meters: Divide your weight in kilograms (kg) by your height in meters (m) squared. (BMI = kg/m<sup>2</sup>)

The table on the right shows how your BMI relates to your weight category.

# Do I qualify for surgery?

Patients who do **not** qualify for surgery include:

- People who use tobacco or illegal drugs.
- People who have an untreated eating disorder, and mental or emotional issues.

Your insurance plan may have other requirements for covering this surgery.

# What are other weight loss options?

Studies show that after 1 year:

- Eating a low-calorie diet can help you lose 5 to 10 pounds, but most people regain the weight they lost.
- Taking weight-loss medicines can help you lose 8% to 10% of your weight. But 95% people regain weight after they stop taking the medicine.

Talk with your care team about which weight loss plan is best for you.

Category	ВМІ
Normal Size	18.9 to 24.9
Overweight	25 to 29.9
Class I, Obesity	30 to 34.9
Class II, Serious Obesity	35 to 39.9
Class III, Severe Obesity	40 and higher

# Section 3: About Weight Loss and Metabolic Surgery

Roux-en-Y gastric bypass, and sleeve gastrectomy

This section explains Roux-en-Y gastric bypass and sleeve gastrectomy, including the procedures, benefits, risks, and recovery. It also covers laparoscopic surgery and the need for lifelong vitamins and healthy habits after surgery.

# What is weight loss and metabolic surgery?

Weight loss and metabolic surgery can treat severe obesity when diet, exercise, and medicines have already been tried and have failed.

UW Medicine Center for Weight Loss and Metabolic Surgery offers 2 types of weight loss surgery:

Your care team will help determine the best surgery option for you.

- Roux-en-Y gastric bypass
- Sleeve gastrectomy

Your surgery will be done in the Surgery Pavilion at UWMC - Montlake campus.

# About Roux-en-Y Gastric Bypass Surgery

Roux-en-Y (pronounced "roo-en-why") gastric bypass is also called "gastric bypass surgery." It is known as the "gold standard" surgery for obesity treatment. It is very safe for most patients. It also has the best success in helping patients with long-term weight loss.

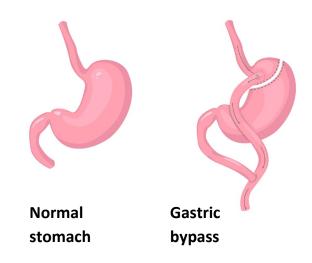
Gastric bypass surgery is both a *gastric restrictive* and *malabsorptive*:

- Gastric restrictive surgery reduces the size of your stomach.
- Malabsorptive surgery bypasses (skips) part of your small intestine.

### What happens during gastric bypass surgery?

Your surgeon will divide your stomach into 2 sections: a small section and a large section.

- The small section, called the pouch, is connected to your small intestine. This pouch becomes your new smaller stomach. This limits the amount of food you can eat.
- The large section of your stomach is called the remnant stomach. It will stay in place, but food will not be digested there anymore.



Page 7 of 93 | Chapter 1. Introduction Your Weight Loss and Metabolic Surgery Guidebook Center for Weight Loss and Metabolic Surgery | Box 358819 11011 Meridian Ave N. Suite 101, Seattle WA 98133 | 206.598.6014

### What should I know about gastric bypass surgery?

- You will only be able to eat small portions of food.
- You must avoid high-sugar and high-fat foods because of the risk of dumping syndrome. (Read more about dumping syndrome in the Nutrition Chapter).
- This surgery bypasses (skips) the part of the intestine that absorbs vitamins and minerals, so you will need to take supplements for the rest of your life.
- Most weight loss happens within 12 to 18 months after surgery.
- Gastric bypass surgery is rarely reversed (it is usually permanent).

### What are the benefits of gastric bypass surgery?

In addition to a better quality of life after surgery, gastric surgery can improve your health.

- Compared to other weight loss surgeries, gastric bypass results in:
  - Faster improvement in blood sugar control for people with diabetes or insulin resistance
  - Quicker decrease in symptoms of gastric reflux
  - Greater average weight loss
- For patients with diabetes:
  - 85% had improvements in their symptoms
  - 15% to 25% had their diabetes in remission
- Symptoms ended in 50% to 80% of patients with high blood pressure.
- Symptoms ended in 80% of patients with sleep apnea.
- Symptoms ended in 90% of patients with acid reflux or heartburn.

# What are the risks of gastric bypass surgery?

All surgeries have some risks. Your risks with gastric bypass surgery will depend on your age and what other health problems you have.

### In the first 30 days after this surgery:

- Death occurs in 0.3% to 1% of patients (less than 1 out of 100)
- These problems may happen, and if so you will need treatment:
  - Intestinal leak
  - Blood clot
  - Bleeding
  - Bowel obstruction (blockage)

### **Later Problems**

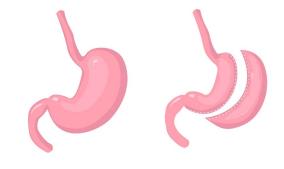
Some problems can happen years after surgery, including:

- Bowel obstruction (blocked intestine)
- Stomach ulcers (painful sores in the intestines) caused by poor nutrition, alcohol, or NSAIDs (nonsteroidal anti-inflammatory drugs, such as ibuprofen)
- Vitamin deficiencies
- Reactive hypoglycemia (low blood sugar)
- Internal hernia

# **About Sleeve Gastrectomy**

In sleeve gastrectomy surgery, 85% to 90% of the stomach is removed by stapling and dividing it vertically. The stomach that is left is in the shape of a slim banana or a sleeve. Removing a large part of the stomach reduces the amount of food you can eat. It may also affect the hormone called ghrelin that controls appetite.

# What should I know about sleeve gastrectomy surgery?



Gastric

sleeve

Normal stomach

As with gastric bypass surgery:

- You must eat less to lose weight. Expected weight loss with a sleeve gastrectomy may be less than with a gastric bypass.
- This procedure cannot be reversed.

### What are the benefits of sleeve gastrectomy surgery?

In addition to having a better quality of life after surgery:

- In patients with diabetes:
  - 60% had improvements in their symptoms
  - Symptoms ended for 20% to 30% of patients with diabetes
- In patients with high blood pressure, 50% to 80% had their symptoms improve.
- For patients with sleep apnea, 60% to 80% had their symptoms improve.

# What are the risks of sleeve gastrectomy surgery?

All surgeries have risks. Your risks with sleeve gastrectomy surgery will depend on your age and what other health problems you have.

### In the first 30 days after this surgery:

- Death occurs in 0.1% to 0.5% of patients (less than 1 out of 100)
- These problems may occur and need more treatment:
  - Intestinal leak
  - Blood clot
  - Bleeding
  - Stomach stricture (narrowing)

### **Later Problems**

Some problems can happen years after surgery, including:

- Increased acid reflux or heartburn
- Trouble swallowing food
- Need for another surgery: 0.3% to 1% of patients (1 out of 100)
- Reactive hypoglycemia (low blood sugar)

# What is laparoscopic surgery?

*Laparoscopic surgery* uses a device called a laparoscope. A laparoscope has a camera that helps the surgeon guide small instruments into the belly through narrow tubes or ports. The surgeons' hands do not enter the body.

In laparoscopic surgery, 5 or more small incisions (cuts) are made. In open surgery, 1 large incision is usually made.

Compared to open surgery, laparoscopic surgery patients have:

- Fewer infections, hernias, and other wound problems
- Less pain after the first week
- Shorter hospital stays and quicker recovery
- Quick return of bowel function
- Fewer heart and lung problems



A doctor doing laparoscopic surgery

# Which surgery is right for me?

Gastric Bypass	Sleeve Gastrectomy
<ul> <li>Bypass is better for severe diabetes, heartburn, and gastroesophageal reflux disease (GERD).</li> </ul>	<ul> <li>May increase reflux and heartburn in some people.</li> </ul>
<ul> <li>May have a slightly higher surgical risk.</li> <li>More stomach problems when eating high- sugar foods. This can help you avoid these foods.</li> </ul>	<ul> <li>Less effect on diabetes than bypass.</li> <li>Long-term results beyond 10 years are still being studied.</li> </ul>

### Review

- Gastric bypass and sleeve gastrectomy surgeries are usually permanent.
- These surgeries are **tools** to help you eat right. They do **NOT** cause weight loss or prevent weight regain by themselves.
- Patients have the best results after surgery if they also have:
  - Regular follow-up
  - Regular exercise
- Weight loss varies for each surgery. Of the 2 options, sleeve gastrectomy leads to less weight loss.

### After any weight loss and metabolic surgery:

- You will need to take vitamins and mineral supplements for the rest of your life.
- Alcohol dependency is a risk after gastric bypass. We strongly advise against drinking **any** alcohol after surgery.
- Do not take any NSAIDS (nonsteroidal anti-inflammatory drugs, such as ibuprofen)
- Do not ever smoke, vape, or use any nicotine products
- If you can become pregnant, it is important to know:
  - You have a greater chance for unplanned pregnancy.
  - You have a greater risk for problems in pregnancy in the first year after surgery.
  - You should **not** become pregnant for 2 years after surgery. Ask your care team if you have any questions about this.

# Section 4: Your Healthcare Team

When you have weight loss and metabolic surgery

This section introduces your UW Medicine healthcare team for weight loss and metabolic surgery. The team includes surgeons, dietitians, social workers, and other specialists who will support your surgery and recovery. Regular follow-ups are key to long-term success.

We want your surgery and recovery to be successful. Your team at UW Medicine Center for Weight Loss and Metabolic Surgery will do everything we can to help you succeed. **But it is up to you to:** 



We are here to support you throughout your weight loss journey.

- Follow your care plan
- Come to all your clinic visits

### Let us know right away when you have any problems.

Patients who have regular follow-up visits have the best success after surgery. Please schedule a visit with us if you start to gain weight, have nausea and vomiting, or have any other problems. We will help you get back on track. We want the best for you!

# Who provides care at the center?

Here are some of the providers who will support you before and after your weight loss and metabolic surgery.

- Bariatric Surgeon: This doctor specializes in treating obesity. You will see your surgeon:
  - At your first and final clinic visits before surgery
  - At the hospital before surgery
  - During your hospital stay after surgery
  - At your follow-up visits right after surgery
- Nurse Practitioner and Physician Assistant: Our nurse practitioner and Physician Assistant (PA) help provide your care before and after surgery. They work closely with the other members of your care team.

You may meet your nurse practitioner and PA at your first clinic visit. After surgery, they will see you at many of your follow-up visits and yearly checkups.

- Surgical Residents, Fellows, and Medical Students: These doctors and students are trained by your surgeons. They will help provide your care.
- **Registered Dietitian**: A registered dietitian promotes healthy eating and long-term lifestyle changes. Working with your dietitian will help you reach and maintain your desired weight.

### Your dietitian will:

- Meet with you before surgery to talk about your meal plans
- Help you prepare for surgery and for the changes you will need to make
- Meet with you after surgery to help you get started on your new life
- Create a food plan that is right for you
- Help you avoid problems with eating and food
- Social Worker: Your social worker will meet with you to learn about your social situation, support system, eating behaviors, mental health issues, and substance use history. Your social worker will use this information to help you make the lifestyle changes that are needed before surgery.
- **Registered Nurse:** Your registered nurse (RN) will help you prepare for surgery, talk with you about what to expect after surgery, and help you identify the lifestyle changes you will need to make to ensure that your surgery is a long-term success.
- **Patient Care Coordinator:** Our Patient Care Coordinator (PCC) schedules your clinic visits, including your pre-anesthesia visit. The PCC also checks your insurance benefits and authorizes and schedules surgeries.
- **Patient Services Specialist:** Our Patient Services Specialist (PSS) schedules patients for the bariatric seminar, new patient visits, and follow-up visits after surgery.

# Section 5: Getting Started

Finding out if weight loss and metabolic surgery is right for you

This section explains the steps to take before surgery, including tests and assessments to make sure the surgery is safe for you. It also covers what to expect during your first clinic visit and how we help you prepare for surgery.

# **Your First Clinic Visit**

During your first visit, you will talk with your care team about your medical history and have a physical exam. We will talk with you about surgery and answer your questions. We will also schedule tests that will help us know if surgery is right for you.



Your safety is our top priority! Tests help us know if surgery is safe for you.

### **Tests and Assessments**

Before we can do your surgery, we need to know more about your health by doing some tests. These tests will help us know if having surgery is safe for you. Here are some of the tests and assessments we will schedule for you:

- **Blood Tests:** After you enroll in our program, our surgeon will send a letter to your primary care provider (PCP). The letter will include a list of the blood tests (labs) you need to have. Your PCP will order the labs and work with you to correct problems with your blood levels, if needed.
- **Dietary Assessment:** You will meet with our dietitian to talk about the diet changes you will need to make after surgery. You will learn about healthy eating and how to maintain a healthy weight.
- Social Work Assessment: You will meet with a social worker for a *psychosocial* (mental health) assessment. The social worker will ask you questions about your life so that we can help you prepare for the surgery. This visit takes about 60 to 90 minutes.
- Swallowing and Heart Burn Testing (pH/Manometry): These tests measure how well your swallowing muscles and *esophagus* (throat) work. If you *have acid reflux* (heartburn), it will also show how severe it is.
- Upper GI (Barium Swallow): For this test, we will ask you to swallow a substance called barium sulfate. We will take X-rays of your esophagus and stomach. This test helps us find the cause of swallowing problems.

- **Esophagogastroduodenoscopy (EGD):** During an EGD, we use a flexible tube with a small light and camera. The tube goes through your mouth and throat and into your stomach. The light helps your doctor see the inside of your stomach. We will then take a small biopsy (tissue sample) of your stomach lining. We will test this sample to see if you have an *H pylori infection*. This is a bacterial infection that causes stomach inflammation (gastritis) and other stomach problems.
- Sleep Study (Sleep Apnea Testing): If you have sleep apnea, your throat relaxes during sleep and blocks your throat. This causes you to stop breathing for a few seconds at a time. Sleep apnea can be very serious and is linked to a higher risk of death. If you do not know if you have sleep apnea, we will refer you for a sleep study. This study checks to see if you have apnea, and how severe it is.

If you have sleep apnea, you must follow your treatment plan before and after surgery. This means using your sleep apnea device for at least 4 hours a night, at least 70% of nights.

- **Medicine Consult:** Your surgeon may want you to meet with a UW Medical Center internal medicine specialist. This provider will make sure that it is safe for you to have this surgery.
- **Physical Therapy and Occupational Therapy:** We may test your physical abilities before surgery to make sure it's safe for you to be active. If you plan to have surgery, you must exercise for 150 minutes every week.

# **Test Review**

When we have received the results of all your tests, we will schedule your test review.

- First, you will meet with a surgeon to review all your test results. This surgeon will tell you if weight loss and metabolic surgery is a good option for you.
- Second, you will meet with a dietitian. You will learn more about the very low-calorie diet you will need to follow before surgery.
- Third, you will meet with a nurse who will explain what you need to do to prepare for surgery.

# **Insurance and Scheduling**

If you decide to proceed with surgery, our Patient Care Coordinator (PCC) will get authorization from your health insurance company. Once your surgery is authorized, the PCC will call you to schedule a surgery date.

# Section 6: Getting Active Exercising for weight loss success

This chapter explains the exercise you must do to qualify for surgery. It outlines an exercise plan and includes an exercise log for keeping track of your activity.



There are many fun ways to add exercise to your day!

# Why is exercise so important?

Your body needs exercise both before and after surgery to stay strong and healthy. Being active also helps with weight loss.

To reach your weight loss goal after surgery, it is important to do regular aerobic exercise. *Aerobic* exercise is any activity that makes you breathe harder and gets your heart beating faster, like swimming or brisk walking.

Before surgery, you must:

- Keep track of your activity in an exercise log.
- Bring your log to every clinic visit and review it with your care team.
- Do aerobic exercise at a *moderate intensity* for at least 10 minutes at a time, for a total of at least 30 minutes a day, 5 days a week.
  - Use the "Target Heart Rate" or "Rate of Perceived Exertion" tools to measure your exercise *intensity*. This will help you know if your activity counts towards your exercise goal (see pages 18, 19, and 20).
  - Talk with your provider before you start exercising to make sure your target heart rate is safe for you. If you take beta-blocker medicine or have certain health conditions, you may need to adjust your exercise intensity. (See page 19 for a list of beta-blocker medicines that can affect your heart rate.)

# How can I stay safe while exercising?

Follow these steps every time you exercise:

- Warm up for 5 minutes before doing your aerobic exercise. Walk slowly, move your arms and legs, and do some light stretching.
- Slowly increase the amount of time you do aerobic exercise. Add 1 to 2 minutes each week to your total time.
- Start with your current number of daily steps and try to take 100 more each day.

- Increase the intensity (difficulty) of your workout to reach your Target Heart Rate goal. Stay at that level for at least 15 minutes.
  - At first, you may only be able to do this for a few minutes, but keep working toward going longer and increasing your intensity.
  - As you get stronger, you will need to work harder to reach your Target Heart Rate.
- Near the end of your workout, slow down for 5 minutes to let your body cool down.

# Warning Signs When You Exercise

Stop exercising right away if you have any of these symptoms. Call for help if needed.

- Chest pains and/or pain that spreads to your arm while exercising.
- Sweating that continues after you stop exercising.
- Pain that keeps getting worse. It is normal to feel some aches and soreness, but ongoing or increasing pain can lead to an injury.
- Headaches that keep coming back.
- Feeling lightheaded during or after exercise.
- Numbness, tingling, or weakness in an arm or leg.
- Shortness of breath after you stop exercising.
- Nausea and vomiting.

### How to Enjoy Your Exercise

Exercise can be fun and can improve your mood! Exercise with a friend or find an activity you enjoy doing. You can try:

- Marching briskly in place while sitting or standing
- Walking briskly (if you have joint problems or balance issues, use walking poles)
- Dance classes
- Elliptical trainer
- Exercise classes at your local gym
- Exercise videos on cable, internet, DVD, or YouTube
- Therabands and physical therapy exercises that raise your heart rate
- Arm bikes

If you have arthritis or joint pain, try:

- Water aerobics
- Bicycling
- Swimming
- Seated exercises like "Sit and Be Fit" on public television or YouTube

# Do my daily activities count as exercise?

Your daily activities do not count toward your aerobic exercise goals. They do not make you breathe hard or burn many calories unless you do them at a quick pace for a long time (see "Target Heart Rate" below).

But it will help with your fitness goals if you take **at least** 5,000 steps every day when doing your regular activities. Here are some activities that will help you increase your steps:

- Walking your dog
- Walking from your car to the store (try parking farther away!)
- Walking to the mailbox
- Walking around stores or the mall
- Doing a few squats in the kitchen while you cook
- Mowing the lawn
- Playing with your children or pets

# **Target Heart Rate**

Your target heart rate helps you see how your body handles **moderate intensity** exercise. It also helps you know if you are working at a level that improves your fitness (makes you stronger). Try to reach and stay in your target heart rate zone during each workout.

- Free apps for Android and iPhone can help you calculate your target heart rate and check how fast your heart is beating. If you do not have a smartphone, see "Finding Your Target Heart Rate" below.
- Some watches and fitness trackers, like Fitbit or Apple Watch, can also show you your heart rate.
- If your physical therapist gives you a different target heart rate, use that number as your goal.

### **Finding Your Target Heart Rate**

Ste	eps	What to Do	Your Number	What It Means
1.	Find your base number	Subtract your age from 220 Example: 220 - 50 = 170	Your Base Number:	This is your maximum heart rate. Use this number to find your answers to steps #2 and #3.
2.	Find your moderate-intensity range	Multiply the answer to #1 by .65 <i>Example: 170 x .65 = 110</i>	Your Moderate-Intensity Target Heart Rate	This is your target heart rate for <b>moderate- intensity</b> exercise.
3.	Find your high-intensity range	Multiply the answer to #1 by .85 <i>Example: 170 x .85 = 145</i>	Your High-Intensity Target Heart Rate	This is your target heart rate for <b>high-intensity</b> exercise.

# How to Check Your Heart Rate

Use your fingers (not your thumb, which has its own pulse) to find your pulse on the inner part of your wrist just below your thumb. You can also gently find the pulse in your neck, using two fingers under your jaw. Do **not** press hard.

Count the number of beats for 30 seconds and multiply by 2. (Or you can count the number of beats for a full minute instead.)

Example: 40 x 2 = 80 bpm (beats per minute)

This is your heart rate, or the number of times your heart is beating in 1 minute.

# What if I am taking beta-blockers?

If you are taking any type of beta-blockers, you must use the "Rate of Perceived Exertion" scale (see below) instead of the Target Heart Rate method to set your exercise goals.



Check your pulse in your wrist with two fingers.



Check your pulse in your neck very gently.

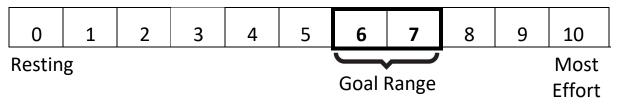
Here are some beta-blocker medicines. The names in parentheses are common brand names:

Atenolol (Tenormin)	Nadolol (Corgard)
Bisoprolol (Zebeta)	Nebivolol (Bystolic)
Carvedilol (Coreg)	Propranolol (Inderal LA, InnoPran XL)
Metoprolol (Lopressor, Toprol-XL)	

# **Rate of Perceived Exertion**

The Rate of Perceived Exertion is another way to measure your exercise tolerance. This scale will help you know if you are working at a safe level for your current ability.

- Rate how hard it is to do a certain exercise on a scale of 0 to 10, with 10 being the greatest effort.
- Your goal is to stay at a level of exercise that you rate **between 6 and 7**. At this level, you are breathing hard, are still able to talk, but find it hard to sing.



# **My Exercise Log**

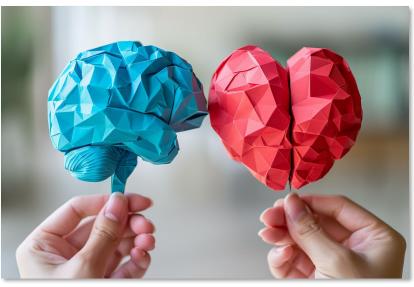
Use your exercise log to record your aerobic exercise activities. You can make copies or use blank paper if you need more space.

Date	Description	<b>Time</b> Goal is 30 minutes per day
Example:		
5/1/17	1 hour water exercise	45 min

# Chapter 2: Social Work

This chapter provides support and tools for building a healthy relationship with food and yourself. It explores important topics like emotional and mindful eating habits, positive thinking, and celebrating non-scale victories. Your team is here to support you, every step of the way, as you work toward a happier and healthier you.





We are here to support your mental health and wellbeing.

# 

# Section 1: 10 Steps to a Better Body Image

Seeing yourself in a new light

One handout cannot tell you how to turn all your negative body thoughts into a positive body image. But it can suggest healthier ways of looking at yourself and your body. The more you practice these new thought patterns, the better you will feel about who you are and the body you naturally have.

# Here are 10 ways to help you see your body in a more positive light:

- Appreciate everything your body can do: Every day, your body carries you closer to your dreams. Celebrate all the amazing things your body does for you, such as running, dancing, breathing, laughing, and dreaming.
- Keep a list of the top 10 things you like about yourself: Think about things that aren't related to how much you weigh or what you look like. Read your list often. Add to it as you become aware of more things to like about yourself.
- **Remind yourself that "true beauty" is not just skin-deep:** When you feel good about yourself and who you are, you carry yourself with a sense of confidence, self-acceptance, and openness that makes you beautiful. Beauty is a state of mind, not a state of your body.
- Look at yourself as a whole person: When you see yourself in a mirror or in your mind, choose not to focus on specific body parts. See yourself as you want others to see you as a whole person.
- **Surround yourself with positive people:** It's easier to feel good about yourself and your body when you're around others who are supportive. Spend time with people who recognize the importance of liking yourself just as you naturally are.
- Shut down thoughts that your body is not "right" or that you are a "bad" person: You can overpower those negative thoughts with positive ones. When you start to tear yourself down, build yourself back up with affirmations that work for you.
- Wear clothes that are comfortable and that make you feel good about your body: Work with your body, not against it. You deserve to feel great!
- Think carefully about social media: Notice when images, slogans, or attitudes make you feel bad about yourself or your body. Protest these messages by writing a letter to the advertiser or by talking back to the image.
- **Do something kind for yourself:** Take time to appreciate and care for your body. Take a bubble bath, make time for a nap, or find a peaceful place outside to relax.
- Instead of worrying about food, calories, and your weight, spend your time and energy helping others: Supporting other people can help you feel better about yourself. You can make positive changes in our world!



Surround yourself with positive people.

# Section 2: For Family and Friends

### Supporting a loved one who has bariatric surgery

Bariatric surgery is just one step on the journey to better health. When someone has this surgery, they also need to make long-term changes if they want to lose weight and keep it off.

You are reading this because someone you care about is having this surgery. It's important to understand that you are a critical part of their support system. They are counting on you to help them make these long-term changes.

### What can I do to support my loved one's decision to have surgery?

Sit down together and take the time to listen carefully. Be sensitive. Know that this decision was not easy to make. Ask them what they know about the surgery. Find out why they feel it is a good choice for them. If you aren't sure how to support them, ask them what would be most helpful.

### How will bariatric surgery affect my loved one?

After surgery, your loved one may feel many positive effects. They may have more energy and more selfconfidence. Once they heal from the surgery, they may be able to be more physically active.

At the same time, the changes related to bariatric surgery can be stressful and emotional. They may find it hard to stick to their new diet, an exercise program, or other lifestyle changes.

Many people use food to cope with their emotions. If this has been true for your loved one, they may develop problems after surgery such as drinking, drug use, gambling, or shopping. Your ongoing support after your loved one's surgery is vital. You can help them find healthier ways to cope with stress or strong feelings.

### How can bariatric surgery affect family and friends?

When someone has bariatric surgery, it can be hard on their family and friends, too. To support a loved one who has this surgery, you might need to make changes to your own habits and lifestyle.

Be open with the person who had surgery. Explain that you want to help, but that you have feelings about making changes. Be honest about what you want and need.

# We always celebrate with food. How do I support my loved one if their food habits have changed?

Many families connect over food. People often celebrate special events with big meals. Cooking, eating, and talking about food may be an important part of how family members relate.

Talk with your loved one about how your traditions can focus less on food. Ask them how they would like to spend the holiday or special event. It will be hard for them to give up old traditions. Make a list of ways to celebrate together that do not involve cooking or eating.

### How can I communicate in a way that is supportive?

- Compliment your loved one when you see positive changes, and do not criticize them when they slip into old habits.
- Resist the urge to be the "food police." Join your loved one in making healthier choices.
- Avoid making comments about weight after surgery. Many people do not feel comfortable having others talk about their weight. Be careful what you say.
- Try to focus on positive changes that do not involve weight loss or how they look. Help them focus on the positive steps they have taken.

#### What can I do if they start to return to old habits?



Your support is vital when someone you love has bariatric surgery.

It is important to understand these things:

- Surgery is only a tool to help someone maintain healthy eating habits and an active lifestyle. It can be hard to make all the long-term changes that are needed for successful weight loss.
- A bariatric patient might return to their old eating habits. This can happen as their body starts to adjust after surgery and they can eat more.
- Old habits do not just go away. It takes a lot of effort to change them. Think about your own habits and ask yourself, "Am I eating and behaving in a way that will support my loved one after surgery?"
- Talk with your loved one about your concerns without criticizing or judging them. Remember that they can get help from their bariatric surgery team. Encourage them to go to their follow-up visits and support group.

### **Your Support Plan**

Use the spaces below to list 5 ways that you plan to support your loved one. Some examples are, "I will set a time with my loved one to sit down once a week and plan our meals together," "I will set the table, including a small plate for my partner so that they always feel included at mealtime," or "I will pick three days a week that we will go on walks together."

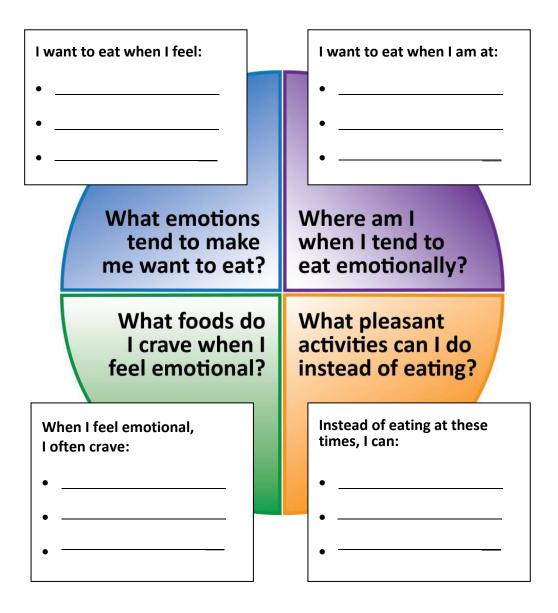
1.	 
2.	 
3.	 
4.	 
5.	 

# Section 3: Emotional Eating How to change the habit

### Do you eat to feel better?

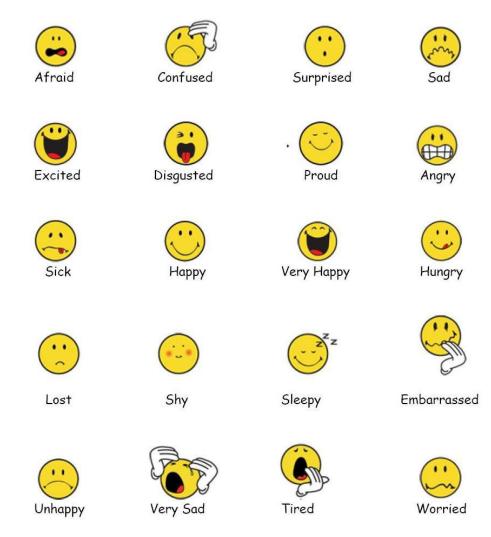
Many people overeat for emotional reasons. Bariatric surgery does not help with this type of eating. Learning to cope with your emotions in other ways will help you both before and after surgery.

This graphic will help you review when and why you eat for emotional reasons. What are your best ways to cope at these times?



### **Emotions That May Trigger Eating**

Do you tend to overeat when you feel some of these emotions? Circle the feelings that often make you feel like overeating.



You're on your way! Remember to reward yourself for trying new activities. What can you do to reward yourself when you have worked so hard to make a change? List your ideas here:

•	 
•	 
•	 
•	 

# Section 4: Mindful Eating

Benefits and a practice exercise

### **Benefits of Mindful Eating**

- Mindful eating is about responding to your body's cues for hunger, fullness, and enjoyment of food.
- Mindful eating is gentle and nonjudgmental. The goal is to keep focusing on what your body needs and how you are feeling. Go at your own pace.
- Mindful eating encourages gentleness and self-acceptance. Accepting where you are right now is important to feeling better long-term.
- This exercise may be challenging at first, but it is simple and easy to practice. There are no special foods or fads. You pick the food.
- Mindful eating is a helpful tool that will support you for the rest of your life.
- It is based on research! Studies show that mindfulness helps you understand and manage your eating habits and impulses.
- It's for everybody. Mindful eating is great for anyone, including people who overeat, under eat, eat irregularly, and chronic dieters.
- Instead of just saying, "don't diet," mindfulness gives you focus and options for what to do.

### **Mindful Eating Exercise**

- 1. **Choose mindfully.** Choose a piece of food that you enjoy maybe nuts, fruit, a piece of chocolate, or an orange slice.
- 2. Observe. Describe it to yourself. What is the color and shape?
- 3. **Smell.** Notice how the smell affects you. Does it remind you of anything? What memories or thoughts does it trigger?
- 4. **Take time to taste.** Describe the way it tastes. Include your experience of the texture, spices, and flavors.
- 5. **Notice thoughts and feelings.** Pay attention to the emotions and thoughts that come to mind. Do you feel happy? Sad? Satisfied? Craving more?
- 6. Chew slowly. Notice how the texture changes.
- 7. **Follow** the sensation down your throat as you swallow.
- 8. **Practice** taking a mindful bite.



Mindful eating is gentle and nonjudgmental.



Choose a food that you enjoy eating for this exercise.

# Section 5: Non-Scale Goals and Victories

A self-care worksheet

After bariatric surgery, it is helpful to have goals that do not involve weight loss. For example, being healthier and able to be more physically active are just as important as numbers on the scale.

### **Non-Scale Goals**

Take some time before surgery to think about what your *non-scale goals* will be. These are goals that are not related to the numbers on the scale. After surgery, be sure to celebrate your "non-scale victories."

To set non-scale goals, think about the things you want out of bariatric surgery besides losing weight. Be as specific as you can! Some examples are: "being able to walk a 5K," "better diabetes control," or "better blood sugar management."

There are many goals

There are many goals you can meet besides losing weight.

Take time now to write down 3 specific non-scale goals for yourself:

1.	2.	3.

### **Non-scale Victories**

It's easy to forget the many positive changes that happen after bariatric surgery. Taking time to write them down can remind you how far you've come and how much you've achieved.

Some examples of non-scale victories are: "I was able to sit on the floor to play with grandkids," or "I have been walking around my neighborhood every evening after dinner."

Use this space to write down some non-scale victories after surgery. Celebrate your wins!

1.	2.	3.

# Section 6: Positive Self-Talk Helping yourself cope

We have all been through some very stressful times. Knowing that we made it through hard times in the past can help us deal with current problems. When you're stressed, using positive self-talk can help you cope. You can say kind, encouraging words to yourself and be your own personal coach!

### **Helpful Statements**

Here are some things you can say to yourself when you're feeling stressed. Write down your favorite ones and keep them with you.

- Stop and breathe. I can do this.
- This will pass.
- I can be anxious/angry/sad and still deal with this.
- I have done this before, and I can do it again.
- This *feels* bad, it's a normal body reaction. It will pass.
- These are just feelings. Feelings are not facts, and they will go away.
- This situation won't last forever.
- Short-term pain for long-term gain.
- I can feel bad and still choose to follow my new and healthy path.
- I don't need to rush. I can take things slowly.
- I have survived before, and I will survive now.
- I feel this way because of what I've been through in the past but right now, I am safe.
- It's okay to feel this way. It's a normal reaction.
- Right now, I am not in danger. Right now, I'm safe.
- Thoughts are just thoughts. They're not necessarily true.
- This is hard and uncomfortable, but it's only short-term.
- I can use my coping skills and get through this.
- I can learn from this and it will be easier next time.
- Keep calm and carry on.



The way you speak to yourself has a big impact on your mood and wellbeing.

### **Your Personal Statements**

What kinds of stress have you experienced lately? Are there stressful situations coming up soon in your life?

In the table below, write down 5 examples of problems or difficult feelings that you have experienced or are worried about. Then choose a positive thought or statement for each one that will help you stay calm and cope.

Write these down on a small card. Carry it in your pocket or bag so that you'll have it handy when needed.



Write down the positive thoughts that will work best for you.

Hard or Stressful Situation	Coping Thought / Positive Statement
1.	
2	
2.	
3.	
4.	
5.	

# Section 7: Thinking Habits

# Taking charge of your thoughts

Most of us have thinking habits that aren't helpful. This section describes thinking habits that can cause problems, and how to change them.

Once you know your usual thought patterns, you can start to notice when they occur. This is often right before and during stressful situations. When you are aware of your thoughts, you can challenge them. This will help you see things in a different way. Read the unhelpful thoughts below. When do you have thoughts like this?

### **Mental Filter**

Our mental filter can make us focus only on what confirms what we already know. When this happens, we ignore anything that doesn't fit our usual mindset. This can be like looking through dark glasses, only seeing what we perceive as negative and not seeing things that might be more positive or realistic.

*What to ask yourself:* Am I only noticing the bad stuff? Am I ignoring the positives? Am I wearing "gloomy glasses"? What is more realistic?

### Prediction

Prediction is believing we have a crystal ball and know what will happen in the future.

*What to ask yourself:* Am I thinking that I can predict the future? How likely is it that my worst fears might really happen?

### **Black-and-White Thinking**

With this habit, we see something or someone as only good or bad, or right or wrong. We don't see any "shades of gray" in between.

*What to say to yourself:* It's not either all white or all black. There are shades of gray. What color is this?

### Memories

Situations and events can trigger bad memories. This can make us believe that the danger is here and now, not in the past. This causes us stress right now.

*What to say to yourself:* This is just a reminder of the past. That was then, this is now. Even though this memory makes me feel upset, it's not actually happening again right now.









### Catastrophizing

When you "catastrophize," you imagine and believe that the worst thing will happen.



*What to say to yourself:* Thinking this way isn't helpful right now. What's most likely to happen?

### **Mind Reading**

Mind reading is assuming that we know what others are thinking, usually about us.

What to ask yourself: Am I assuming I know what others are thinking? What evidence do I have? Are these my own thoughts, not theirs? Is there another, more balanced way of looking at it?

### **Compare and Despair**

With this habit, we see only the good things in others. We get upset because we see ourselves as less or worse than they are.



*What to ask yourself:* Am I comparing myself to this person? What would be a more balanced and helpful way of looking at it?

### **Critical Self**

Self-criticism is putting ourselves down. We blame ourselves for things that may not be our fault.



What to say to yourself: There's my inner bully again. Do people who really know me say that about me? Am I totally responsible for this?

### "Should" and "Must"

Saying or thinking "I should / shouldn't" or "I must / must not" puts a lot of pressure on us.



What to ask yourself: Am I putting pressure on myself, expecting the impossible? What is reasonable to expect from myself?

### Judgments

We can judge events, ourselves, others, or the world, instead of describing what we really see.

What to say to yourself: I'm judging the situation or person. It's how I make sense of the world, but that doesn't mean my judgments are always right or helpful. Is there another perspective?

### Mountains and Molehills

"Making mountains out of molehills" means making problems bigger than they really are, or not seeing possible benefits.

*What to ask yourself:* Am I making it worse than it is? How would someone else see it? What's the bigger picture?



# anxious, so I must be in danger.

I feel bad, so it must be bad! I feel

**Emotional Reasoning** 

What to say to yourself: Just because something feels bad, doesn't mean it is bad. My feelings are just a reaction to my thoughts, and thoughts are just brain responses.

# Section 8: When We Were Young

A self-care worksheet

### **Caring for Your Needs**

When we were young, our needs were simple. A child needs very basic things: sleep, food and fluids, play time, warmth, a sense of belonging and support, and help to stay clean.

As we grow older, some of these needs are neglected or even ignored. No matter your age, you need to take care of your needs every day to live in balance and thrive.





You can care for yourself now just as you were cared for as a child.

Ask yourself these questions:

- When was the last time I had a full, restful night's sleep?
- When was the last time that I felt as if I ate regular meals, nourishing fluids, and healthy snacks?
- When was the last time I moved my body out of joy and fun?
- When was the last time I had a sense of connection with someone I care about deeply?
- Am I noticing any changes in my digestion or bathroom routines?

Do I make time for fun activities? \_\_\_\_\_ Yes \_\_\_\_\_ No

If your answer is yes, name those activities here:

If your answer is no, please see the "Pleasant Activities" list on the next page for some ideas. Think about which ones sound enjoyable or interesting to you!

### **Pleasant Activities:**

- Take a walk in a park you've never been to.
- Take a long soak in a hot tub, with bubble bath!
- Return to a hobby you used to enjoy or start a new one.
- Explore a museum, aquarium, or farmer's market.
- Write a letter to someone you would like to connect with again.
- Learn a new craft, like knitting, painting, or pottery.
- Play tourist in your own neighborhood. What would someone new to your area want to see?
- Spend time gardening or taking care of a small indoor plant.
- Listen to a new podcast or audiobook.
- Spend time with animals! You can visit a zoo or shelter, or spend extra time with your pet.
- Volunteer for a cause or organization that inspires you.
- Take a yoga or stretching class in-person or with free online videos.
- Host a game night with friends or family.
- Journal about the things you're thankful for or your favorite memories.

What activities would you like to try? What are some ways you can take care of your needs and wellness? Try to list five ideas.

1.	
2.	
3.	
4.	
5.	

If answering the questions in this section is difficult, or you notice you are out of balance in one or more of these areas, mindfulness and gentleness with your body might be just what you need.



Trying enjoyable activities is a great way to take care of yourself.

# Chapter 3: Nutrition

# UW Medicine

This chapter provides nutrition information and tools for your bariatric journey. The first step is to read each section and plan the steps you will take. We will explore topics that will help you make informed decisions about nutrition and start your journey toward a healthy future. There is a lot to learn, but you are not alone! Your UW bariatric team is here to help you every step of the way!



The path to a successful surgery begins with good nutrition!

### **Table of Contents**

### 

You must complete each section above **<u>BEFORE</u>** committing to surgery.

Page **P**age

### Please Complete These Items Before Meeting with Your Dietitian

- Explore Your Current Eating Habits (page 42)
- □ Food Diary and Hunger Scale (page 43)
- □ Attend the "Key Concepts in Weight Management" class
- □ Watch the "Eat Well, Be Well" videos sent after the Weight Management class
  - Protein and Hydration
  - Fat and Fiber
  - Carbohydrates and Sugars
- Download a calorie-tracking app and start logging all your meals, snacks, and drinks

Complete the Pre-Surgery Assessment (page 78)

# **Handout Guide**

You will get the following handouts during your pre-surgery and post-surgery appointments. For each one mark the date that you received it and add it to your binder behind this guidebook.

DATE RECEIVED	PRE-SURGERY HANDOUTS	DATE RECEIVED	POST-SURGERY HANDOUTS
	Alcohol and Weight Management		Bariatric Liquid Diet
	Choosing Protein Supplements		Bariatric Meal Plan Table
	Foods Rich in Vitamins		Required Bariatric Vitamins
	Goals for the Week		Top Tips for Staying on Track
	Hydrating Liquids Table		Transitioning to a Regular Diet
	Liver-Shrinking Diet		Transitioning to the Soft Foods Diet
	Meal Planning Table		
	My Plate Meal Plan		
	Non-Nutritive Sweeteners		
	Resources		
	Sources of Carbohydrate		
	Sources of Fat		
	Sources of Fiber		
	Sources of Protein		
	Sources of Vegan Protein		

# Section 1: Goal Setting

Trying to accomplish everything at once is too much. Instead, set small goals. These are more manageable and will help you transition into your lifestyle changes.



**Note**: Make copies or use blank paper to continue setting goals!

Goal #2: I will commit to ... Measuring my food

You can reach big goals by breaking them down into small ones!

# <u>Example</u>

Goal #1: I will commit to Separating drinking from eating				
Possible Barriers	Strategies			
Eating quickly	Don't get too hungry			
Not chewing enough Allow enough time to eat slowly				

	5,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7
Barriers	Strategies
Too busy	Planning my menu ahead of time
Rushed in the moment	

Goal #3: I will commit to Logging my food in my calorie app		
Barriers	Strategies	
Forgetting to log my food after I	Set a timer to remind me to log	
eat	right after I eat	

### Reflection

	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Goal #1	X		X	X	X	X	X
Goal #2	X	X	X	X	X	X	X
Goal #3			X	X		X	

### Ideas for next week

I did a great job measuring my food and meal prepping each day, and I'm doing well taking time for myself to eat. Next week, I'll try Alexa reminders to help me remember to log after eating.

### My Goals for Week

Goal #1: I will commit to         Barriers         Strategies	1		
Barriers Strategies	Goal #1: I will commit to		
	Barriers	Strategies	

Goal #2: I will commit to				
ategies				

Goal #3: I will commit to				
Barriers	Strategies			

### Reflection

	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Goal #1							
Goal #2							
Goal #3							

Ideas for next week			

### My Goals for Week

Goal #1: I will commit to         Barriers         Strategies		
Barriers Strategies	Goal #1: I will commit to	
	Barriers	Strategies

Goal #2: I will commit to				
ategies				

Goal #3: I will commit to				
Barriers	Strategies			

### Reflection

	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Goal #1							
Goal #2							
Goal #3							

Ideas for next week			

# Section 2: Introduction: Planning For Your Journey

**Congratulations**! You are starting a personal lifelong journey toward good health. Now is the time to start practicing healthy eating habits. For long-term success, it is important to learn about nutrition before your bariatric surgery.

In the sections ahead, you will find tools and information that will help you:

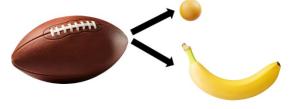
- Make diet and lifestyle changes to prepare for surgery
- Reach and maintain your weight loss goals
- Prevent side effects
- Develop a bariatric mindset to help you think about food

### What to know before committing to bariatric surgery

- *Bariatric* (weight loss) surgery changes your stomach size to limit the amount of food you can eat at one time. Your stomach shrinks from the size of a football to the size of a ping-pong ball after a bypass surgery or a banana after a gastric sleeve.
- It is important to understand that surgery is a tool. It does not change everything.
  - Surgery will not stop you from making unhealthy food choices.
  - Surgery will not stop your emotional hunger.
  - Surgery will not change disorganized eating patterns.
  - Surgery will not prevent you from gaining weight back.
- You will not be able to eat many of your favorite foods. This may include bread, soda, alcohol, and food that is high in fat or sugar.
- You will need to eat 3 to 4 small, high-protein meals each day.
- It is important to eat nutritious whole foods, not packaged or pre-made food.
- You will need to learn new shopping and cooking habits.
- Each bite of food must be no larger than a dime.
- You must take time to chew each bite until it is smooth like yogurt, which means meals may take 20 to 30 minutes.



Preparing for weight loss surgery is as important as packing a suitcase before a trip!



Your stomach will shrink after surgery.



Bites of food must be dime-sized

- You will have to sip at least 64 ounces (8 cups) of fluids each day to avoid dehydration. These fluids must not have calories, caffeine, alcohol, or protein.
- You will not be able to drink any liquid 30 minutes before, during, or 30 minutes after eating any food.
- You will always need to take certain vitamins and minerals to stay healthy.
- Lifelong, consistent exercise is an important part of reaching and maintaining your health and weight-loss goals.
- If you start changing your habits <u>now</u>, it will be easier for you to be healthy, lose weight, and stay at a healthy weight.

### Taking Time to Think and Plan

There is a lot of information you need to know as you learn about and prepare for surgery. To make it easier to process, you will have many chances to pause and process.

- 1. Food for Thought: These are quick checkpoint questions to help you think about how the information fits into your life. Look for this icon as you read
- 2. Section Reflections: At the end of each section, you'll find a chance to look back at what you've read, think about how you will use the information, and write down any questions you'd like to ask your care team. Your dietitian will review these with you.

### Section 2 Reflection

Date I Read Section 2: \_\_\_\_\_

Things from this section I'm already doing well:	Things from this section I'd like to work on:
Questions:	

### Section 3:

# **Explore Your Current Eating Habits**

Before you start your nutrition journey, it is important to think about your current eating habits. This reflection will help you find ways that you can improve your health and weight management.

Remember that your bariatric team will give you tools and guidance during your journey, whether you are doing well or facing challenges.



Learning how you think about food now will help you make healthy changes.

### Ask yourself these questions:

<b>When</b> do l eat?	
What do I eat, and how much?	
<b>How quickly</b> do I eat?	
Where do I eat?	
Why do I eat? See the Emotional Eating faces on page 26 in the Social Work chapter.	

It is important to reflect on your eating habits and think about ways you may want to change. Come back to this exercise after a month to see how much you have been able to change!

Your dietitian will review your Food Diary and Hunger Scale with you. You must complete this BEFORE your first individual visit.

- The Food Diary and Hunger Scale is different from your calorie and nutrient tracking.
- Your food diary will take a few days to complete.
- Using your food diary will help you be aware of physical signals that tell you, "it's time to eat" or "we can stop eating now."
- You will also think about what emotions (feelings) you have related to eating, including snacking when you are bored. To help you think about this, see the Emotional Eating faces on page 26 in the Social Work chapter.

	Hunger Rating*	Time of Day	Any Food, Snacks, or Drinks	Amount	Fullness Rating*	Mood or Emotions How am I feeling?
		Breakfast	Black coffee	1 сир		
			Yogurt	½ cup		A little
			Strawberries	4 ounces		stressed about work
	3	8:30 AM	Wheat toast	1 slice	7 🗕	
/						

### Food Diary and Hunger Scale

\*Rate **hunger before eating** and **fullness after eating** using the number scale below

#### Hunger Scale

- 1. Starving, weak, grouchy
- 2. I could eat everything and anything
- 3. I am ready to eat NOW
- 4. I can wait a little longer to eat
- 5. Not hungry, not full

- 6. Lightly comfortable, like after a snack
- 7. Satisfied. I could eat more but I can stop
- 8. A little too full, a bit of tummy pressure
- 9. Very full, uncomfortable tummy pressure
- 10. Too full, may be painful

Hunger Rating*	Time of Day	Food, Snacks, or Drinks	Amount	Fullness Rating*	Mood or Emotions How am I feeling?

Water (total number of glasses or ounces): \_\_\_\_

\*Rate hunger before eating and fullness after eating using the number scale below

#### Hunger Scale

- 1. Starving, weak, grouchy
- 2. I could eat everything and anything
- 3. I am ready to eat NOW
- 4. I can wait a little longer to eat
- 5. Not hungry, not full

- 6. Lightly comfortable, like after a snack
- 7. Satisfied. I could eat more but I can stop
- 8. A little too full, a bit of tummy pressure
- 9. Very full, uncomfortable tummy pressure
- 10. Too full, may be painful, nauseated

Hunger Rating*	Time of Day	Food, Snacks, or Drinks	Amount	Fullness Rating*	Mood or Emotions How am I feeling?

Water (total number of glasses or ounces):

\*Rate hunger before eating and fullness after eating using the number scale below

#### Hunger Scale

- 1. Starving, weak, grouchy
- 2. I could eat everything and anything
- 3. I am ready to eat NOW
- 4. I can wait a little longer to eat
- 5. Not hungry, not full

- 6. Lightly comfortable, like after a snack
- 7. Satisfied. I could eat more but I can stop
- 8. A little too full, a bit of tummy pressure
- 9. Very full, uncomfortable tummy pressure
- 10. Too full, may be painful, nauseated

Hunger Rating*	Time of Day	Food, Snacks, or Drinks	Amount	Fullness Rating*	Mood or Emotions How am I feeling?

Water (total number of glasses or ounces): \_\_\_\_

\*Rate hunger before eating and fullness after eating using the number scale below

#### Hunger Scale

- 1. Starving, weak, grouchy
- 2. I could eat everything and anything
- 3. I am ready to eat NOW
- 4. I can wait a little longer to eat
- 5. Not hungry, not full

- 6. Lightly comfortable, like after a snack
- 7. Satisfied. I could eat more but I can stop
- 8. A little too full, a bit of tummy pressure
- 9. Very full, uncomfortable tummy pressure
- 10. Too full, may be painful, nauseated

Hunger Rating*	Time of Day	Food, Snacks, or Drinks	Amount	Fullness Rating*	Mood or Emotions How am I feeling?

Water (total number of glasses or ounces): \_\_\_\_\_

\*Rate hunger before eating and fullness after eating using the number scale below

#### Hunger Scale

- 1. Starving, weak, grouchy
- 2. I could eat everything and anything
- 3. I am ready to eat NOW
- 4. I can wait a little longer to eat
- 5. Not hungry, not full

- 6. Lightly comfortable, like after a snack
- 7. Satisfied, I could eat more but I can stop
- 8. A little too full, a bit of tummy pressure
- 9. Very full, uncomfortable tummy pressure
- 10. Too full, may be painful, nauseated

# **Trigger Foods**

*Trigger foods* make you want to keep eating until the bag, box, or container is empty. You may want to eat trigger foods when you feel a certain emotion, such as comfort or joy. Identifying your trigger foods will help you stay on track with your eating goals. Look back at your food diary to see if you can spot any trigger foods. *Examples: pizza, candy, cookies, ice cream, chips, soft drinks, coffee drinks, etc.* 

Read pages 25-26 in the Social Work chapter to learn more about emotional eating.

What trigger foods do you have?	When do you usually eat these foods?
Now think about which emotions, or feelings, the alternative that provides that same emotion?	hese foods connect with. What is a non-food
Emotion	Non-food alternative
Example: Stress	Example: Going for a walk

# **Teaser Foods**

*Teaser Foods* are snacks that are often kept in the cupboard or fridge. Having them around can lead to cravings and mindless snacking. These are tempting to eat when you see them, even when you're not hungry, such as chips, cookies, or soda.



What teaser foods do you keep in your home? \_\_\_\_\_

### **Section 3 Reflection**

#### Date I Read Section 3:

Reflect on how you are feeling about changing your eating habits and choose the number that best matches how you are feeling today. Return to this page every month to see how far you've come!

1	2	3		(4)	5
I'm not sure that I am ready to make changes yet.	I know that I need to make changes but I have not started yet.	I will be re making ch <b>the next r</b>	•	I have been practicing new behaviors for <b>at</b> least 1 month.	I have made changes to my nutrition and kept these new habits for at least 4 months.
Things from this s	ection I'm already doi	ng well:	Things fro	m this section I'd like	to work on:
Questions:					

# Section 4: Understanding Nutrition

*Learning about nutrition is an important step in preparing for your surgery.* 

### Water

Each cell in your body needs water to function. Water can:

- reduce hunger
- help you feel full
- help with digestion
- reduce constipation
- protect and moisturize skin
- reduce joint pain and headaches
- improve thinking, memory, attention, and energy
- prevent kidney stones and UTIs

	- Drink (4 eveness (0 evens) of hydrotian liquids and have
· · ·	<ul> <li>Drink 64 ounces (8 cups) of hydrating liquids each day.</li> </ul>
How much	• You may need more water when it is hot, when you are exercising, or if you are
water should	eating more than 80 g protein per day.
I drink?	<ul> <li>Note: There are exceptions to the 64-ounce rule for certain medical conditions. Talk with your doctor about your water goals.</li> </ul>
	<ul> <li>Practice sipping liquids. Gulping is not tolerated well after surgery.</li> </ul>
	• After surgery you must separate fluids from food by 30 minutes. For example:
	<ul> <li>7:30-8:00 nothing to drink</li> </ul>
	- 8:00-8:30 food only
	<ul> <li>8:30-9:00 nothing to eat or drink</li> </ul>
How should I	<ul> <li>9:00 start sipping</li> </ul>
drink water	• Start practicing eating food without drinking any liquids today. The more you practice, the easier it will be!
after surgery?	<ul> <li>Try not to put a glass on the table while you're eating.</li> </ul>
	– Once that is a habit, set an alarm to not drink for the 30 minutes after food.
	<ul> <li>Once those 2 habits are consistent, set an alarm to not drink 30 minutes before food.</li> </ul>
	• After surgery you may not tolerate water or ice water. Try room temperature or warm liquids. Try sugar-free flavors or alkaline waters, which may be easier to sip.
	Always carry a water bottle with you.
	Set an alarm to remind you to drink.
How can I	• Try flavoring your water with fresh fruit, fresh vegetables, or fresh herbs.
meet my water	• You may feel hungry when you are actually thirsty. Try drinking first.
goal?	<ul> <li>Hydrating liquids do not contain protein, caffeine, or alcohol. See page 70 and the "Hydrating Liquids Table" handout for a list of hydrating liquids.</li> </ul>

# Good nutrition is vital!

Your food choices have a direct effect on your weight and health. All food contains different types of nutrients that keep your body healthy. The basic 4 nutrients we need are water, protein, fats, and carbohydrates (including fiber).

# Protein

Before you read this section, watch the **"Protein and Hydration"** video sent after the class "Key Concepts in Weight Management"!

You must eat protein to help your body:

- Build muscle and hormones
- Build enzymes (used for digestion and energy)
- Build antibodies (used to fight infections)

Amino acids are the tiny building blocks that make up a protein. Many foods contain a small amount of partial protein, meaning they have some of the essential amino acids. Some food contains full proteins, meaning they have all 9 of the essential amino acids in every bite. Both partial and full proteins are good for you and contain other nutrients, so it's important to eat a variety of foods each day.



Examples of protein-rich foods

Your meal portions will be very small, so you will need to eat high-quality, lean, moist, protein-rich foods each day for the rest of your life. Your body will need the most protein during the first 6-12 months after surgery because of the rapid weight loss.

After surgery it is most important to **eat protein-rich foods first** at meals. Your new stomach size is very small, and you will feel full quickly. Remember: "Protein first, then produce." See the handout "Sources of Protein" for a list of examples.

- Your new stomach will feel tightest for several months after surgery. You may feel full after eating just a few bites of dense foods like steak. Vegetarian (partial) proteins are good options to try.
- Your dietitian will talk with you about how much protein you need.
  - Track how many grams (g) of protein you're eating to make sure you reach your goal.
  - Right after surgery your goal will be 15-20 g of protein per meal or 7 g per snack.
  - Slowly increase the amount of protein you eat to a goal of 2-3 ounces (oz), or 14-20 g at each meal.

<ul> <li>85 g protein during the 3 weeks <u>before surgery</u></li> <li>60 g protein during first <u>2 weeks after</u> surgery</li> <li>80 g protein <u>2-6 weeks after</u> surgery</li> <li>g protein from <u>6 weeks to 1 year</u></li> </ul>	
This goal will change with time but <b>should never be less than 60 g.</b> To meet your goal, includ protein with every meal and snack. There are exceptions to the very high protein rule if you have certain medical conditions. Tal	

### How to Tolerate Protein After Surgery

your doctor about your protein goals.

After surgery, your new stomach will not be able to grind or break down food as well. You will need to cut proteins into dime-sized pieces and chew 1 bite at a time, very well. Ground, shredded, chopped, and thin-sliced meats will be easier to tolerate. **Choose naturally moist and soft proteins such as:** 

Eggs	Cottage cheese, Greek yogurt, cheese, cow or soy milk, protein-enhanced (lactose-free) milk	Canned tuna, chicken, or salmon	Small shrimp, crab, boneless salmon, or white fish
			<b>B</b>
Ground meat, deli meat	Chili (mild), stew with small chunks	Quinoa, farro, freekah, lentils, beans	Soy products like tofu, edamame

### **Protein Drinks and Powders**

For the first 6 to 12 months after surgery, you must take protein supplements. This will help you heal and decrease muscle loss during your rapid weight loss. Use a protein shake to **replace** a meal, not in addition to a meal. You can also add protein powder to food.

There are different types of protein supplements. Isolated whey is the best protein source as it is often easiest to digest. If you use vegan proteins, try to choose supplements with combinations of pea, brown rice, bean, lentil, seed, or nut. Avoid **any** form of collagen as a primary protein powder, but it is okay as a supplement for hair, skin, and nails. **See your handout "Choosing Protein Supplements."** 

### Protein supplements should meet the following guidelines:

	Nutrition F	acts	<b>Nutrition Fac</b>	cts
	75 servings per container		Serving size 1 Shake (11	1 fl oz
One serving should contain:	Serving size 1 s	coop (30g)	Amount nos consina	
She selving should contain.	Amount Per Serving		Calories 1	60
less than 180 calories	Calories	130	% Daily V	
<ul> <li>less than 31 g protein</li> </ul>		% Daily Value*	Total Fat 3g	49
	Total Fat 2g	3%	Saturated Fat 0.5g	3
<ul> <li>Grams (g) of</li> </ul>	Saturated Fat 1g	5%	Trans Fat Og	
carbohydrates	Trans Fat 0g Cholesterol 50mg	17%	Cholesterol 20mg	7
	Sodium 55mg	2%	Sodium 180mg	8
should be lower	Total Carbohydrate 2g	1%	Total Carbohydrate 5g	2
than total grams (g)	Dietary Fiber 0g	0%	Dietary Fiber 3g	11
	Total Sugars 2g		Total Sugars 1g	
of Protein	Includes 0g Added Sugars		Incl. 0g Added Sugars	0
	Protein 25g	50%	Protein 30g	60

List three high-protein foods you enjoy eating: \_\_\_\_\_

### Fats

Before you read this section, watch the **"Fats and Fiber"** video sent after the Weight Management class!

Eating healthy fat in moderation will help fuel your body. Healthy fats provide energy and help you feel full longer. Fat also:

- Helps your body absorb vitamins and minerals
- Builds structures for cells and nerves
- Makes hormones
- Supports brain function, blood clotting, and inflammation control



Examples of foods high in fats

Fats are an important part of your diet, but they can be high in calories! Remember these top tips for fats:			
Choose healthy fats such as nuts, seeds, avocado, and olive oil.	Eat limited amounts. Fat has 2 times the calories per gram as proteins and carbohydrates.	Measure all portions!	

### **Healthy fats**

Foods with fat often have a mix of different types of fat. Even healthy foods like chicken and nuts have small amounts of unhealthy fat so it is important to think about your portion sizes. We recommend that no more than 20% of your calories come from **unsaturated fats**, 10% of calories from **saturated fats**, and 0% from **trans fats**. If you need to decrease your cholesterol, your saturated fat should be less than 6% of your calories. Talk with your dietitian about your fat goals.

- Unsaturated fats: Unsaturated fat is the healthiest type of fat! Unsaturated fats are helpful because they can improve cholesterol levels and decrease inflammation. Unsaturated fats are liquids at room temperature, like olive oil. These fats mostly come from plants, such as vegetable oils, nuts, and seeds.
- Read handout "Sources of Fat" for a list of healthy fat sources.

### **Unhealthy fats**

There are two types of "unhealthy" fats, which increase the risk of cardiovascular disease, stroke, and diabetes. These types of fat are usually solid at room temperature, like butter.

- **Saturated fats** are found in foods including meat, dairy, and palm or coconut oil. There are also saturated fats in pizza, fast food, cookies, and cake. Eating too much saturated fat can cause problems with your cholesterol and heart health.
- Trans fats are usually artificial and are added to most packaged and processed foods. Trans fats are the worst type of fat for your heart, blood vessels, and the rest of your body. Eating trans fats, even in small amounts, can lead to health problems.
- See handout "Sources of Fats" for more information and examples of fat sources.



What is your favorite type of healthy fat to eat? \_\_\_\_

Think about unhealthy fats in your diet. What are two foods you will try to limit?

# Carbohydrates

Before you read this section, watch the **"Carbohydrates and Sugars"** video sent after the Weight Management class!

Carbohydrates (carbs) are the main source of energy for your brain and muscles! They can also help restore the energy storage in your muscles during rest. There are many types of carbohydrates. Make sure you do not limit carbohydrates too much. Try to eat at least 80 grams a day unless your provider tells you otherwise.



Examples of foods high in carbohydrate

### **Choose**

**Complex carbs** take longer to digest and provide long-lasting energy.

Examples: fruits, vegetables and whole grains

#### Why should I choose complex carbs?

- They provide the most vitamins, minerals, and fiber
- They help you feel full longer

# <u>Avoid</u>

**Refined carbs** are digested quickly and provide a quick source of energy.

**Examples**: white bread, white rice, white pasta, jelly, syrups, ice cream, candy, desserts, soft drinks, sugar

#### Why should I avoid refined carbs?

- They can raise blood sugar, make you feel hungry, and lead to food cravings.
- To encourage your body to use your stored fat as energy.
- Sugary foods can promote "dumping syndrome" (see page 74) after gastric bypass surgery.
- Starchy foods such as breads may leave you feeling bloated and uncomfortable.

See a list of carbohydrate examples in the handout "Sources of Carbohydrate".

### Fiber

Fiber is a type of complex carbohydrate found in all plants. It is made of many linked sugar molecules which cannot be entirely digested (broken down). There are two types of helpful fiber:

- Soluble fiber forms a gel that lowers cholesterol. This decreases risk of cardiovascular disease and helps keep blood sugar levels regular.
- **Insoluble fiber** passes through the intestine undigested, which decreases the risk of constipation.

#### Fiber supports weight loss and helps your body in many ways:

- Helps you feel full with less food
- Decreases blood sugar
- Relieves and prevents constipation
- Reduces risk for heart disease and colon cancer
- Supports healthy gut bacteria (microbiota)
- Decreases "unhealthy" LDL cholesterol

Fiber-rich foods are also high in essential vitamins, minerals, and antioxidants, which keep you healthy and prevent disease. High-fiber foods include vegetables, fruits, whole grains, beans, lentils, nuts, and seeds.



Examples of foods high in fiber



hole carbs

### How to Increase Fiber in Your Diet

As you add fiber to your diet, go slowly! If you add fiber to your diet too quickly you may have abdominal discomfort, bloating, and gas. Drink plenty of liquids to avoid nausea and constipation. If you have significant constipation, talk with your care team before increasing your fiber.

### How much fiber should I eat?

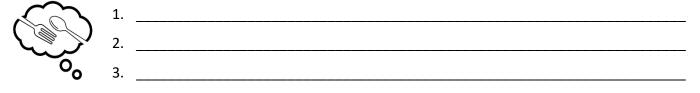
Add 1 serving of fiber-rich food each day, then increase over a few weeks to reach your daily goal:

- 20 30 grams for females
- 30 40 grams for males

### **Fiber Tips**

- Instead of juice, eat fresh vegetables and fruits with peels or skins
- Add beans and peas to casseroles and soups
- Choose brown or wild rice instead of white rice
- Use whole wheat flour instead of white or all-purpose flour
- Choose packaged items that show "whole grain" in the first ingredients
- See handout "Sources of Fiber" for a list of examples

Write down three ideas for meals or snacks that are high in fiber or complex carbohydrates:



# **Choosing Nutrient-Packed Foods**

Eating a variety of foods from all food groups each day will give you a balanced diet! Try to eat more whole foods than processed or packaged foods. This will help you avoid added sugars, fats, and sodium (salt). To save time, you can buy pre-cut or frozen raw foods. These are usually healthier than prepared or precooked food.



Frozen and pre-cut vegetables are a healthy and easy option.

Vitamin or Mineral	Examples
Beta Carotene	Orange, yellow, red, and green veggies and fruits
Biotin	Eggs, whole wheat products, cheddar cheese
Calcium	Dairy products, fortified non-dairy milks, fish bones
Chromium	Whole grains, bran cereals, green beans, broccoli, nuts, egg yolk
Copper	Liver, oysters, sesame seeds, dark chocolate, cocoa
Folic Acid	Leafy greens, legumes, oranges, broccoli, cauliflower
Iodine	Dried seaweed, cod, iodized salt, baked potato peel, milk, shrimp, turkey, navy beans
Iron	Squash, pumpkin seeds, beef, dark leafy greens, dark chocolate, tofu, whole grains, fortified cereals/bran, white beans, lentils, cashews, almonds, peanuts, seafood, liver
Magnesium	Beans, nuts, whole wheat, brown rice, leafy greens
Manganese	Whole grains, nuts, leafy greens
Molybdenum	Beans, lentils, peas, whole grains, nuts
Niacin	Poultry, beef, fish, legumes, peanut butter, nuts
Pantothenic Acid	Avocado, broccoli, kale, cabbage, eggs, legumes, lentils, milk, mushrooms, organ meats, poultry
Riboflavin (Vitamin B2)	Dairy products, leafy greens, oysters
Selenium	Brazil nuts, shiitake/white button mushrooms, lima/pinto beans, chia seeds, brown rice, seeds, broccoli, cabbage, spinach
Thiamin (Vitamin B1)	Whole grains, brown rice, legumes, pork, oysters
Vitamin A	Liver, carrots, fortified milk
Vitamin B6	Meat, fish, poultry, eggs, potatoes, fortified cereals, peanuts, soybeans
Vitamin B12	Fish, shellfish, meat, eggs, fortified soy, rice, or almond milk, fermented soy products, cheese, nutritional yeast, poultry
Vitamin C	Fruits and vegetables, especially peppers and citrus fruits
Vitamin D	Fortified milk, fatty fish, beef liver, egg yolk, cheese
Vitamin E	Wheat germ, vegetable oils, cashews, hazelnuts
Vitamin K	Green leafy vegetables, Brussels sprouts, broccoli, cress
Zinc	Seafood, meat, seeds, beans, peas, lentils

# Foods to Avoid:

It is best to avoid foods that provide little or no nutrition. These are known as "empty calories" or "slider foods." These foods are easy to eat but do not help you feel full for long, which can lead to weight gain. If you decide to eat these:

- Significantly limit your portion size
- Do not eat them often
- Avoid bringing them into your home
- Carefully avoid any trigger foods

While it is important to limit eating empty calories, do not be too restrictive. If there is a special occasion, you may want to eat a special treat. Enjoy and savor 2 to 3 bites. It is best to avoid eating these treats daily or weekly to help you maintain your health and weight goals.

Category	Examples	Notes
Added Sugars	Agave, baked goods, candy, chocolate, honey, ice cream, maple syrup, molasses, etc.	Limit added sugars to less than 25 g for women and 36 g for men per day
Diet, Low- Carb Foods	Any packaged food, snack, sauce, dip, or beverage item that includes: diet, net-carb, low-carb, zero-carb, carb-balance, low-fat, light, or keto	These are highly processed and can be high in sodium, fat, carbs, and excess fiber powder.
Fast Food	Burgers, chicken nuggets, French fries, hot dogs, pizza, etc.	These are highly processed and high in saturated fat and sodium.
Fatty Meats	Bacon, hot dog, pepperoni, rib-eye, sausage, salami, barbeque	These can be highly processed and high in saturated fat and sodium.
Fried Foods	Fish and chips, fried chicken, potato chips, donuts, etc.	These are highly processed and high in sugar, fat, and sodium.
Processed and Refined Carbs	Bagels, chips, cookies, crackers, sugar-sweetened cereals, white bread, etc.	These are highly processed and high in sugar and sodium, and often in fat.
Sauces, Dips, and Dressings	Barbeque sauce, cheese sauce, ketchup, ranch, tartar sauce, etc.	These are highly processed and high in fat and sodium.
Sodas and Sugar- Sweetened Beverages	Energy drinks, juices, sodas, sports drinks, sweet tea, or flavored coffee drinks (latte), etc.	These are highly processed and high in sugar.

### No matter what your calorie goal is, avoid or limit these foods:



Which 3 foods from the table on the previous page are the biggest triggers for you? Write down a healthy alternative you can try for each one.

**Portion Practice:** Enjoying special treats in moderation is a skill that takes practice. Choose a treat you enjoy and take your time to savor 2 to 3 bites of it. Then put the rest away.

Write about your experience:

- If you felt tempted to continue eating more, what strategies could help you next time?

### **Section 4 Reflection**

#### Date I Read Section 4: \_\_\_\_\_

Things from this section I'm already doing well:	Things from this section I'd like to work on:
Questions:	

# Section 5: Portions and Meal Planning

# **Nutrition Labels**

What to look for on Nutrition Facts labels:

- What is the serving size?
- How many servings are in the container?
- How many servings are you eating?
- Choose snacks with less than 200 calories per serving.
- Try to choose foods with at least 3 grams of fiber per serving.
- Use a free app while you are shopping, such as "Fooducate"
- Read the first 3 ingredients. Do they match what the package shows or says?
- 4 grams of sugar = 1 teaspoon of sugar

Packaged foods often contain artificial sweeteners, such as xylitol and acesulfame K. If you are sensitive to these, always check the ingredient list. See handout "Non-Nutritive Sweeteners" for more information.

	Nutri		۱F	ac	ts
Serving Size	2 servings per co	ontainer	(1	cup (2	55g)
Calories			serving 20	Per cor	ntainer <b>40</b>
Total Fat	Total Fat	5g	% DV*	10g	% DV*
	Saturated Fat Trans Fat	2g 0g	10%	4g 0g	20%
	Cholesterol	15mg	5%	30mg	10%
Total Carbohydrate Fiber	Sodium     Total Carb.     Dietary Fiber     Total Sugars	240mg 35g 6g 7g	10% 13% 21%	480mg 70g 12g 14g	21% 25% 43%
	Incl. Added Sugars	_	8%	8g	16%
Protein	> Protein	9g		18g	
	Vitamin D	5mcg	25%	10mcg	50%
	Calcium	200mg	15%	400mg	30%
	Iron	1mg	6%	2mg	10%
	Potassium	470mg	10%	940mg	20%



Healthy choices start with good planning!

Page 59 of 93 | Chapter 3 Nutrition Your Weight Loss and Metabolic Surgery Guidebook Center for Weight Loss and Metabolic Surgery | Box 358819 11011 Meridian Ave N. Suite 101, Seattle WA 98133 | 206.598.6014

# Portions

It is important to learn about food labels, marketing tricks, and serving sizes so you can make healthy food and portion choices. You will attend an online group class that explores these topics. Start to weigh and measure your food and pay attention to serving size. This helps you understand the calories and nutrients in your food portions.

And the second sec				
Baseball =	Deck of cards =	Thumb =	Thumb tip =	Small handful =
1 cup	3 ounces	1 ounce	1 tablespoon	2 ounces or ¼ cup
Crease to t	ip =	1 walnut =	1 ii	nch cube =
1 teaspo	on	2 tablespoons		1 ounce

### Use the pictures below to help you guess portions if you can't weigh or measure:

### **Portion Tips**

- Buy a digital kitchen scale to help you check your portion size.
- Weigh and measure the weight of proteins after you cook them.
- **Before surgery**, use a salad plate no larger than 8-9 inches across. Keep a 1-inch border or frame around your food instead of filling your plate to the edge.
- After surgery, use a child's plate no larger than 5-6 inches across. The total amount of food should be the size of your fist or smaller.
- After 12 months:
  - After bypass: total meal size should be 1 cup or less
  - After gastric sleeve: total meal size should be 1 ½ cups or less



Write down two things that you own or plan to buy that will help you limit portion sizes:

# **Meal Planning**

Planning your meals is an important step in meeting your nutrition goals! This section will explain why meal planning is important and includes tips for success.

### Why should you plan meals?

- It prevents last-minute options like fast food or vending machines
- It simplifies one part of your busy life
- Eating a variety of whole foods helps your weight and health
- It makes it easier to control what you eat, helping you stay on track!

### What should you plan?

- 3 meals a day (avoid snacking / eating more than every 3 hours)
- 1-2 snacks a day, if needed
- Meals at work or school and home
- Grab-and-go snacks for traveling, appointments, etc.

### A healthy meal includes:

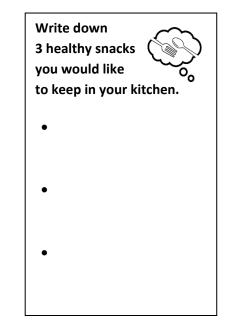
- Protein
- Low-carbohydrate vegetable
- Small amount of healthy fat
- Small amount of carb from fruit, grains, or starchy vegetable
- See the "My Plate Meal Plan" handout for more information

#### Healthy snacks include:

- Protein
- Low-carbohydrate vegetable or a small amount of carb from fruit or grains
- Total snack size is 1/2 cup or less

#### How to meal plan

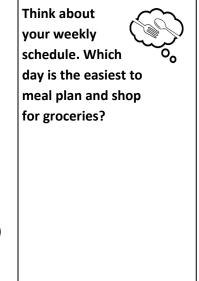
- Start by planning your meals and snacks for a few days or a week, depending on how often you go grocery shopping.
- Consider a plan that includes ingredients that can be used in multiple recipes. This can decrease your cost and size of your grocery list.
- Find recipes that sound good for that week. Think about:
  - How much time does the recipe take?
  - How many ingredients does it need?
  - How many servings does it make?
  - Can I reuse it (or part of it) in another meal?



- Make a shopping list with the ingredients for all your meals so you can stock your kitchen with the foods you need and not buy too much.
  - There are many free grocery shopping apps!
- Set yourself up for success: Buy the foods that fit your meal plans and avoid high-calorie trigger foods and treats.
- Use your measuring tools and smaller dishes to help manage portion sizes.
- Make time to wash and prepare vegetables and fruits, slice cheeses, etc.
- Make grab-and-go bags or small plastic containers that store well in the refrigerator or cupboard for 2-3 days at a time. For example:
  - Bags of cut vegetables or fruit
  - Small containers of sliced cheese and deli meat or jerky (not pepperoni)
  - ¼ cup of nuts in a container
  - Single serve, pre-packaged foods like cheese, yogurt, or hummus
- Make meals and snacks to keep in the freezer or refrigerator. Consider items that are easy to heat up, like egg muffins.

# **Cooking Tips**

- To tolerate meat after surgery you must use moist (wet) cooking. Try using the crock-pot, insta-pot (pressure-cooker), and air fryer to increase moistness. Avoid deep frying, grilling, roasting, pan frying, or microwaving as they can overcook and make food dry.
- Adding marinade, plain Greek yogurt, or avocado can help add moisture, but be aware of the extra calories.
- To help control calories:
  - Remove extra fat and skin before cooking.
  - If you are using the air fryer, use a light breading like panko instead of a heavy eggand-flour batter.
  - Use very small amounts of added fats.
  - Measure all foods! If you use packaged food, check the label for the serving size.
- Avoid prepared frozen foods or meals. These often are low in protein and high in sugar, salt, and fat.
- Fresh or frozen vegetables and fruits are nutritious and convenient, and you can easily add them to cooked foods. Avoid foods that already are pre-seasoned or have sauces added to them.



# Set Up Your Home for Success

Your home environment can lead you to overeat, or it can help you succeed! Follow these tips to set up your home for success:

#### Set up your space:

- Donate or compost unhealthy foods, *teaser foods*, and *trigger foods* (see page 48)
- If you share a kitchen, choose a cupboard for storing your food, snacks, and bariatric dishes.
- Put the most nutritious foods at eye-level in the refrigerator.
- Only eat in your kitchen or dining room!
  - If you do not have a dining room, choose a specific spot in your home for eating. You can use a placemat on a computer desk or use a nightstand or tv stand while sitting on your couch.
  - Use your bedroom only for sleeping and relaxing so you do not expect to eat there.

### Be aware of your eating:

- Read page 27 in the Social Work chapter to learn about mindful eating.
- Avoid eating when you are bored. When you're bored, your brain may suggest you get a snack. Instead you can:
  - Create an entertainment basket for the living room or bedroom if you need an added distraction.
  - Try Sudoku, word games, adult coloring books, knitting, etc.
  - Get up and do a quick 3-minute dance during television commercials.
- Put up a schedule for your meals and snacks in the kitchen.
- Eat every 3-5 hours but not sooner.
- While you're relaxing, have a sugar-free liquid to sip on instead of snacking.

### Making meals special:

- Play soft music in the background. Avoid your phone or anything that takes your attention away from the mindfulness and enjoyment of your food.
- Try using pretty dishes and glasses to make the mealtime special!

### **Section 5 Reflection**

Date I Read Section 5: \_\_\_\_\_

Things from this section I'm already doing well:	Things from this section I'd like to work on:
Questions:	

# Section 6: Exercise and Activity

Exercise has many health benefits! It can:

- Decrease muscle loss as you lose weight and get older
- Improve your metabolism
- Improve movement and balance
- Decrease joint stiffness and pain
- Strengthen your muscles and bones
- Increase energy
- Improve your mood by reducing stress, anxiety, and depression
- Support thinking, learning, and memory
- Improve your sleep
- Help you keep a healthy weight

# **Exercise Tips**

- Start slow
- Walking is always a good place to start!
- Start with low-impact exercises like seated chair exercises, yoga, or tai chi.
- Add strength training with resistance bands or light weights.
- Start by moving for 5 minutes. Then increase your movement by 1 minute every day until you can exercise for at least 15 minutes before taking a break.
- Slowly increase low intensity to moderate intensity. How do I know if I'm exercising at a moderate intensity level? See the table below.

Low Intensity	Moderate Intensity	High Intensity
You might feel like:	You might feel like:	You might feel like:
I have enough air to do my exercise, talk, or sing.	I have enough air to do my exercise and talk but I can't sing.	I barely have enough air to do my exercise. I can't sing or talk.
You might think:	You might think:	You might think:
"I'm enjoying my stroll."	"I'm moving fast enough that	"I'm gasping for air."
	I'm breathing hard."	

### If you have high blood pressure:

• If you are taking a beta-blocker medication for high blood pressure, please talk with your provider or see the handout "Get Active" for safety information.



Talk with your primary doctor about starting an exercise routine that is safe for you.

### How much should I exercise?

- Your goal is to exercise for 30 minutes at a time, 5 days a week, before surgery.
- Add exercise to your daily routine. Try walking to work, or doing calf raises or squats while brushing your teeth.
- Do "exercise snacks" during the day. These are high-energy exercises that last for 1 to 10 minutes. Try fast dancing, walking upstairs without stopping, etc.
- Continue to challenge yourself with different exercises and increasing time.
- Make an appointment with yourself every day to exercise.
- You should feel a little bit sore, but not so sore that you cannot move.
- Be safe and go at your own pace!

### Enjoy Your Exercise!

- Keep a record of your success! Write down the exercises you try and notice how you are getting stronger.
- Try something new and fun!
- Find a workout buddy. You can connect with friends and family over the phone or a video call.
- Set up your routine now so you are ready to succeed after surgery!

### **Exercising After Surgery**

- After your surgeon says it's safe to start exercising: Start low, and slowly increase to 60 minutes a day, 5 days a week. This will help you minimize muscle loss and improve your metabolism.
- Include both cardio and strength training.

Cardio	Strength Training		
• Cardio exercise increases your heart rate and breathing. It helps your cardiovascular (heart) system.	• Strength training is exercise that builds muscle and strength. It is an important way to reduce muscle loss.		
• <b>Goal</b> : After surgery, do cardio exercise 3 days a week.	• <b>Goal</b> : After surgery, do strength training 3 days a week.		
• Examples: Running, cycling, swimming, fast walking, climbing stairs	<ul> <li>Examples: Hand weights (dumbbells), exercise bands, body weight (for example push-ups, squats), or yoga</li> </ul>		
Try combining cardio and strength training! Exercises like rowing machine, group dance classes, or			

kickboxing keep your heart rate up while building muscle. These can be fun options!

### **Exercise Resources**

There are many free and paid exercise programs that can be done at home.

### Seated Chair Exercises:

These are great exercises to start with. These are easy on knees or other sore joints. You can choose low-intensity or high-intensity exercises.

- "Sit and Be Fit" is free on YouTube or Public TV, Mon-Fri, between 9 a.m. and 10 a.m., across Washington state. Visit sitandbefit.org to learn more.
- There are many free options online! Find one that fits your style.

#### Yoga:

- You can find many free yoga classes on YouTube
- Free and paid video options are available on: yogawithadriene.com/free-yoga-videos/

#### Tai Chi:

This exercise involves slow and steady movements. It improves balance, coordination, and flexibility. There are many free options online. Find one that fits your style.

#### **Other Exercises:**

You can find many other fun and free exercise resources, including cardio, cycling, and family-friendly workouts! Visit: thesportsinstitute.com/exercise-anywhere/

### C Deflection

Section 6 Reflection	
Things from this section I'm already doing well:	Things from this section I'd like to work on:
Questions:	



Data | Poad Soction 6.

# Section 7: Preparing for Surgery

# What to Buy Before Surgery

Food Scale	Measuring Cups	Measuring Spoons	Sugar-Free Liquids
		<b></b>	
Blender or Food	Mesh Strainer	Water Bottle(s)	Protein
Processor		É	Shakes/Powders
			30 g of protein and less than
O			180 calories per serving
Bariatric-Size plate	Very Small Utensils	Very Small Bowls	Vitamins and Minerals
less than 6 inches wide		(1/2 cup - 1 cup)	Allow up to 2-3 weeks to arrive!

# Pre-Surgery Diet: Start 3 Weeks Before Surgery

### Liver-Shrinking Diet (LS Diet)

- It is very important that you follow a Liver-Shrinking Diet (LS Diet) starting at least 3 weeks before your surgery.
- This diet softens and decreases the size of your liver, which makes surgery quicker. This means you will spend less time under anesthesia (asleep) and have a lower risk of complications.
- The LS Diet includes mostly protein and low-carb vegetables. You must avoid ALL sugar and carbs.

### Why is the LS Diet important?

- Your liver is too large right now for the surgeon to safely do surgery *laparoscopically* (an operation that is done through tiny holes with a camera).
- If the doctor cannot do surgery because your liver is very large, they may need to stop the surgery.

### LS Diet Class

You will take the LS Diet class with a dietitian about 4-8 weeks before your surgery. This group class will be held online and lasts 1 hour. During this class you will learn how to follow this diet safely, and we will give you a handout with more information. We will also share information about the protein liquid diet you will follow after surgery.

# **1 Week Before Surgery**

- Starting 7 days before your scheduled surgery:
- **Stop ALL the following items** to lower your risk of problems with anesthesia, blood pressure, and blood thinning during surgery.
  - Herbal supplements, fish or krill oil pills, multivitamins, Vitamin D, prebiotics, probiotics, caffeine, energy drinks or additives, and alcohol
- Review all the materials and handouts you received from the surgeon just before surgery.
- Make smooth blended foods that you can pour into an ice cube tray and freeze for quick heating to increase flavor variety. In most ice cube trays, 1 cube = 1 ounce.
- Make sure you have all items from the "What to Buy Before Surgery" table on page 67.

# **Planning for Your Food After Surgery**

**After surgery you will follow a liquid diet.** Your food cannot have **any** lumps, bumps, or chunks of anything. Have a blender ready to prepare your food, and a strainer to remove lumps. You should be able to pour all your food, so stock up on pourable liquids now!

**You will sip ½ cup portions.** After surgery you will need to sip a ½-cup portion over 20-30 minutes. Purchase small glasses or cups for your meals.

**Focus on protein.** You will need to have 15-20 grams of smooth liquid protein 4 times per day. This will help you reach your goal of 60 g a day. Before surgery, stock up on liquid protein. You will drink it every 3 to 4 hours.

**Stay on track.** Set up your meal schedule and reminders in case you have no appetite. Be ready to record all your food and nutrition!

### **Section 7 Reflection**

Date I Read Section 7: \_\_\_\_\_

Things from this section I'm already doing well:	Things from this section I'd like to work on:
Questions:	

# Section 8: Eating During Recovery

Starting immediately after surgery, follow these guidelines until your first appointment with your surgeon:

#### Your main goal for the first 2 weeks after surgery is preventing dehydration.

- Drink at least 60 ounces of hydrating liquids each day.
- You cannot drink carbonated liquids for **at least** the first 3 months.
- Avoid coffee. It is very acidic and can cause heartburn and stomach pain.
- Avoid caffeine and alcohol. These liquids are dehydrating.
- Protein drinks are **not** hydrating liquids.
- Do not drink with a straw for the first 3 months. Straws increase air and pressure in your new stomach.

#### Your next goal is to have plenty of protein.

- Protein goal: 60 g total per day for women, 80 g total per day for men.
- Sip 4 ounce (½ cup) protein-rich liquids 4 to 5 times a day. Sip this portion over 20 to 30 minutes.
- Have 15 g protein in each liquid meal.
- See a sample day on the handout given to you in the purple folder.

#### Choose your food carefully.

- Drink only smooth, pourable liquids without lumps. Avoid all other food textures until you meet with the surgeon.
- Avoid any solid food that is not drinkable. This will help you avoid vomiting, which can cause problems with your healing stomach.
- Avoid any vitamins or minerals unless your provider tells you otherwise. At your first online group class appointment after surgery, your dietitian will talk with you about taking vitamins.

### Day 1 of Recovery

When you wake up after surgery, you will feel uncomfortable, very thirsty, and very sleepy. Walk as soon as your nursing team allows you to get up. This will help decrease the gas pressure in your abdomen.

#### **Drinking Liquids:**

- Your mouth will feel very dry, but you will not be able to drink anything immediately after surgery.
- When you wake up from anesthesia, your nurse will bring you water in small medicine cups. It may take 1 hour to finish 1 medicine cup of water.
- When you can tolerate 1 medicine cup of water over an hour, you will start the Bariatric Liquid Diet. Your dietitian will review this with you.
- Sip on liquids very slowly. Drink 1 medicine cup (1 ounce) over 15 minutes.
- Do not use a straw, even if it comes on your hospital tray.
- Order diet Jello, broth, or water. **Do not** order carbonated liquids like soda or sparkling water.

Focus on healing through careful eating and drinking choices.

### Day 2 of Recovery

- If you are recovering well, you will likely go home.
- You will start your Bariatric Liquid Protein Diet.

#### When you get home:

- Continue to increase the amount of hydrating liquids you drink each day.
- Work up to ½ cup of Bariatric Liquid Diet items 4-5 times a day.
- Continue walking.

# **Staying Hydrated**

**It is important to drink enough fluids.** After surgery you may not feel thirsty, but it is still important to drink enough fluids. Always carry your water bottle with you and set mini goals during the day to help you stay on track. Take small sips instead of gulps to reduce pain. After surgery you will not be able to drink quickly, so it is a good idea to start practicing sipping now!

Sip at least 48 ounces of hydrating liquids each day to prevent dehydration. Try to reach 60 ounces a day between meals. Sip slowly to avoid pressure or pain caused by drinking too much at one time. Drink 8 ounces (1 cup) every hour that you're not having protein.

There are exceptions to the fluid recommendations for certain medical conditions. Talk with your provider about your fluid goals.

**Do not drink with your meals.** After surgery you **must** separate your hydrating liquids from your meals by 30 minutes, before and after. Drinking hydrating liquids during or too close to your meals can:

- Make food pass more quickly into the intestine. This can make you feel hungry.
- Increase the risk of dumping syndrome after Gastric Bypass. See page 74 for more information about dumping syndrome.
- Increase the risk of GERD and regurgitation after sleeve gastrectomy.
- Cause pain in your *esophagus* (throat) or stomach.

### What should I drink?

- Hydrating Liquids do not have any caffeine, protein, or alcohol.
- You can drink water or non-sugar-sweetened flavored water. If plain water causes cramping or discomfort, try drinking it at room temperature. You can also try alkaline water or electrolyte water.
- Make flavored water by adding slices of non-citrus fruit, herbs, or cucumbers. Try using a water bottle insert that allows you to add items. Experiment with different combinations and amounts to find a flavor that you like!
- Try drinking zero-calorie electrolyte waters that are less sweet:

<ul> <li>Powerade Zero</li> </ul>	<ul> <li>Gatorade Zero</li> </ul>	<ul> <li>Sobe Life Water Zero</li> </ul>	
- Vitamin Water Zero	- Propel Zero	- Core	

- Vitanini Water Zero Froper Ze
- Core
- Smart Water Hint Water Water flavors (Mio, Crush, Crystal Light)

### What drinks should I avoid?

Avoid caffeine, coffee, tea, and energy drinks, and carbonated beverages, such as soda, seltzer, or beer. These cause gas, cramping, and stomach pain. Avoid anything citrus or acidic, such as lemon, lime, orange, grapefruit, tomato, or vinegar.

Avoid alcohol, as it is high in calories and low in nutritional value. It is important to know that there is an increased risk of addiction to alcohol after bariatric surgery.

### Watch for Dehydration

Dehydration is the most common reason people must go to the emergency room. Dehydration may cause these symptoms:

• Thirst

- DizzinessHeadache
- Fatigue

- Dark or decreased urine
- Feeling lightheaded
- Dry skin or mouth
- NauseaRapid heart rate
- . . . . . . . . . .
- If you notice any of these symptoms and are not drinking at least 48 ounces a day, your first step is to **drink**. If you cannot drink enough for your urine to be light, or if your symptoms do not improve in 3-4 hours, call 206-598-2274. Choose #2 to speak with a provider.
- If you have a rapid heart rate, feel dizzy, and you are urinating ½ as much as usual, go to the emergency room.

### Listen to your body!

It's important to focus while eating so you can listen to your body's signals. Sit down to eat all your meals and snacks and avoid eating in front of the TV or other distractions. Listen to what your body is telling you about being satiated (full). You may be getting full if you have a hiccup, sneeze, runny nose, watery eye, 1 burp or sigh. Pay attention to signals that your body is **not tolerating your food:** 

If you notice these signs	You might have	
Lots of burping, hiccupping, foamies	Eaten too much	Eaten too quickly
(foamy mucus regurgitation),	Had liquids too close to food	• Taken too large a bite
regurgitation of food, nausea, chest pressure, or stomach pain	Eaten food that is too dense	Not chewed well enough

### **Recovery Tips**

Choose Food Carefully	Stay on Track	Stay Active
<ul> <li>Eat 4-5 very small meals or snacks daily</li> <li>Limit your meal size to ½ cup after gastric bypass and ¾ cup after gastric sleeve.</li> </ul>	<ul> <li>Set alarms on your phone or download a bariatric app to help stay on track for meals, liquids, and exercise.</li> <li>Ask a support person to help you.</li> </ul>	<ul> <li>Do not sleep all day.</li> <li>Walk each day. Start slowly and increase your time and pace as you can. This will help your bowels move and decrease pressure in your abdomen.</li> <li>Work up to 60 minutes a day, 5 days a week.</li> </ul>

## **Transitioning to Your New Diets**

**Soft Diet:** You will start this diet about 2 weeks after surgery. During your first online group class appointment after surgery, your dietitian will talk with you about how to transition to a very soft foods diet and about taking vitamins. In a soft diet, your food must be very moist and easy to chew, and you must avoid anything with a crunchy, crispy, or firm texture. Protein will continue to be the focus at all your meals. You will get more instructions and handouts during your group class.

**Regular Diet:** Transitioning to a regular diet may take weeks to months! You will learn how to slowly transition from the very soft foods diet to solid meat, raw fruits and vegetables, bread, pasta, rice, etc. Your dietitian will review your diet at your second clinic appointment. This is usually 6 weeks after surgery. You will learn more about this diet in an online class with other participants.

#### As you transition to a soft-texture or regular-texture diet, keep these important notes in mind:

- You will **always** need to cut your food into small, dime-sized pieces.
- Your food will **always** need to be very moist.
- Chew each bite until it is smooth.
- You might find that you can no longer eat some of your favorite foods.
- Keep your meals small and stick to the approved foods.
- Protein must **always** be the focus of meals and snacks.
- Your goal is to avoid going back to the foods or eating patterns from before your surgery. This is the next part of your journey.

#### Place your Bariatric Diet handouts here for quick reference.

Section 8 Reflection	Date I Read Section 8:
Things from this section I'm already doing well:	Things from this section I'd like to work on:
Questions:	

## Section 9: Preventing Problems

All journeys have some challenges. In this section you will learn about some possible problems that can happen, and tips on how to fix or avoid them.

#### **Vitamins and Minerals**

• You must take certain vitamins and minerals after surgery to lower your risk of *deficiencies* (shortage). Deficiencies can be harmful to your long-term health. Problems include *osteoporosis* (weak bones), change in vision, nerve damage, poor memory, *anemia* (low iron), etc.



This section has tips on stopping problems before they start.

- Your dietitian will talk with you about the vitamins and supplements you will need after surgery. Ask your dietitian for current pricing.
- You must remember to take your supplements every day.
- Before surgery you should take an adult multivitamin and at least 100 mcg (4,000 IU) of Vitamin D3 each day if your Vitamin D level is *deficient* (low).
- You **MUST** take a 100 mg Thiamine (also called Thiamin and Vitamin B1) capsule to prevent complications. Begin taking this every day beginning at the Liver-Shrinking Diet and continue through the first 9 months after surgery.
- There are exceptions to these vitamins and minerals for certain medical conditions like kidney disease, heart disease, or liver disease. Talk with your provider about your supplement plan.
- Do **NOT** take gummy, liquid, or patch vitamins.
- See handout "Required Bariatric Vitamins" for suggested products.

## Schedule for taking vitamins and minerals

TIME	SUPPLEMENT	AMOUNT

## **Dumping Syndrome**

*Dumping syndrome* happens when a concentrated food or liquid passes too quickly from your stomach pouch into the intestine. The intestine adds fluid to *dilute* (thin out) the concentrated sugary food. Follow the arrow in the diagram below.

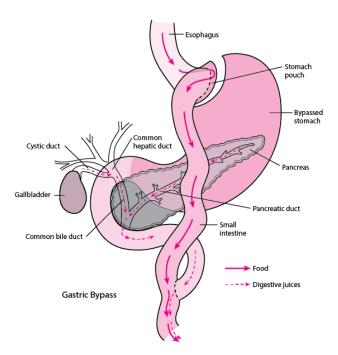
Dumping is a possible problem after gastric bypass surgery and may get better over time. Not everyone gets dumping syndrome as each person has a different tolerance level.

If you do experience dumping syndrome, the symptoms start within 20 minutes after eating a food or drink that is not tolerated. The symptoms may last 1 hour. If this happens, rest for 45-60 minutes to allow the symptoms to pass. Symptoms may include any of these:

- Shaking
- Rapid heart rate
- Pounding heart
- Liquid diarrhea
- Overheated, flushing
- Body aches like having the flu
- Sweating
- Very tired
- Nausea
- Abdominal cramping

#### Prevention is the best way to avoid dumping syndrome!

- Avoid ANY liquid with ANY food! Wait 30 minutes after eating to have liquids.
- Avoid sweets like ice cream, frosting, candy, flavored latte, cookies, etc.
- Avoid large portions of high-fat foods like greasy, fried foods, or creamy sauces.
- Keep portions small and do not overeat.
- Listen to your body's signals and stop eating before you are full.
- Notice what type and amount of food is a trigger and avoid it in the future!





Wait to drink until at least 30 minutes after eating.

## **Preventing Common Problems**

Going Out to Eat	<ul> <li>Plan to spend a long time enjoying your meal. Tell your family and/or friends that this will not be a quick meal.</li> <li>Check restaurant menus ahead of time so you do not have to make a quick decision.</li> <li>Push the glass of water aside and do not order any drinks.</li> <li>Instead of an entrée, try 1-2 side dishes, a non-fried appetizer, or sharing a meal.</li> <li>Ask the restaurant for alternative items or preparations. For example, ask for grilled instead of fried fish, request to have your salad dressing on the side, etc.</li> <li>Pack your leftovers immediately to avoid snacking while talking.</li> </ul>
Hair Loss	It is so exciting to lose weight very rapidly, but it does cause the side effect of some hair loss. It will begin about 6-12 weeks after your surgery and continue for about 12 months. Biotin and many other store-bought products unfortunately do not stop hair loss. A very low-calorie diet means rapid weight loss which causes hormone changes that affect hair loss and growth. The best way to decrease hair loss is to have enough protein, hydration, vitamins, exercise, and calories. If you are not eating enough calories, then you are likely to lose more hair. This does not mean you should overeat to prevent hair loss. It is a trade-off.
Dental Problems	<ul> <li>Avoid overeating, as this can lead to regurgitation of food or foamy mucus.</li> <li>Avoid snacking, as digestive enzymes start each time you have a sip or bite with calories.</li> <li>Floss after each snack or meal.</li> <li>Brush your teeth 2 times each day. Don't brush more often as this can harm your enamel.</li> <li>Rinse your mouth well with warm water.</li> <li>Take all the vitamins your dietitian recommends.</li> <li>Do not smoke or inhale any type of nicotine or cannabis (marijuana).</li> </ul>
GERD (Heartburn)	<ul> <li>Avoid any liquid 30 minutes before, during, or after any food. Sometimes you need to wait 60 minutes.</li> <li>Avoid eating beyond your satiation signal which is about 1 cup after gastric bypass and 1½ cups after gastric sleeve.</li> <li>Take small bites and chew very well.</li> <li>Avoid eating and lying down for at least 1 hour after eating anything.</li> <li>Avoid any inhaled products (unless prescribed by your healthcare provider).</li> <li>Avoid any carbonation, caffeine, and alcohol.</li> <li>Avoid acid, spicy, and citrus foods and beverages.</li> <li>Avoid chocolate and any type of mint.</li> </ul>
Alcohol	Avoid alcohol for at least 1 year. After bariatric surgery having 1 drink is like having 3 drinks! Your stomach can no longer make enough of the enzyme that breaks down alcohol, so it goes directly to your blood. This means that 2 ounces of wine or ½ ounces of hard alcohol can stay in your body for many hours. Your blood alcohol level is 2-3 times as high as before surgery if you had a gastric bypass. If you must drink, choose a low-sugar beverage. Eat food before you drink and sip slowly. There are many low- or no-sugar mocktails (non-alcoholic drinks) to enjoy.
Constipation	For guidance, see page "Stomach Problems After Surgery" in the Nursing chapter.



What is your favorite restaurant? Write down two strategies you can use after surgery to enjoy going out to eat with family and friends.

How do you feel about avoiding alcohol for at least one year? What are some ways you can enjoy socializing and relaxing without alcohol?

#### **Old Habits**

Bariatric surgery is a great tool to reduce the portion size of your meals. However, in the future you may notice that you can eat larger portions, crave foods and drinks like you used to, or even return to some old habits.

About 2 years after surgery, you may notice that you do not get as much feedback or "fullness" signals from your stomach. This can lead you to eat larger portions of food. The more food you eat, the more hunger hormones you will have. Both of these can cause an increase in calories and weight.

To prevent this, you must forever continue to use and practice your new knowledge and tools. Set yourself up for success by choosing dense, whole foods instead of highly processed foods or sweets. We encourage you to work with a therapist to help heal and manage your emotional relationship with food.

# Section 9 Reflection Date I Read Section 9: \_\_\_\_\_\_ Things from this section I'm already doing well: Things from this section I'd like to work on: Questions: Questions:

## Section 10: Skills for Lifelong Success

#### **Be Ready to Change**

- You must be willing to change to succeed after surgery!
- Be consistent! Practice your healthy habits every day.
- Be accountable to yourself track all food and exercise.
- Remember: Weight-loss surgery is a tool but is **not** a cure for obesity. Use your skills and tools to meet your goals.
- It takes about 3 months before a behavior becomes a habit. It is important to start practicing changes now!

#### Eat a Balanced Diet

- Choose whole foods instead of processed foods.
- Eat from all the food groups for balanced nutrients.
- Eat protein first at every meal and snack!
- Eat high-fiber foods: vegetables, fruits, whole grains.
- Choose colorful, low-carb vegetables.
- Snack on fresh fruit instead of sweets.
- Include a small amount of healthy fat each day.

Practice Your Portions	Plan Ahead	Avoid Trigger Foods
<ul> <li>Meals should be smaller than your fist.</li> <li>Cut food into dime-sized bites.</li> <li>Chew each bite until it is smooth.</li> <li>Use small plates and cups.</li> <li>Measure and weigh your food.</li> <li>Track all snacks/meals in your app: <ul> <li>At least 3 days a week for weight loss.</li> <li>Track at least 3 days a month for weight maintenance.</li> </ul> </li> </ul>	<ul> <li>You will make healthier choices if you plan for each day!</li> <li>Plan 4-5 small meals each day</li> <li>Eat every 4-5 hours.</li> <li>Do not snack or nibble between your planned meals.</li> <li>Keep a backup food option with you so you are always prepared.</li> <li>Shop from a list to avoid bringing home <i>teaser</i> or <i>trigger</i> foods.</li> </ul>	<ul> <li>Find non-food substitutes for trigger foods.</li> <li>Limit these foods to less than 1 small serving a week: <ul> <li>Smoothies (limit to 1 cup)</li> <li>Processed meats</li> <li>Sugar-sweetened foods</li> </ul> </li> <li>Avoid carbonated, sweetened, and alcoholic beverages.</li> </ul>
Mindful Meals	Preventing Problems	Seek Support
<ul> <li>Eat only 1 bite of food per minute.</li> <li>Eat with your non-dominant hand.</li> <li>Put your fork down between each bite.</li> <li>Use chopsticks.</li> <li>Leave 1-2 bites of food on your plate.</li> <li>Listen to your body's signals and stop eating when you are full.</li> <li>Each meal should take 20-30 minutes.</li> <li>Avoid distractions while eating.</li> </ul>	<ul> <li>Always separate liquids and food by at least 30 minutes.</li> <li>Have at least 8 cups (64 ounces) of hydrating liquids each day.</li> <li>Take daily vitamins and minerals.</li> <li>Eat fiber to decrease constipation.</li> <li>Exercise each day! Include cardio and strength training.</li> <li>Avoid dumping syndrome (see page 74)</li> </ul>	<ul> <li>Participate in support groups.</li> <li>Ask your family and friends to help support you.</li> <li>Join bariatric communities and forums online.</li> <li>Go to all your appointments.</li> <li>If you need help or have questions, contact us! We are here to help you stay on track.</li> </ul>

#### Date I read section 10: \_\_\_\_\_

## Section 11: Pre-Surgery Nutrition Assessment

Before we approve your surgery, you must understand how your body will change and how to adjust your eating habits. You must show that you are ready and able to make these changes in your daily life. Answer the questions in this section as you work on your new habits. Your dietitian will review this with you.

#### **Requirements**

- □ I read my Bariatric Notebook
- □ I purchased and read / listened to Bariatric Mindset Success, by Kristin Lloyd (available on Amazon)
- □ I spoke with someone or watched videos about their bariatric surgery experience
- □ I understand that bariatric surgery helps me reduce my portion size, but I still must be aware of my calories and food choices
- □ I attended the "Key Concepts of Weight Management" on (date)\_\_\_\_\_
- □ I need to weigh less than \_\_\_\_\_ pounds before qualifying for surgery

#### **Nutrition Knowledge**

#### Write down 2-3 food examples for each of the terms below:

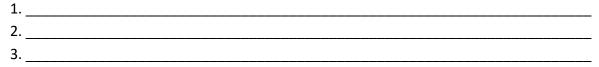
- Fat:
- Carbohydrates: \_\_\_\_\_\_
- Fiber: \_\_\_\_\_

Describe a **balanced meal** that you know how to make at home:

Write down 2 healthy snacks you enjoy eating:

- •
- •

Write down 3 nutrition habits that will be different for you after bariatric surgery:



#### <u>Vitamins</u>

- □ I understand that for the rest of my life, I will need to take daily vitamins that are not a gummy.
- □ I understand that vitamins aren't usually covered by insurance.
- I am currently taking the following vitamins:

For the next questions, rate yourself from 1 to 5 for how often you are currently doing this habit.

1	2	3	4	5
I am not	l am just starting	I do this	I do this most	I do this
doing this yet	to do this	sometimes	of the time	consistently
Meal Planning	<ul> <li>I plan and cook most of my meals for the week and weekend.</li> <li>I plan 1-2 snacks for the day that include protein with vegetables or fruit.</li> <li>I shop from a grocery list to prevent buying <i>trigger</i> or <i>teaser</i> foods.</li> </ul>			
Nutrient Tracking	<ul> <li>I track calories and grams of protein, carbs, and fiber with a journal or an app.</li> <li>Which app are you using?</li> <li>I use measuring cups and/or food scales to make sure my tracking is accurate.</li> <li>I track every single food, soup, sauce, dip, candy, treat, or liquid that I eat or drink.</li> </ul>			
Eating Habits	I prepare and eat mo I eat while sitting in My meal plate is ¼ p I use small plates (8 I put ½ cup of food in I remind myself to ta I can leave 1-2 bites I do not eat second s I take 20 minutes to I take 20 minutes to I listen to my body a I can recognize my ha I can recognize my satiat I keep food only in n I do not eat out of a I recognize the emot	a chair, without lookin rotein, ½ green or low - 9 inches across) or 1 n a dish beside my plan ike small bites of food of food on my plate at servings of anything. slowly eat meals. Ind stop eating before unger signals, such as ion (fullness) signals, s hy kitchen (not in my k bag, box, package, or ions that may lead me	orocessed or packaged fo ag at a tv, phone, or comp y-carb vegetable, and ¼ h ½-cup bowls. te at meals to get used to and chew very well. t any meal. I get too full. such as: bedroom, office, or living large dish.	outer. igher-fiber carb. o seeing small meals.  room).
Liquids	I do not drink any su	ding all alcohol in soci	oonated liquids or alcoho	
Exercise		eek, for at least 30 tot least 15 minutes at a		

## Chapter 4:

# Nursing

This chapter explores obesity, types of weight loss surgery, and your care team. It also explains how to get started, get ready for surgery, and which medications to avoid. You will learn how to take care of yourself after surgery and avoid problems.





We are here to help you understand your surgery and support your health every step of the way.

## **Table of Contents**

## **Page**

Section 1: Preparing for Your Surgery	81
Section 2: Medications to Stop Before Surgery	85
Section 3: Self-Care After Weight Loss and Metabolic Surgery	87
Section 4: Stomach Problems After Weight Loss and Metabolic Surgery	90

# Section 1: Preparing for Your Surgery

Gastric bypass and sleeve gastrectomy

This section explains how to prepare for your gastric bypass or sleeve gastrectomy surgery. It covers what to expect before, during, and after surgery, including instructions on fasting, showering, and what to bring. It also includes tips on avoiding constipation and information on parking and directions to the hospital.

## **Your Surgery Experience**

It is important that you understand what will happen during your surgery and why. We are committed to working with you for a safe surgery experience. Your surgery will be at the University of Washington Medical Center (UWMC).

Clinic hours: Monday to Friday from 8 a.m. to 5 p.m.

After hours: Call 206.598.6190 and ask for the "surgery or resident doctor on call."

**Urgent needs:** Call 911 or go to the emergency department if you are experiencing bleeding, chest pain, shortness of breath, or difficulty breathing.

## Where to Check in for Your Surgery

2 <sup>nd</sup> Floor Surgery Pavilion Admitting	2 <sup>nd</sup> Floor Pacific Admitting
Surgery Pavilion	UWMC – Montlake Campus
UWMC – Montlake Campus	1959 N.E. Pacific St., Seattle, WA 98195
1959 N.E. Pacific St., Seattle, WA 98195	

## **Arrival Time**

Operating Room Scheduling staff will call you 1 to 2 days before your surgery, between 9 a.m. and 3 p.m. They will tell you your admitting location, when to arrive, and what to bring with you. If your surgery is on a Monday, they will call you the Friday before.

If you have not received this call from Scheduling by 3 p.m. the day before your surgery, please call 206.598.4045 or 206.598.6334.

## Interpreters

If needed, UWMC has interpreters to help you before and after surgery. Please tell us if you need an interpreter. You may also call Interpreter Services at 206.598.4425 to ask for an interpreter.



There are many steps to take before surgery. Use this section to help you keep track of everything you need to do!

## **Pre-Surgery Checklist**

- □ You need to have a responsible adult (your support person) drive you home from the hospital. You cannot drive or use public transit alone after this procedure.
- □ Your support person must stay with you for the first 24 hours after you leave the hospital.
- □ Carefully follow the fasting guidelines below.
- □ Follow the shower and shaving instructions below.
- Do not use make-up, deodorant, lotions, hair products, or fragrances on surgery day.
- □ Remove all jewelry and body piercings.
- □ If you use a CPAP machine at night to help you breathe, bring it with you.
- □ Bring your medical insurance card and a photo ID with you.
- □ Bring a method of payment for any co-pays for medications needed after surgery.
- □ Bring a copy of your healthcare directive and/or durable power of attorney for healthcare so they can be placed in your medical record.
- Do not bring any unattended children with you. If children aged 17 and under (minors) come to the hospital, they must be supervised by a responsible adult at all times. Children must be supervised in all areas of the hospital including the waiting room.

## How to Prepare for Surgery

#### **Fasting Instructions**

- 24 hours before surgery, follow a liquid diet:
  - 2-3 protein shakes and 64 ounces (8 cups) of hydrating fluids.
- Drink one bottle of apple juice at bedtime the night before surgery.
- Do not eat any food after midnight the night before surgery. Water is okay.
- On surgery day, bring the other bottle of apple juice with you to your surgery appointment.
- Start drinking this other bottle of apple juice when you arrive at the hospital parking lot. After you check in, do **not** drink any more liquids.
- Your stomach needs to be empty for 2 hours before surgery.

#### **Shower and Shaving Instructions**

- Starting 2 days before surgery, do not shave your body.
- In the 2 days before surgery, take a total of 5 showers using surgical soap.
  - 2 days before surgery: Take 2 showers (morning and evening)
  - 1 day before surgery: Take 2 showers (morning and evening)
  - Day of surgery: Take 1 shower (in the morning)
- Wash your entire body below your shoulders. Do not wash your hair or face with surgical soap.
- After your final shower on the day of surgery: Do not use makeup, hair products, lotions, deodorant, and fragrances.

#### Before Coming to the Hospital

- Remove all jewelry, acrylic nails, and body piercings.
- Wear loose, comfortable clothing.
- Do not bring valuables with you.

#### What to Bring with You to the Hospital

- CPAP machine (if you have one). This will be especially important to use after surgery because:
  - You will be sleeping on your back
  - Your breathing may be shallow (because your stomach muscles will be recovering)
  - You will be on narcotics, which are medications that can decrease respiratory rate (breathing rate)
- Bring your insurance information and a photo ID.
- Bring a list of all medications you are currently taking.
- Do not bring any unattended children (age 17 and under).

## **Constipation Before Surgery**

To avoid constipation, you can use these recommended medications before surgery:

- Over-the-counter (OTC) recommendations:
  - Senna
  - Milk of Magnesia
  - Glycerin suppositories
  - Fleets enema
  - Miralax
- Avoid harsh laxatives
  - Magnesium citrate
  - Phospho-soda
  - Ex-lax
  - Bisacodyl

## Parking on Surgery Day

After your surgery, you can have your parking at the hospital validated for a reduced rate. For more information on:

- UW Campus parking and fees: Please call 206.685.1543.
- Hospital parking: Please call 206.598.5275.

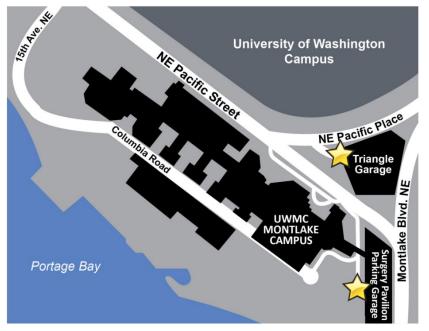
UWMC – Montlake is at the south end of the UW Campus. The address is 1959 N.E. Pacific St., Seattle, WA 98195. You may park in one of these garages:

- Triangle Parking Garage: Across N.E. Pacific St. from the hospital.
- Surgery Pavilion Parking Garage: At the east end of the hospital.

#### **Driving Directions to UWMC – Montlake**

- From Interstate 5:
  - Take Exit No. 168B (Bellevue /Kirkland) onto State Route 520.
  - Take the first exit off State Route 520 to Montlake Boulevard.
  - Follow the signs to University Washington Medical Center.
- From Interstate 405:
  - Take exit 14 (to Seattle via State Route 520) heading west.
  - Take the Montlake Boulevard exit.
  - Follow the signs to University Washington Medical Center.

UWMC - Montlake campus is east of Interstate 5 and north of State Route 520.



Stars on the map show the entrances to the Triangle Garage and the Surgery Pavilion Parking Garage.

## Section 2: Medications to Stop Before Surgery

Important safety instructions

This section explains which medications and supplements you should stop taking before surgery to help prevent bleeding problems. It also provides important safety instructions about when to stop specific medications, like pain relievers and blood thinners.

## **Getting Ready for Surgery**

To prevent bleeding problems, your doctor may tell you to stop taking certain medications before your surgery. This may include medicine you take with a prescription, without a prescription ("over the counter"), vitamins, or herbal supplements.

You must carefully follow all medication instructions. This is for your safety.

Tell your provider about **ALL** the medications and supplements you are taking.

**IMPORTANT:** Talk with your doctor **BEFORE** you stop taking the following prescription and anti-platelet drugs used to prevent blood clots, heart attack, or stroke:

- Aspirin
- Clopidogrel (Plavix)
- Dipyridamole (Persantine)
- Aspirin/Dipyridamole (Aggrenox)
- Prasugrel (Effient)
- Ticagrelor (Brilinta)

**IMPORTANT**: These prescription anticoagulant (blood thinning) drugs require special instructions before you stop or restart taking them. Ask your prescribing doctor or Anticoagulation Clinic for instructions:

- Apixaban (Eliquis)
- Dabigatran (Pradaxa)
- Dalteparin (Fragmin)
- Edoxaban (Savaysa)
- Enoxaparin (Lovenox)
- Fondaparinux (Arixtra)
- Rivaroxaban (Xarelto)

## **Medications to Avoid**

You must NOT take the products listed below in the days before your surgery.

Pain relief medications that contain aspirin or other salicylates	<ul> <li>Ascomp with Codeine</li> <li>Alka-Seltzer</li> <li>Bayer (aspirin)</li> <li>Ecotrin</li> <li>Empirin with Codeine</li> </ul>	<ul> <li>Excedrin</li> <li>Fiorinal</li> <li>Pepto-Bismol</li> <li>Zorprin</li> </ul>
Pain relief medications that contain nonsteroidal anti-inflammatory medications (NSAIDs)	<ul> <li>Advil</li> <li>Aleve</li> <li>Diclofenac (Flector, Zipsor, Zorvolex)</li> <li>Indomethacin (Tivorbex)</li> <li>Ketorolac (Toradol)</li> <li>Meclofenamate (Meclomen)</li> </ul>	<ul> <li>Meloxicam (Mobic)</li> <li>Ibuprofen</li> <li>Midol</li> <li>Motrin</li> <li>Naproxen</li> </ul>
Other prescription pain-relief medications	Celecoxib (Celebrex)	• Valdecoxib (Bextra)

#### Stop taking the products listed below 7 days before your surgery date:

## **Vitamins and Other Natural Supplements**

Starting 7 days before your surgery, stop taking ALL:

- Herbal supplements
- Multivitamins
- Fish oil or omega-3
- Vitamin D
- Vitamin E

# Section 3: Self-Care After Weight Loss and Metabolic Surgery

Post-operative care instructions

This section explains how to take care of yourself after surgery. It covers what to do while you're in the hospital, how to care for your incision, and the goals you need to meet before going home. It also gives advice on what to eat and drink, how to stay hydrated, and how to safely dispose of any leftover pain medication.

## At the Hospital

To meet your discharge goals:

- **Breathe deeply and cough.** We will teach you how to use an *incentive spirometer*, which is a device to help your lungs recover. You will use this spirometer 10 times each hour you are awake.
- **Do not get out of bed on your own.** Ask for help from a nurse or nurse aid. Once it is safe, get out of bed and walk as many times a day as you can.



Plan ahead to make sure you're ready for a safe and comfortable recovery after surgery.

## **Discharge Goals**

Once you meet all the goals below, you will be discharged home from the hospital:

- Adequate pain control
- Able to urinate after your catheter is removed (if you have one)
- Nausea control
- Able to get out of bed on your own

## **Incision Care**

- Shower every day and let soapy water flow over your incisions. Pat yourself dry and do not rub your incisions.
- Check your incision(s) daily and leave the Steri-Strips in place. These usually fall off on their own in 7 to 14 days.
- Watch for signs and symptoms of infection:
  - Increased redness
- Any creamy-colored drainage
   Eaver greater than 101 E°E
- Increased swelling
- Fever greater than 101.5°F
- Increased pain Chills
- Bad smell Shaking
- Be active and increase your activity daily. Take several walks throughout the day.

- For 6 weeks:
  - Do not submerge yourself in water (go all the way underwater). Do not swim, use a jacuzzi or hot tub, or take a bath.
  - Do not lift more than 10 pounds (about the weight of a gallon of water).

## **Post-Operative Diet**

After your surgery:

- Consume a thin, pourable liquid diet (see below) for 2 weeks until your follow-up appointment.
- Drink 8 cups (64 ounces) of hydrating liquids each day (see more on page 13).
- Consume at least 60 grams of protein each day.
- Log everything you eat and drink in a journal. You will use this when you see your dietitian.
- If you cannot eat, make sure you continue to drink fluids to stay hydrated.
- Signs that you are not drinking enough:
  - The amount you urinate is less than normal.
  - Your urine is dark-colored and strong-smelling.
  - You feel dizzy when you stand up.

#### **Liquid Protein Meals**

Slowly sip 4 to 5 liquid protein meals each day. Each meal is 1/4 to 1/2 cup of smooth, blended protein. Sip each meal for 30 minutes.

The liquid should be thin and smooth like milk. Try:

- Blended chicken or fish with broth.
- Blended cottage cheese.
- Add unflavored protein powder to strained low-fat cream soup.
- Plain Greek yogurt with no fruit pieces or added sugar.
- Smooth protein shakes that have at least 15 grams total protein and less than 15 grams total carbohydrates.

#### **Hydrating Liquids**

Be sure to stay hydrated after your procedure. Examples of hydrating liquids:

- Sugar-free flavored water
- Sugar-free Jell-O
- Sugar-free popsicles
- Water infusion
- Plain water
- Hydrating liquids do **not** contain protein, caffeine, or carbonation (bubbles).

- Do not drink for 30 minutes before and after each meal.
- Drink at least 1 cup (8 ounces) hydrating liquid each hour, between meals. Aim to drink 1 to 2 ounces every 15 minutes.

#### Example of One Cycle

Repeat this cycle every 3 hours throughout the day:

- 1. 9:00 to 9:30 a.m.: 1/2 cup (4 ounces) blended cottage cheese (10 to 15 grams of protein)
- 2. 9:30 to 10:00 a.m.: Do not eat or drink anything (30 minutes)
- 3. 10:00 to 11:30 a.m.: 1 ½ cups (8 to 12 ounces) hydrating liquids. Sip 2 ounces every 15 minutes
- 4. 11:30 a.m. to 12:00 p.m.: Do not eat or drink anything (30 minutes)

Repeat steps 1-4 until the end of the day.

#### **Daily Goals**

Daily Hydration Goal	Slowly sip hydrating liquids between meals to equal 8 cups (64 ounces)	Drink: 8 to 10 ounces between meals over 60 to 90 minutes
Daily Protein Goal	Slowly sip 10 to 15 grams of protein at each meal. Aim to get at least 60 grams of protein	Drink: 4 ounces over 30 minutes

Until Your Follow-up Visit:

- Do not take vitamins or minerals.
- Do not change the texture of your meals.

## How to Properly Dispose of Opioid Medication

Opioid medications falling into the wrong hands is one of the leading causes of the ongoing opioid epidemic. People die daily from opioid overdoses.

#### **Opioid Safety**

- To dispose of leftover opioids: Find a local take-back program with www.takebackyourmeds.org
- Do not tell others you are taking opioids. Lock them up when using them.

#### Section 4:

# Stomach Problems After Weight Loss and Metabolic Surgery

Why it happens and what you can do

This section explains common stomach problems that can happen after surgery, like constipation, diarrhea, and gas. It describes symptoms and treatment you can do at home.



There are many things you can do to help with discomfort after surgery.

## Constipation

*Constipation* is when you have fewer bowel movements, and your *stool* (poop) is harder. Symptoms include pain in your *abdomen* (belly), bloating, swelling, and having to *strain* (push hard) during a bowel movement.

Constipation is common after having surgery. You may feel uncomfortable until your constipation gets better.

#### What causes constipation after surgery?

You may get constipated when there are changes to your:

- Diet (such as more protein or less fiber)
- Fluids (bariatric surgery can increase the risk of dehydration)
- Level of activity and exercise

Your abdomen will also feel sore after surgery. This can make it harder to use your muscles while having a bowel movement.

#### **Tips to Decrease Constipation**

#### Drink more water:

- Staying hydrated keeps your stools soft.
- Try to drink 8 cups of water each day (64 fluid ounces).
- Warm beverages may work better.

#### Eat regularly and add fiber:

- Try to eat your meals at the same time each day, especially your breakfast. This helps to get your digestion back on a regular schedule.
- Slowly add fiber into your diet with high-fiber foods:
  - Use a blender to blend cooked beans, lentils, split peas, and vegetables.
  - Add 1/3 cup of frozen berries to protein shakes.
  - Add flax seeds or chia seeds to protein shakes.
- Use fiber supplements such as Metamucil, Konsyl, and Citrucel. Choose powder or chewable options. Do not use tablets or capsules.

#### Other helpful tips:

- Take probiotic supplements.
- Take 1,000 mg of fish oil per day.
- Add 1 to 2 teaspoons of olive oil to protein shakes.
- Try drinking Smooth Move tea.
- Try to be a little more active and walk a little bit more each day. This will help your digestion.
- If you feel like you need to poop, try to go right away. Most people have the urge to have a bowel movement about 20 minutes after a meal.

#### Medications

Sometimes after surgery, a *laxative* medicine can make it easier to have a bowel movement. You can buy laxatives at most stores, and you do not need a prescription.

- For long-term use (follow the directions on the package):
  - Colace (Docusate)
  - Senokot (Senna)
  - Miralax (Polyethylene glycol)
- For short-term use:
  - Milk of Magnesia liquid works overnight. Do not take this for more than 3 days in a row.
  - Glycerin suppositories work in about 20 minutes.
  - Fleets enema works in about 15 minutes.

## Diarrhea

Diarrhea is having 2 or more loose or watery stools a day. Diarrhea can cause dehydration, weakness, feeling tired, poor appetite, and weight loss. Diarrhea can also make it difficult for your body to absorb enough of the important nutrients, vitamins, and minerals that you need to be healthy.

## What causes diarrhea?

- Caffeine (from coffee, energy drinks, or certain teas)
- Lactose
- Sugar alcohols (such as xylitol, sorbitol, and erythritol)
- Non-nutritive sweeteners (such as aspartame, sucralose, and saccharin)
- Foods and drinks that are high in sugar or fat
- Food intolerance (difficulty digesting certain foods)
- Illness (such as bacterial infection, flu, or food-related illness)

## **Treatment Options for Diarrhea**

- Drink plenty of hydrating fluids.
- Write down what you eat and drink. Record any symptoms of diarrhea to see if you can notice any triggers.
- Limit foods that are high in sugar and fat.
- Limit foods that are high in refined carbohydrates (such as white bread, pasta, pastries, sweets, and sodas).
- Avoid milk and dairy products. Lactose (the sugar in milk) can cause diarrhea.
- Do not eat any sugar alcohols, such as sorbitol, xylitol, or maltitol.
- Take Imodium medication and follow the directions on the package.

#### Gas

Gas happens when air builds up in your abdomen. Symptoms may include abdominal pain and discomfort, bloating, and cramping.

#### Why do I have gas?

- You may have swallowed air. This may happen if you eat quickly, drink through a straw, or drink carbonated beverages, such as soda.
- There may be undigested carbohydrates in your colon. This may be due to:
  - Bacteria in your colon that eat the undigested food and create gas.
  - Non-nutritive sweeteners.
  - Lactose.

#### How to treat and prevent gas



You can take care of yourself by learning which foods and drinks upset your stomach and digestion.

- Use a food journal to log your food intake. Record signs and symptoms of gas to help you identify triggers.
- Eat slowly and chew thoroughly.
- Avoid carbonated beverages.
- Avoid chewing gum.
- Avoid sugar-free foods (such as mints and candies) for 1 week.
- Avoid lactose or choose lactose-free options instead. You may want to try taking lactase enzymes.

- Avoid gas-producing foods such as beans, asparagus, Brussels sprouts, broccoli, cabbage, cauliflower, apples, and pears.
- Take probiotics these support healthy bacteria in your colon.
- Drink peppermint or ginger tea.
- To control bad-smelling gas, consider taking internal deodorant tablets such as Devrom. Do not use these within the first 3 weeks of your procedure.
- Consider taking the medications below. Follow their package directions:
  - Gas-X
  - Beano
  - Phazyme

## When to Call

Call the Center for Weight Loss and Metabolic Surgery at 206.598.2274, option 2 and ask to talk with a nurse if you:

- Are sick to your stomach and throwing up
- Feel dizzy and lightheaded when you stand up
- If you have not had a bowel movement in 3 days after discharge from the hospital