Summa Health™

Weight Management Institute

Reclaim Your Life.

Surgical Patient Education Manual

summahealth.org/weightloss

WMI-26-83736/KG/7-26

Are You Using MyChart?

Your Personal Health Hub

Summa Health's online portal puts your health information right at your fingertips. MyChart makes it easy to:

- Request a medication refill
- View consult, test and lab results*
- Stay informed and engaged with your care during your hospital stay
- Ask your doctor a question
- Check in to your appointment online
- View and manage a family member's health record
- Conduct a video visit with your provider
- Manage payments through one easy bill
- Register with the hospital ahead of time for your upcoming labor and delivery

Complete most tasks 24/7, all on your own time.

* All services are subject to availability on a per office basis

GET IT ON Google Play

Download on the App Store

Sign up today!

Visit **summahealth.org/mychart** with any questions or **mychart.com/Features** for additional features.

Summa Health™

Weight Management Institute
summahealth.org/weightloss

Patient Education Manual

Summa Health™

Getting Started

Section 1

Hello!

Congratulations! You are starting your journey to having weight loss surgery! This is an exciting time but as with all big decisions, there can be anxiety and nervousness associated with it. We are here to help guide you through the entire process. The most important thing to remember is that this is **your journey** and it is yours to navigate. We encourage you to play an active part in reaching your goal of being healthier.

This educational manual is going to play a key role in learning about your journey and helping you prepare for surgery and achieving better health. It is necessary that you read all of the information given to you. It is yours to keep and you can use it to add additional information in this manual. You can write notes and any questions you may have in it.

You will also find answers to frequently asked questions in this manual.

Please bring this manual with you to every visit. You should keep your manual handy so that you can refer to it when a question arises. There are also spaces for you to fill in your appointments which will make it easier to keep track of them and your progress.

For your convenience, there is also copy of the manual on our website at **summahealth.org/medicalservices/weight-loss**

Weight Loss Surgery Program Roadmap to Success

Phase I

Program Eligibility & Enrollment

1-2 weeks

- Complete information session seminar
- Verification of insurance benefits, if required.
- Initial consult with the surgeon
  - Meet with financial specialist

Phase II

Program Requirements

6-8 months for typical patients.* Your level of engagement determines how quickly you are able to complete pre-procedure requirements.

Complete:

- "Pre-op" medical management monthly visits (typically 3-6 visits required*)
- Bariatric Nutrition Assessment (BNA) with a dietitian (Initial assessment and typically 1-2 follow-up visits)
- Psychology evaluation (initial assessment with testing and typically 1-2 follow-up visits)
- Lab work including nicotine and drug/alcohol screening
- Cardiac and pulmonary clearance (if required)
- EGD
- UGI (if required)
- Other tests, assessments, etc. as required by your surgeon

Phase III

Before Surgery

1 month

- Surgery pre-authorization submitted for approval
- Final pre-op visit with surgeon before surgery
- Complete pre-surgery education class

Phase IV

Surgery

1-2 days

- Surgery
- Overnight hospital stay

Phase V

After Surgery

1 year

- Post-op visits at 1 week, 1 month, 3 months, 6 months, 12 months

Phase VI

Lifelong Maintenance

- Post-op visit at 18 months and annual check-in visits thereafter with an obesity medicine specialist
- Support groups

*Dependent upon specific insurance plan requirements

WMI-24-70259/CS/RH/06-24

Summa Health
Weight Management Institute Expectation Agreement

Thank you for choosing Summa Health's Weight Management Institute (WMI) for your care. The WMI physicians, Advance Practice Providers (APPs), nurses, and staff are here to help you achieve your goals and support you during your time in the program. While in the program, there are a few important things we ask of you so that we can help you stay on track and be successful in your weight loss journey.

1. Program Requirements (applies to surgical patients only)

Prior to surgery, you will be scheduled for many appointments that are required to comply with insurance requirements. It is important for you to complete these program requirements in a timely manner. These will include appointments such as: provider visits, psychological evaluation, nutritional assessments*, cardiology clearance, pulmonary clearance (if required), endoscopy (if required), obtaining necessary labs, and providing medical or behavioral health information from other providers that are pertinent to your care, if necessary.

*The Bariatric Nutrition Assessment (BNA) is a requirement prior to surgery. There is an out-of-pocket fee associated with this assessment that generally is not covered by insurance. Payment is due at the time of service. A surgery date will not be established until this fee has been paid.

Please be sure to review the checklist that is provided at your first monthly program visit. This is a great way to stay on track with required testing or visits. Your care team will review this checklist with you at each visit, please let us know if you have any questions.

2. Appointments

To keep you on track, it is important for you to show up to all your scheduled office visits and testing appointments. When you need to reschedule an appointment, we ask that you **provide us notice at least 24 hours in advance of your scheduled appointment**. Failure to do so may result in a program hold for a minimum of 6 months.

It is important to **be on time for all scheduled appointments**. If you arrive more than 10 minutes late to your appointment, we will do our best to fit you in the same day but if schedules are full you may have to be rescheduled for another day.

Please be aware, a program hold could result in having to restart or repeat certain program requirements like insurance required provider visits, nutrition assessments etc. Any co-pays or associated out-of-pocket expenses would be forfeited.

3. Conduct

Patients are expected to treat all WMI staff, physicians, and caregivers with respect. Aggressive behaviors, swearing at or threatening staff, and making racist, sexist, ethnic or homophobic comments will not be tolerated and could result in immediate dismissal from an appointment and/or the program.

4. Periodic Weigh-ins

Because we are here to help you lose weight it is important for us to obtain an accurate height and weight at each visit. Therefore, whenever you need to be weighed, we require the following:

1. All heavy outerwear be removed (coats, jackets etc.)
2. All personal belongings set down (purses, backpacks etc.)
3. All heavy objects be emptied from pockets and set down (heavy keys/key rings etc.)
4. Shoes are removed (please be sure to wear shoes that are easy to be removed prior to each visit)

PATIENT LABEL

Summa Health

Summa Health System

Summa Health
Weight Management Institute Expectation Agreement

5. Stay Connected
Being part of this program is a big commitment. You will be provided with a lot of information, scheduled for many appointments, and required to complete several assessments and diagnostic tests which are required as part of your care plan. We know it can be a lot to manage. We are here to help and have tools and resources to help you stay on top of everything.

If you have questions or need help don't be afraid to ask. Patients are encouraged to send and check messages using MyChart. This is the fastest and easiest way to get your questions answered and avoid having to play "phone tag." If you are not on MyChart and are interested in enrolling, ask your provider or the WMI front desk staff and they can help get you connected. Please note, MyChart messages are not responded to on evenings, weekends, or holidays.

You are always welcome to call the WMI at 330-375-6590. We will do our best to answer your call or get back to you within the next business day.

6. Children Under 12
It is important that office visits are free from distractions so our care team can focus on you and your care plan. Therefore, we ask that you do not bring children under the age of 12 to your visits. Please be aware, if children are brought to visits and interfere with a provider's ability to provide care, you may be asked to leave and reschedule the appointment. Any office co-pays associated with the visit will be forfeited.

7. Psychology Evaluations and Visits
All surgical patients are required to have a consultation with a psychologist. The purpose of this consultation is to learn more about you and the ways you cope with life events and stress and to help make sure you are successful before and after surgery. We will also require written confirmation from your behavioral health providers supporting your readiness for surgery.

An adult support person such as a spouse, significant other, parent etc. may attend provider appointments with you; however, support persons will be asked to remain in the waiting room for any psychology-related visit due to sensitive nature of these visits.

8. Our Commitment to You
We are committed to helping you achieve your goals and providing you with outstanding personalized care throughout the program. We will do our best to limit unexpected changes to your appointments, keep you informed of any changes to your care plan, be responsive to your needs and questions, and provide excellent customer service along the way. Lastly, we promise to treat you with kindness and respect and ask the same courtesy of you. Thank you for choosing Summa Health's Weight Management Program. We are glad you are here!

My Agreement:
I understand participation in this program is a big commitment on my part. I have read and understand what will be expected of me. ***If at any point I believe I am not able to do what is required I will let my care team know.*** *I understand if I do not comply with these expectations it could result in my ability to successfully complete the program including bariatric surgery.*

_____ _____
Patient Signature Date

This document will be added to your medical record.

Summa Health™

Weight Management Institute

Metabolic Weight Loss Surgery Notice for Women of Childbearing Potential

Our formal recommendation is for female patients to avoid becoming pregnant for 12-18 months after surgery.

- During this time, there is the potential for rapid weight loss, which may have uncertain effects on fetal development. Any deficiency in nutrition during pregnancy also carries a risk of fetal damage or loss.
- If a woman becomes pregnant after surgery, she will need special attention from her clinical care team to ensure adequate nutrition to meet the increased nutrition requirements of pregnancy.
- Summa Health's Weight Management Institute recommends patients secure forms of birth control prior to surgery. We encourage types of birth control that will not unnecessarily increase the risk of blood clots (DVT, etc.) around the time of surgery. These types of birth control are progesterone only, and low estrogen.

O I understand the recommendation is for female patients to avoid pregnancy for at least 12-18 months after surgery.

- I understand that if I am currently a woman of childbearing potential age 18-50 (meaning physically capable of becoming pregnant), pregnancy testing will be a routine part of my preadmission testing.

O I am not a woman of childbearing potential.

- Older than 50 years of age or
- Have had surgery to prevent pregnancy (Example: Bilateral tubal ligation, or has completed menopause.)

Patient Signature_____ **Date** _____

Surgical Weight Loss Patients

Now that you have made the decision to have metabolic weight loss surgery, there are some important things that you need to know:

- This is a big decision, and we are here to help you through this journey.
- Weight loss surgery is referred to as metabolic surgery because it impacts metabolism and gut hormones.
- These changes can lead to dramatic improvement or may cure metabolic disorders like Type 2 diabetes, high blood pressure, and high cholesterol.
- You are going to learn a lot about your health before and after surgery. Being willing to learn more about this life-changing decision will make this a positive experience.
- You must read all the information given to you; we are here to help if you need further explanation or assistance.

We need your help to get your insurance company's approval! The steps that need to be taken to get approval will be explained to you. The tests and appointments may seem overwhelming, but they are to ensure your safety and prepare you for the life style changes that you will need to make. You can help by:

- **NOTIFYING THE OFFICE IMMEDIATELY IF YOU HAVE ANY CHANGE TO YOUR INSURANCE 330.375.6590.**
- Keeping yourself on schedule by keeping your scheduled appointments and completing tests in a timely manner. If you need to reschedule something, it is your job to do so as soon as possible.
- Knowing what you will be expected to pay for the surgery such as, deductibles, copays and fees. Knowing this upfront will help you prepare and avoid interruptions in your progress toward surgery.
- It is your responsibility to obtain detailed coverage and benefit information from your insurance company.

Despite health benefits, weight loss surgery is considered elective surgery (meaning you have chosen to have surgery). Many insurance companies require their members to pay some portion of the cost. The Weight Management Institute uses a "split-fee" billing method. This means there will be two different bills. One bill will be for professional components (physicians) and the other will be for the facility (Summa Health).

Once all requirements set by your insurance company and our program have been met, we will send the information to your insurance company for their approval. It will then be time to get your surgery scheduled! There are many factors that go into setting your surgery date and we will work with you to schedule surgery. Surgery dates cannot be held.

Summa Health™

Weight Management Institute

Notice of Non-Covered Service

Patient Name: _____ DOB: _____

As your weight loss team, we want to provide you with the best care possible. The service listed below is a requirement for patients undergoing weight loss surgery at Summa Health and is part of our comprehensive program directly related to successful outcomes after surgery.

The service listed below is not covered by any insurance company. Payment for this service is your responsibility.

Non-Covered Service	Amount Due
Bariatric Nutrition Assessment (BNA) This covers before surgery appointments with a registered dietitian (RD), and provides education regarding after surgery diet and vitamin education. This BNA is required by insurance companies as a part of before surgery clearance care.	**$129.50** Due at the time of your first BNA appointment. Please note this must be paid in full before insurance submission and/or surgery date assigned.

Patient Signature: _____ Date: _____

Summa Health Representative: _____ Date: _____

Summary of Presurgery Requirements

Listed below are requirements that may be ordered by your surgeon. If ordered, they will need to be completed prior to getting authorization from your insurance company and a subsequent surgery date.

☐ **Preoperative Medical Management (PROMM)** Date(s)_____

PROMM includes appointments with a care team member who specializes in metabolic and obesity medicine that will help you become healthier through knowledge and dietary changes. These visits are also required by your insurance company to increase success and show your commitment to this journey.

☐ **Behavior Health Visit(s)** Date(s)_____

Behavior Health visits are with one of our psychologists. They work with you and help identify the positives in your life that will help in your journey and identify any negatives that could hinder your success. The psychologist approving you for surgery is a required step. If you have your own Mental Health Provider, our psychologist will work with them if needed.

☐ **Registered Dietitian Visit(s)** Date(s)_____

Appointments with the Registered Dietitian will review eating habits, eating biases, and emotional connections with food. It is important for success to have healthy eating habits established before surgery for success. You will need to have knowledge and acceptance of the changes that are required after surgery. The surgery is only one tool in the weight loss process and works WITH a healthy lifestyle. The dietitian approving you for surgery is a required step. There is an out of pocket fee for this visit.

☐ **Cardiology Clearance** Date(s)_____

Cardiology Clearance means you will see a Cardiology physician to make sure your heart health is good and you are safe for surgery. The Cardiologist may have additional testing you need to complete.

☐ **Pulmonary Clearance** Date(s)_____

Pulmonary Clearance means you will see a Pulmonary (lung) physician to make sure your respiratory system is good and you are safe for surgery. The Pulmonary doctor may have additional testing you need to complete. Frequently, you will need tested for sleep apnea and if you need treatment, it is required that we have proof of compliance.

☐ **UGI (Upper GastroIntestinal Imaging)** Date(s)_____

An UGI procedure is an imaging test used to examine the upper part of the digestive system. The test requires you to drink a contrast so that your organs can be seen on x-ray. You do not receive sedation for this procedure. (See picture)

☐ **EGD (EsophaGogastroDuodenoscopy)** Date(s)_____

An EGD procedure is a "scope" test where a flexible tube is used to examine the lining of the esophagus, stomach and the first part of the small intestine. This allows your surgeon to examine your digestive system. During this procedure, they will test for a bacteria called H-Pylori. You will receive sedation for this procedure so you will need a driver. (See picture)

☐ **Blood work**

Periodically throughout the process, you will need to go to a laboratory to have blood work drawn. This allows your caregivers to diagnose health conditions, monitor chronic diseases and assess overall health. Blood work is essential in monitoring your nutrition status as your diet changes.

☐ **Nicotine Testing**

Tobacco is known to cause complications after weight loss surgery. You will need to be tobacco free prior to surgery and blood work will confirm this. If you use tobacco, please tell us so we can assist you in quitting. (Refer to our Smoking Cessation pamphlet.) Many insurance companies also require proof of no nicotine.

☐ **Toxicology Testing**

Toxicology Testing is lab work that shows the presence or absence of drugs or alcohol. This testing is often required by your insurance company.

☐ **Preoperative Education Class**

Once you have a surgery date. You will be assigned a preoperative education class. This is a virtual class that you will be required to attend prior to having surgery. The bariatric nurse case manager will review preoperative information, hospital stay and things you need to know for home after surgery.

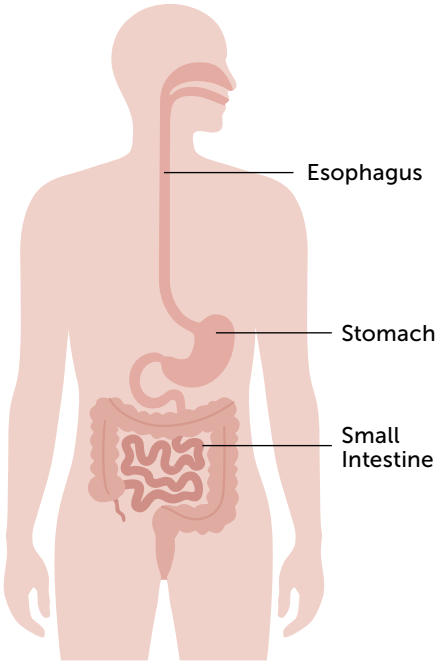
☐ **Other Testing**

Each patients individual medical history will be reviewed and further requirements could be needed to ensure safety.

What is an Upper GI (UGI)?

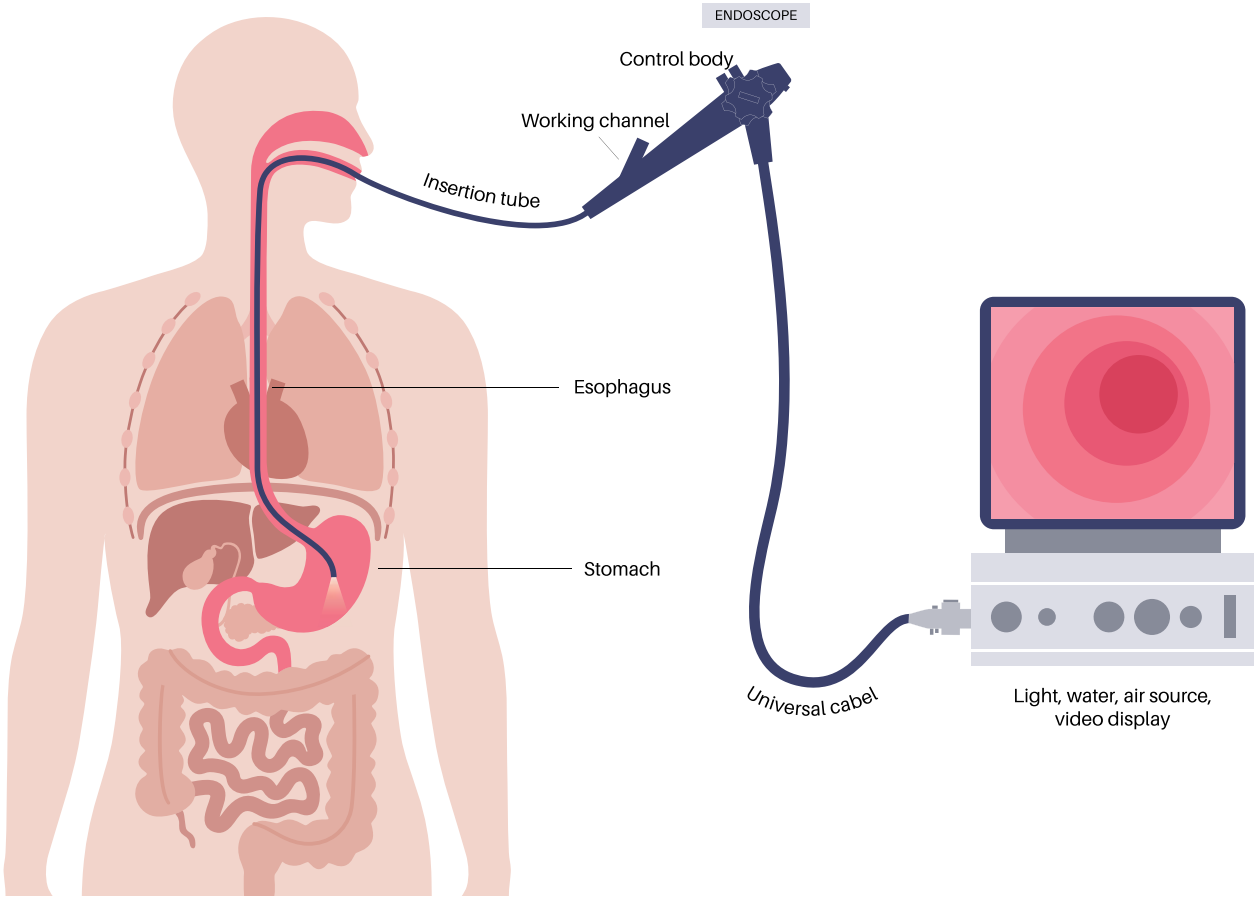
An upper gastrointestinal series (UGI) is an x-ray exam that shows the structure of the upper gastrointestinal tract, which is the part of the body that food passes through as it is digested. The upper gastrointestinal tract includes the esophagus, the stomach and part of the small intestine.

These images are obtained by a fluoroscopy x-ray that requires you to drink a contrast.



What is an esophagogastroduodenoscopy test (EGD)?

An esophagogastroduodenoscopy test is a "scope" test. A flexible tube is used to examine the esophagus, stomach and first part of small intestine. This allows your physician to examine the digestive system. During this procedure, a biopsy is taken to test for a bacteria called H pylori. You will receive sedation for this prcedure.



Frequently Asked Questions

Q: If my insurance changes before I have surgery, what should I do?

A: Notify the office immediately, your new insurance may not have the same benefit that covers the surgery. **330.375.6590**

Q: Will rescheduling my appointments delay my surgery date?

A: We understand that "life happens" and appointments will need rescheduled. However, not getting them rescheduled in a timely matter could delay your surgery date. No Showing for for an appointment could lead to cancelling your surgery preparation.

Q: How will I know what requirements my insurance company needs me to complete so that I can get my surgery approved?

A: You will be given a general outline at your first visit with the surgeon. Soon after that, you will get a preoperative "check list", with all of your requirements listed.

Q: When should I start working on the requirements I need to complete to have surgery?

A: ASAP. You will get a list of the requirements at your first visit with the surgeon and will get a more detailed list soon after that. If there are any abnormalities or "bumps in the road", there is time to address them. Ideally, your requirements should be completed by the end of your medical management visits.

Q: How long does the process usually take from beginning to surgery date?

A: The process is dictated by your insurance company requirements. Playing a proactive role in this process is extremely important. An estimate for the process is 6-8 months.

Q: Do I have to lose a certain amount of weight in the presurgery process to qualify for surgery?

A: This is dictated by your insurance company requirements. Typically, your weight at the end of the preoperative medical management visits should be less than at the beginning.

Summa Health™

Preoperative Medical Management Visits

Section 2

Preoperative Medical Management Visits

At these visits, you will see a healthcare provider who specializes in treatment of obesity as a disease, offering personalized treatment plans that assess nutrition, physical activity and medication.

Insurance companies require these visits to prove you are committed to the program and dedicated to complying to the recommendations given by Weight Management providers. The insurance company dictates how many of these visits are needed, typically, 3, 6 or 12. Your weight at completion of these visits should be lower than your weight was at the beginning of these visits.

The visits occur in a series, once a month. Once you start the series, you cannot miss one. If you cancel, rescheduling can be difficult and may delay your progress to surgery. You may work on completing your other requirements during this time.

Please add any material that is given to you at these visits to this section of your manual for future reference.

Summa Health™

Your Weight Loss Surgery Team

Section 3

Bariatric Surgery Journey

This education manual contains information related to your bariatric procedure, preoperative information and postoperative plan. This information will help you prepare for your surgery date. The manual is yours to keep and you can make notes in it as needed to help you keep organized. Please write down any questions you have so that when we meet with you, we can address them. Below are processes that will be occurring to complete your surgery journey.

- Your chart will be reviewed to verify readiness to be submitted to your insurance company to get authorization for your surgery and ensure coverage. If there are items missing, we will call you and provide you with a list of what needs to be done.

- When your chart is ready for submission to your insurance company, the Financial Specialist will make the submission and notify you that this has been done. Once the submission is completed, it could take four weeks before we get approval.

- When we get notice of the insurance approval, we will notify you. Please note that it is not uncommon for you, the patient, to hear about the approval before we do. If you are notified of the approval, please notify the office.

- Once we are notified of the approval, we will do a chart review to make sure all program requirements are met for you to have surgery. There are some program requirements that are in addition to what your insurance company requires. Once all the requirements have been completed, you are ready for a surgery date!
  - Please note: You will need to identify an adult who is planning on staying with you, around the clock for several days after surgery. For your safety, you will be asked to designate who will be caring for you at home before a surgery date is assigned.

- The Case Manager works with your surgeon to assign you a date of surgery.

- Once you have a date of surgery, you will receive a call to notify you of the date. At this time, you will also be provided with:
  - A final preoperative visit with your surgeon (three to four weeks before surgery date).
  - A Pre-Admission Testing (PAT) appointment (approximately one week before surgery).
  - Links to our online education and resources. You are **required** to attend the virtual preoperative education class prior to your surgery. The information and videos on the website can be reviewed anytime.
  - Instructions for preoperative diet (if recommended by your surgeon). There is a video on our website and you will be given a handout that provides detailed information about preoperative diet.
  - A reminder for you to start the FMLA paperwork process if your employer requires. This process could take three to four weeks and can only be submitted to your employer after surgery date is set. Email forms to **FMLAweightmanagement@summahealth.org** or fax them to **330.375.6290**.
  - Post operative appointments for one week after surgery, one month after surgery, and a support group session. By providing these appointments it allows time for you to add them to your schedule and make any necessary arrangements.

Your Team of Bariatric Experts

The Weight Management Institute employs a multidisciplinary approach to weight loss and to the lifestyle changes required to maintain your progress. Your team consists of qualified, dedicated professionals:

- Weight loss medicine physicians and surgeons
- Advanced Practice Providers
- Bariatric nurses
- Registered Dietitians
- Athletic Trainers/Physical Therapists
- Psychologists

The entire team participates in your pre and postoperative care. We are available to facilitate your progress and answer all of your questions. However, you will have the ultimate responsibility for your own weight loss success. Surgery is one tool that can put you one step closer to becoming healthier, but your ongoing commitment to making the necessary diet and exercise changes will drive your overall success.

Please visit our website by scanning this code or by visiting **summahealth.org/surgical-weight-loss** for more information about your Bariatric Team

Physician Profile

John G. Zografakis, M.D., FACS, FASMBS

Director, Advanced Laparoscopic Surgical Services
Medical Director, Weight Management Institute

Undergraduate: University of Virginia – BA Biology (1993)

Medical School: St. Louis University School of Medicine – MD (1998)

Internship: Summa Health System, Akron Campus – (1998-1999)

Residency: Summa Health System, Akron Campus – (1999-2003)

Fellowship: Advanced Laparoscopic and Bariatric Surgery Evanston Northwestern Healthcare – (2003-2004)

Board Certification: General Surgery - American Board of Surgery (2004)

Special Expertise: Advanced Laparoscopic and Bariatric Surgery

Professional Societies:
- American College of Surgeons (ACS)
- The Society of American Gastrointestinal Endoscopic Surgeons (SAGES)
- American Society for Metabolic and Bariatric Surgery (ASMBS)

Adrian G. Dan, M.D., FACS, FASMBS

Medical Director, Weight Management Institute

Undergraduate: Youngstown State University – BS Biology/Chemistry (1996)

Medical School: Northeastern Ohio Universities College of Medicine (NEOUCOM) – MD (2000)

Internship: Michigan State University, Department of Surgery – (2000-2001)

Residency: Michigan State University, Department of Surgery – (2001-2005)

Fellowship: Advanced Laparoscopic and Bariatric Surgery Cleveland Clinic Foundation, Department of Surgery – (2003-2004)

Board Certification: General Surgery – American Board of Surgery (2006)

Special Expertise: Advanced Laparoscopic and Bariatric Surgery

Professional Societies:
- American College of Surgeons (ACS)
- The Society of American Gastrointestinal Endoscopic Surgeons (SAGES)
- American Society for Metabolic and Bariatric Surgery (ASMBS)

Physician Profile

Tyler Bedford, M.D.

Program Surgeon, Weight Management Institute

Undergraduate: The University of Toledo – BA Biology (2003)

Medical School: St. George's University School of Medicine – MD (2011)

Internship: Western Reserve Health Education – (2011-2012)

Residency: Western Reserve Health Education – (2012-2016)

Fellowship: Advanced Laparoscopic and Bariatric Surgery, Summa Health - (2016-2017)

Board Certification: General Surgery – American Board of Surgery (2016)

Special Expertise: Advanced Laparoscopic and Bariatric Surgery

Professional Societies: American College of Surgeons (ACS)

Logan T Mellert, D.O., FACOS, FACS, FASMBS

Program Surgeon, Weight Management Institute

Medical School: Ohio University Heritage College of Osteopathic Medicine (2010-2014)

Internship: Western Reserve Hospital, Osteopathic (2014-2015)

Residency: Western Reserve Hospital, General Surgery (2015-2019)

Fellowship: Summa Health System - Akron Campus, Advanced Laparoscopic and Bariatric Surgery (2019-2020)

Board Certification: American Osteopathic Board of Surgery (2020)

Special Expertise: General and Minimally Invasive Surgery, Abdominal Wall Reconstruction, Complex Hernia, GERD

Professional Societies:

- American College of Surgeons (ACS)
- The Society of American Gastrointestinal Endoscopic Surgeons (SAGES)
- American Society for Metabolic and Bariatric Surgery (ASMBS)

Mark Pozsgay, D.O., FACS, FASMBS

Program Surgeon, Weight Management Institute

Undergraduate: Case Western Reserve University – BA Biology (2000)

Medical School: Ohio University College of Osteopathic Medicine – DO (2004)

Internship: Summa Health System – Akron Campus – (2004-2005)

Residency: Summa Health System – Akron Campus – (2005-2009)

Fellowship: Advanced Laparoscopic and Bariatric Surgery, MaGee-Womens Hospital, UPMC – (2009-2010)

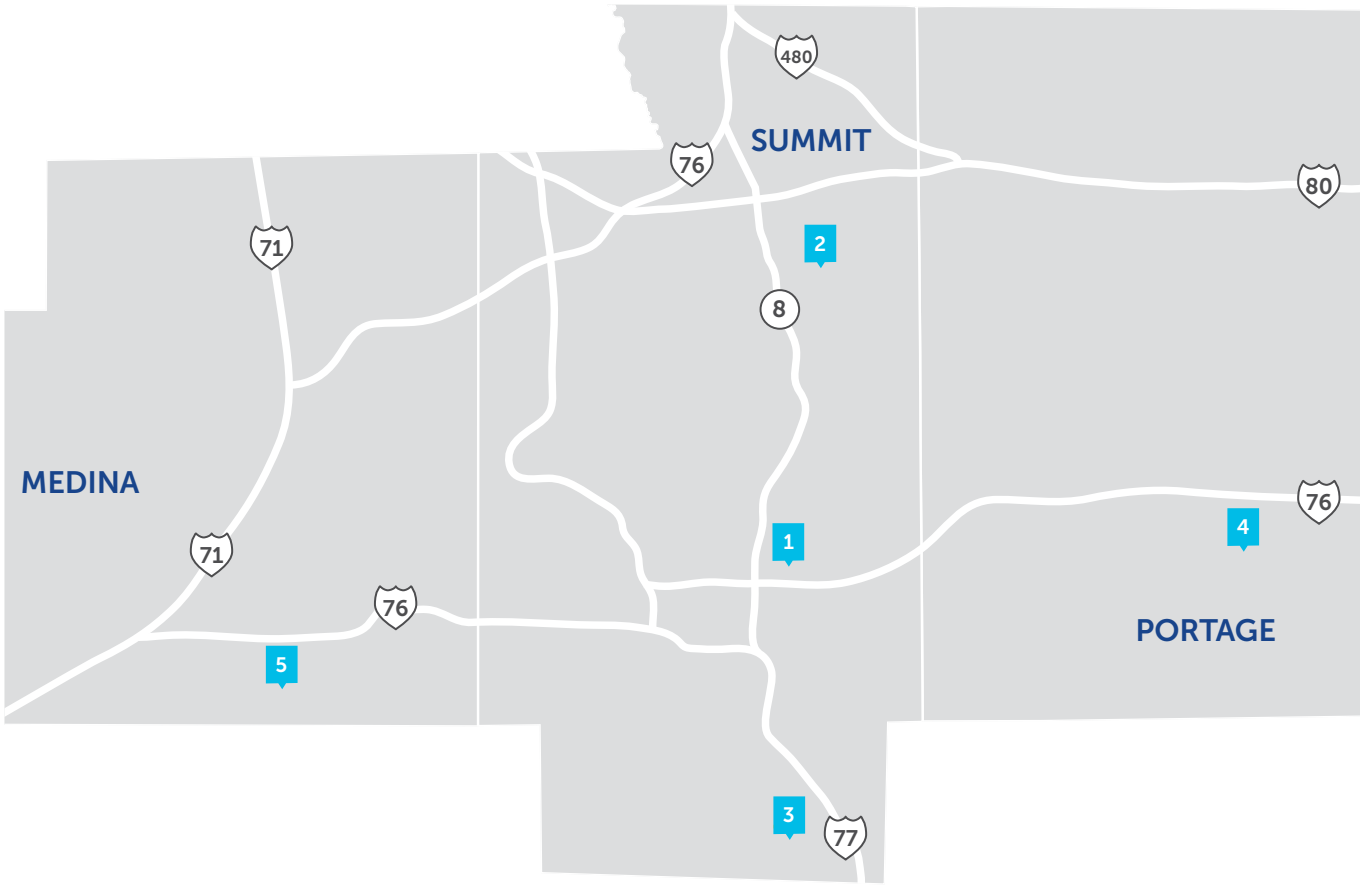
Board Certification: General Surgery – American Board of Surgery (2006)

Special Expertise: Advanced Laparoscopic and Bariatric Surgery

Professional Societies:

- American College of Surgeons (ACS)
- The Society of American Gastrointestinal Endoscopic Surgeons (SAGES)
- American Osteopathic Association (AOA)
- Alpha Omega Alpha

Locations



1 **Summa Health System – Akron Campus**
95 Arch St, Suites 175 and 260
Akron, OH 44304

2 **Summa Health Hudson Office**
1305 Corporate Dr., Suite A
Hudson, OH 44236

3 **Summa Health North Canton**
7034 Braucher St, Suite C
North Canton, OH 44720

4 **Summa Health Rootstown Medical Center**
4211 State Route 44 Suite 130
Rootstown, OH 44272

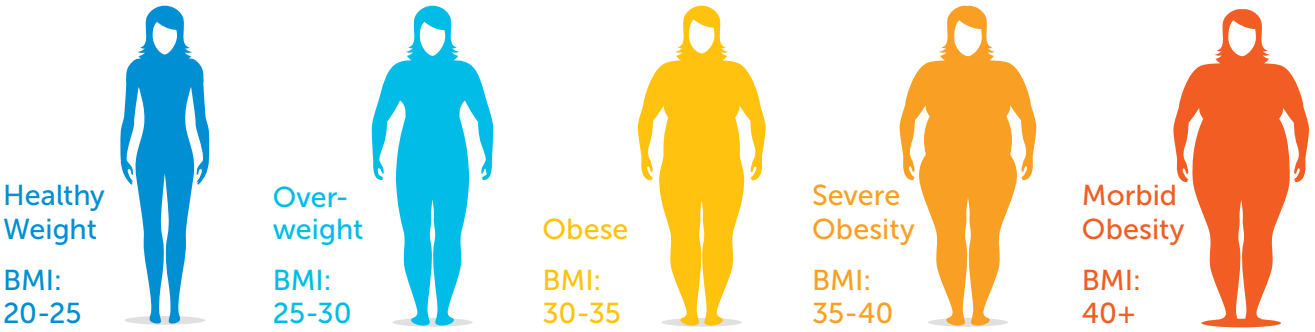
5 **Summa Health Wadsworth-Rittman Medical Center**
195 Wadsworth Rd.
Founder's Hall, Door #4
Wadsworth, OH 44281

Summa Health™

The Disease of Obesity

Section 4

Facts About Obesity



Obesity is a chronic disease currently affecting approximately 30% of American adults. In fact, the number of adults and children who are obese has increased steadily for the past 10 years, and is now considered epidemic. Obesity is complex in nature and is related to many other conditions such as:

- Cancer
- Cardiomyopathy
- Cerebrovascular disease (such as atherosclerosis and stroke)
- Chronic back pain
- Coronary artery disease
- Depression
- Degenerative joint disease
- Diabetes
- Endocrine abnormalities
- Gallstones
- Gastroesophageal reflux (acid reflux)
- Hepatic steatosis (fatty liver)
- Hepatobiliary disease (such as Crohn's disease and Hepatitis)
- Hypertension (high blood pressure)
- Infertility
- Obstructive sleep apnea
- Respiratory abnormalities
- Sudden death

Definition

The American Society for Metabolic and Bariatric Surgery (ASMBS) defines obesity as "a life-long, progressive, life-threatening, costly, genetically-related, multi-factorial disease of excess fat storage." While many have thought obesity to be a disease of willpower or life-choice, evidence is growing that strongly suggests exactly the opposite. While the specific causes of obesity are not known, it is clear that genetic inheritance, environmental, cultural, socioeconomic and psychological factors are involved.

Determining Obesity

The usual method for determining obesity is the Body Mass Index (BMI). The BMI measures the relationship between an adult's height and weight and provides a way to determine whether the height-to-weight ratio is healthy. According to the World Health Organization (WHO), a BMI between 18.5-24.9 is considered to be healthy, a BMI of 25-29.5 is considered to be overweight and a BMI of $\geq$ 30 to be obese. Individuals with a BMI of 40 or more, or who are greater than 100 pounds overweight, are considered to have clinically severe obesity. Most of the diseases that are associated with obesity begin to be a problem at a BMI of 30 or more.

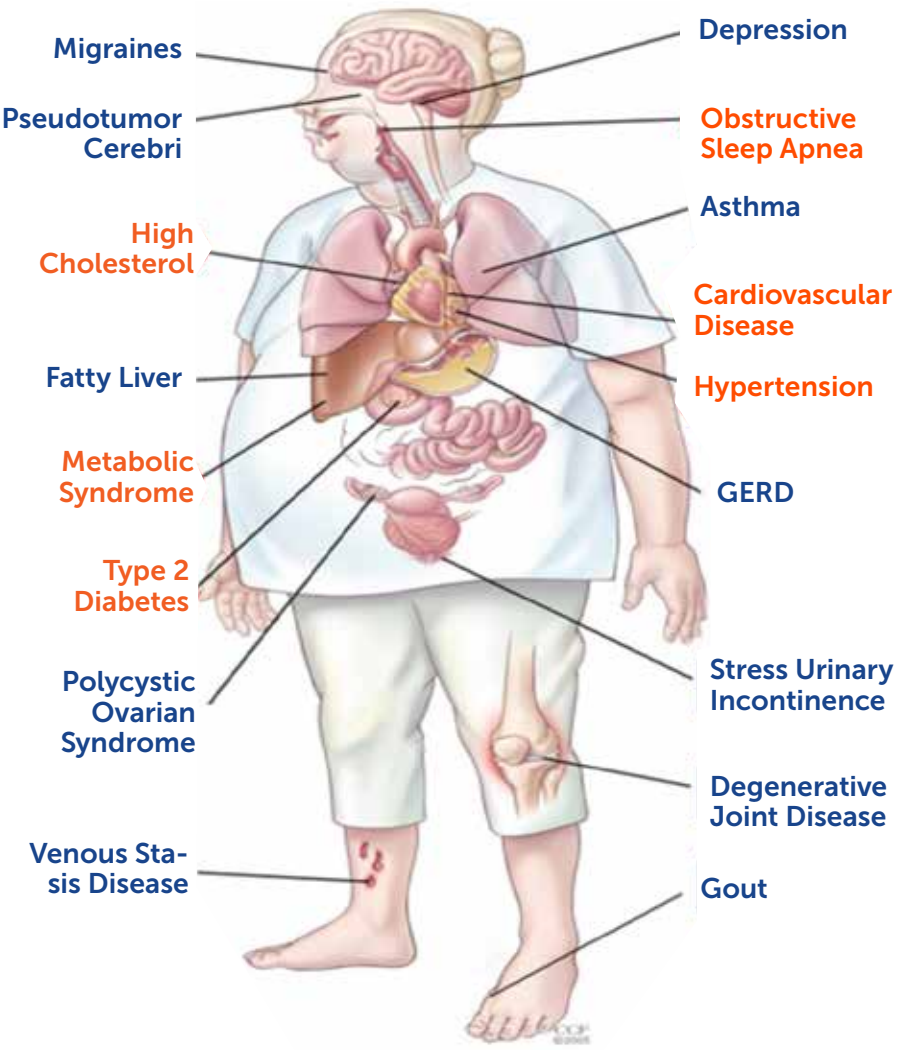
Additional Facts

Approximately 300,000 people die each year from obesity-related illnesses, making obesity the second leading cause of preventable death in America (smoking-related deaths remain the leading cause). Perhaps surprisingly, obesity is the most common cause of malnutrition in the Western world because people who are obese are not eating the right foods.

While diet and exercise have been consistently shown to result in weight loss, 90-95% of patients regain the lost weight within one to two years. When compared to these results, weight loss surgery has been shown to be most effective in helping people maintain significant weight loss and improve medical conditions.

Understanding Obesity

How Obesity Affects Your Body



$$\text{Body Mass Index (BMI)} = \frac{\text{Weight (kg)}}{\text{Height(m)}^2}$$

Healthy Weight	20-25
Overweight	25-30
Obese	30-35
Severe Obesity	35-40
Morbid Obesity	40+

The Truth about Bariatric Surgery: **Myths and Facts**

Myth #1 **Bariatric Surgery is extremely dangerous.**

While it is true that every surgery carries some risks, studies have shown that the risk for bariatric surgery is about the same as routine gall bladder surgery. In addition, obesity is related to an increase in life threatening conditions. Having bariatric surgery can lead to a reduction in health issues, increasing longevity.

Myth #2 **It' s all about diet and exercise, surgery is unnecessary and an "easy way out"**

Diet and exercise are certainly important, but they may not be enough for many patients who are overweight. Obesity is recognized as a chronic disease. Often, patients diagnosed with obesity may lose weight with diet and exercise, but more than half will gain weight back. Studies show that severe obesity is resistant to long term weight loss by diet and exercise. Dieting alone can cause alterations in body composition that can lead to weight gain. Weight loss surgery causes metabolic and gut hormone changes that reduce hunger and aid in weight loss.

Myth #3 **Most people will gain weight back after surgery.**

Long term studies have shown that 10 years after a weight loss procedure, more patients have kept the weight off when compared to patients who have lost weight without surgery. Bariatric surgery is a lifetime commitment and follow-up is essential. Most weight regain after bariatric surgery can be traced back to dietary habits and noncompliance with the Bariatric team recommendations.

Myth #4 **Surgery can affect how the body absorbs vitamins and minerals causing malnourishment**

Bariatric procedures may change the way the body absorbs vitamins and minerals. Deficiencies can be avoided by taking supplements after surgery as recommended by your Bariatric team. Follow up care for patients after surgery is very important so regular testing of vitamin and mineral levels can be done, and any deficiencies can be addressed.

Myth #5 **You can't have children after weight loss surgery.**

Patients who have weight loss surgery are advised not to become pregnant in the first two years after surgery due to nutritional concerns in the initial weight loss phase. Most patients reach a plateau of weight loss around 18 months after surgery and are in good nutritional status. It is important to note that weight loss leads to higher fertility rates and higher testosterone levels in men.

Myth #6 **Insurance won't cover weight loss surgery.**

Many insurance companies cover weight loss procedures. You must have surgery at a recognized weight loss center. If your insurance company has this benefit, they will have requirements to complete before approving your surgery. These requirements will be outlined by your Bariatric team. Bariatric surgery is metabolic surgery, not cosmetic surgery.

Myth #7 **Bariatric surgery leads to alcoholism**

Bariatric surgery does not naturally lead to alcohol abuse. However, having bariatric surgery does increase the risk for developing an alcohol use disorder, especially for people with a history of addiction or impulsivity issues. This is because surgery changes the way in which the body metabolizes alcohol (consuming 1 drink prior to surgery will feel like consuming 3 drinks after surgery). Thus, it is important to lessen risks of developing an alcohol problem. This is done by: eliminating alcohol consumption for at least 1 year after surgery and limiting alcohol consumption to one drink per sitting, forever. Further risks of alcohol use following weight loss surgery include: alcohol is calorie dense and offers no nutritional value (thus could lead to weight regain), dumping syndrome, liver damage, malnutrition and dehydration.

Myth #8 **Bariatric surgery causes depression**

Bariatric surgery can lead to emotional changes due to the biological, psychological and social changes that occur with surgery. Bariatric surgery does not directly lead to experiencing depression; however, surgery does place an individual at risk for experiencing mood difficulties, particularly for individuals with preexisting depression, those who experience greater difficulties with surgery adjustments and/or people experiencing various other life stressors. Thus, it is important to reduce risks of developing mood related difficulties. This is done by: creating an appropriate treatment plan for individuals with history of depression (medication management and/or psychotherapy), developing healthy and effective coping skills, using and/or increasing social support and obtaining adequate physical activity and sleep.

Who is a Surgical Candidate?

At the Weight Management Institute, we follow specific criteria when it comes to selecting candidates for weight loss surgery.

Those criteria are based on the National Institutes of Health (NIH) guidelines, as well as recommendations from the American Society for Metabolic and Bariatric Surgery (ASMBS). These criteria have been put into place to protect patients and to ensure their ability to comply with the postsurgical obligations related to diet, exercise, vitamin supplementation and other lifestyle changes.

The criteria are generally:

- BMI greater than 40
- BMI greater than 35 but less than 40 but with documented medical conditions resulting from obesity
- Previous attempts at nonsurgical weight loss
- Psycho-social contraindications have been ruled out
- Patient understands the risk, benefits and alternatives
- Patient demonstrates commitment to postoperative obligations

You and your healthcare provider will discuss if you are a candidate for weight loss surgery, or if nonsurgical options would benefit you.

Making the decision

Once you have educated yourself about the surgical options, spend some time considering whether weight loss surgery is right for you.

- Weigh all the risks and benefits of the surgery for you personally.
- Consider the nonsurgical options and alternatives.
- Know the possible complications of surgery
- Consider how you would personally benefit from the surgery.
- Make sure your expectations are realistic. Unmet goals as a result of unrealistic expectations can be very disappointing.
- Review your goals and identify what is motivating you to consider surgery.

Weight loss surgery will not solve all of your problems. It does not cure depression, low self-esteem, relationship problems or other psychological concerns. Undergoing this procedure simply provides you with another tool to help you lose weight, maintain that loss and improve your overall health. Remember: success is best measured in terms of your increased abilities, improved health and quality of life!

Summa Health™

About Weight Loss Surgery

Section 5

To Our Valued Patients...

Dear Patient,

We would like to tell you how pleased we are you have given us the opportunity to help you reach your weight loss goals. You have worked hard to get to this point, and are now ready for your weight loss surgery procedure.

The preoperative education you are given is a very important part of your preparation for surgery. The nurses and dietitians want to make sure that you are well prepared for your surgery, hospital stay and changes that you will make in your diet and lifestyle after surgery.

Please pay close attention as you go through the information, as it will help you know what to expect when you come to the hospital for your surgery, as well as in the days following. You will see members of your surgery team during your hospital stay; they will also be working with you before you go home to make sure you are prepared to care for yourself after surgery.

This patient education manual is an important tool. It contains information about the surgical procedure, medication management before and after surgery, what to expect each day while you are in the hospital, and the diet and lifestyle changes you will make after surgery.

We encourage you to add education materials to the manual as you receive them, and to bring the manual with you to the hospital.

Our team is excited for you; we want you to know that we are here to support you. Please let us know if you have questions at any time as you continue to move through the process.

Congratulations on getting to this point! You are on the verge of having a life-changing surgical procedure that will help you to become healthier!

Sincerely,
Your Bariatric Care Team

Understanding the Digestive Process

Note: See Figure A on the following page for visual references to the process outlined here.

To better understand how weight loss surgery can help you lose weight, it is important to understand how the gastrointestinal tract functions.

The esophagus is a long tube that moves food from the mouth to the stomach. The normal stomach can hold about three pints (1500 ml) of food from a single meal.

Food enters the stomach through a valve, which then closes to keep stomach acid from refluxing back into the esophagus. In the stomach, food is mixed with acids that aid digestion, breaking down larger pieces of food into smaller ones. Smaller pieces of food are then emptied into the small intestine through another valve called the pylorus.

Digestion continues in the small intestine, where most nutrients are absorbed. The small intestine is about 15-20 feet long. This allows sufficient time for digestion and nutrient absorption to occur. The first section of the small bowel is the duodenum, where food is mixed with bile from the liver and juices from the pancreas. This section of the bowel accounts for the absorption of much of your body's iron and calcium. Further digestion takes place in the middle part of the small intestine (the jejunum). The last section of the small intestine is called the ileum. This section plays a very important role in absorbing nutrients and fat-soluble vitamins A, D, E and K.

The contents from the small intestine then move to the colon (large intestine), where excess fluid is absorbed and stool is formed. A valve located between the small and large intestines prevents bacteria-laden contents in the colon from backing up into the small intestine.

Your surgeon will provide you with greater details on the changes that will be made to the digestive system's anatomy and function when the surgery is performed.

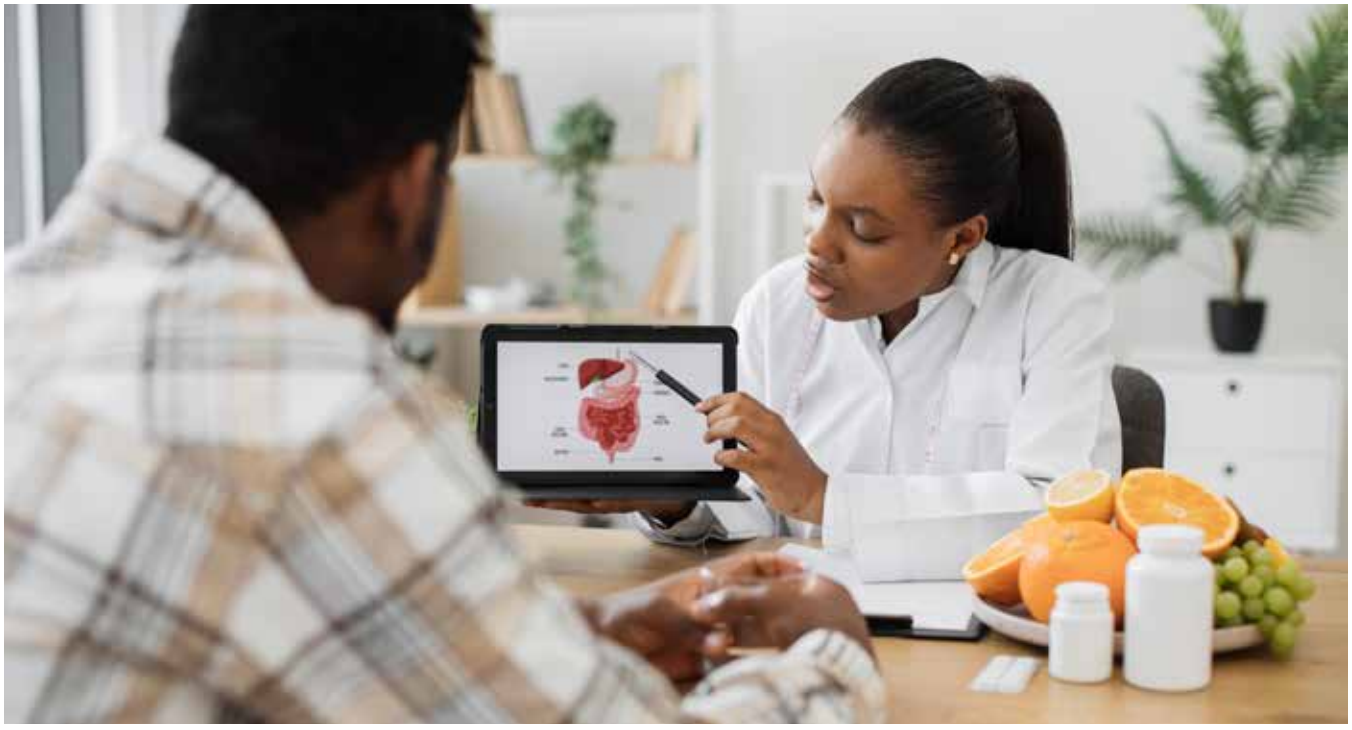
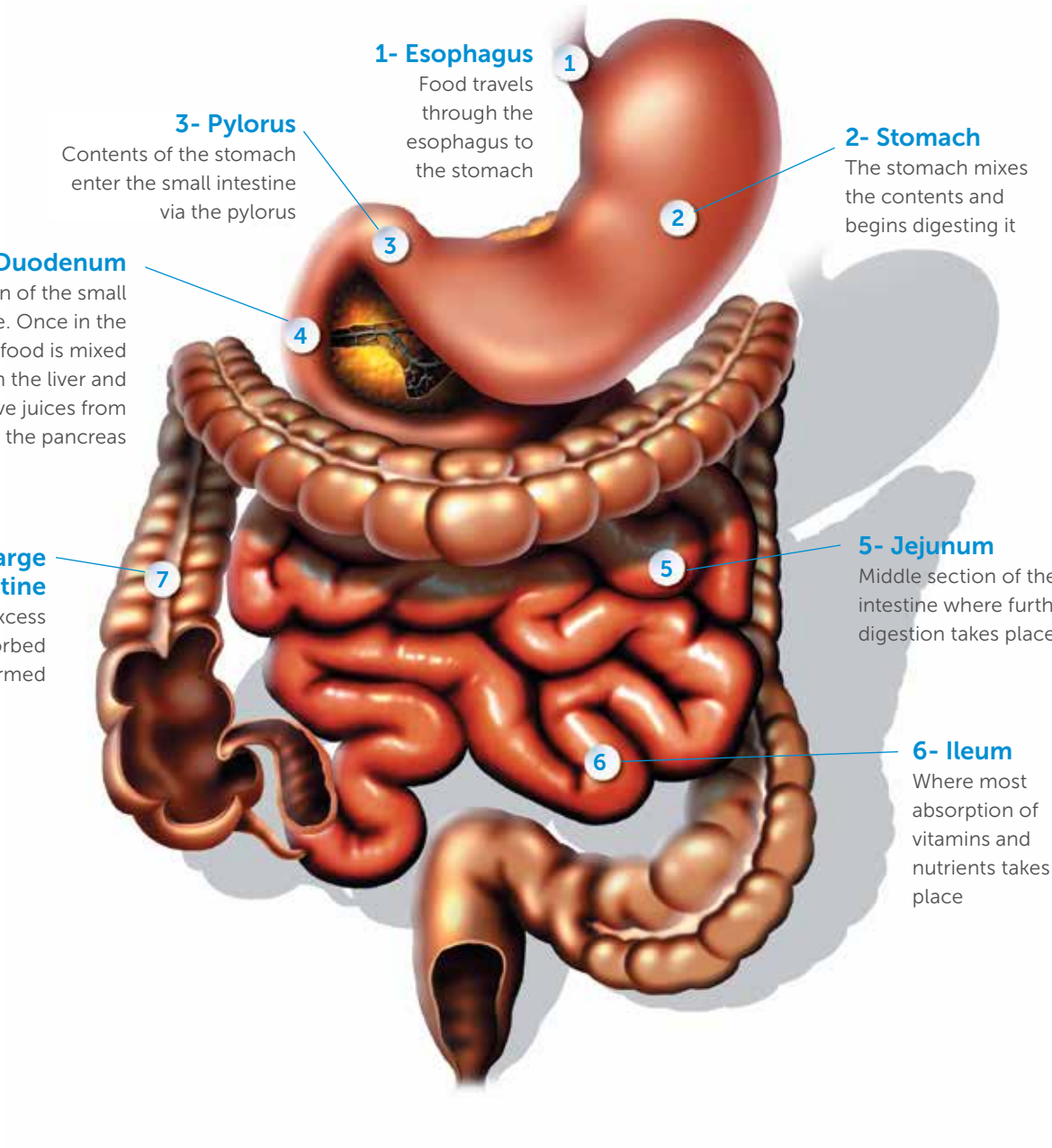


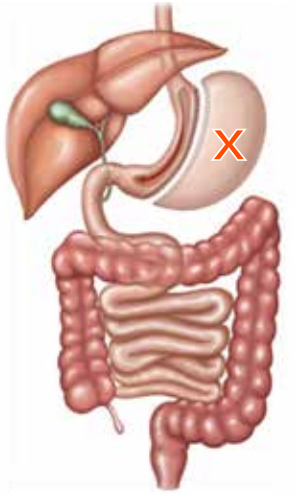
Figure A


1- Esophagus
Food travels through the esophagus to the stomach
1
2- Stomach
The stomach mixes the contents and begins digesting it
2
3- Pylorus
Contents of the stomach enter the small intestine via the pylorus
3
4- Duodenum
First portion of the small intestine. Once in the duodenum, food is mixed with bile from the liver and other digestive juices from the pancreas
4
5- Jejunum
Middle section of the small intestine where further digestion takes place
5
6- Ileum
Where most absorption of vitamins and nutrients takes place
6
7- Large Intestine
Where excess fluids are absorbed and stool is formed
7

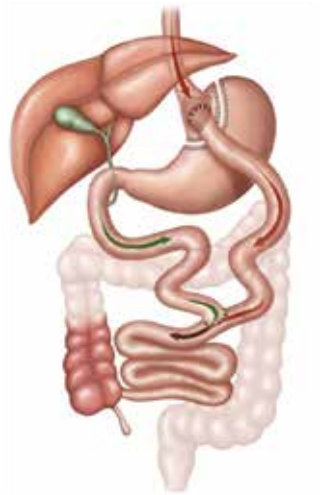
Surgical Procedures

Primary weightloss surgical procedures performed at Summa Health Weight Management Institute:

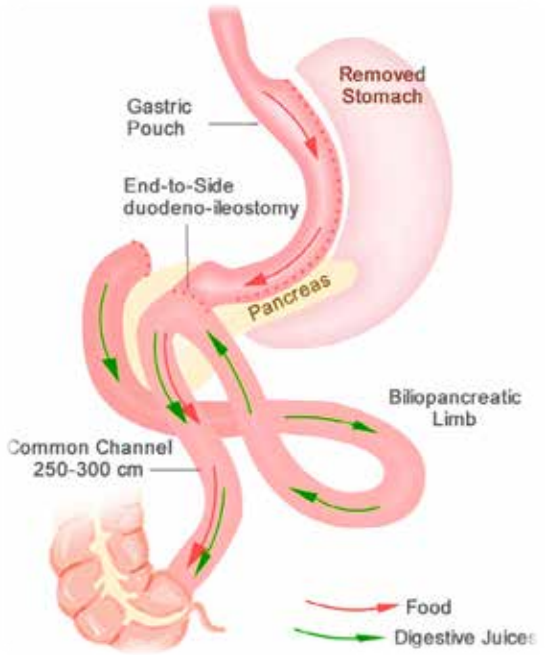
Sleeve Gastrectomy



Roux-en-Y Gastric Bypass



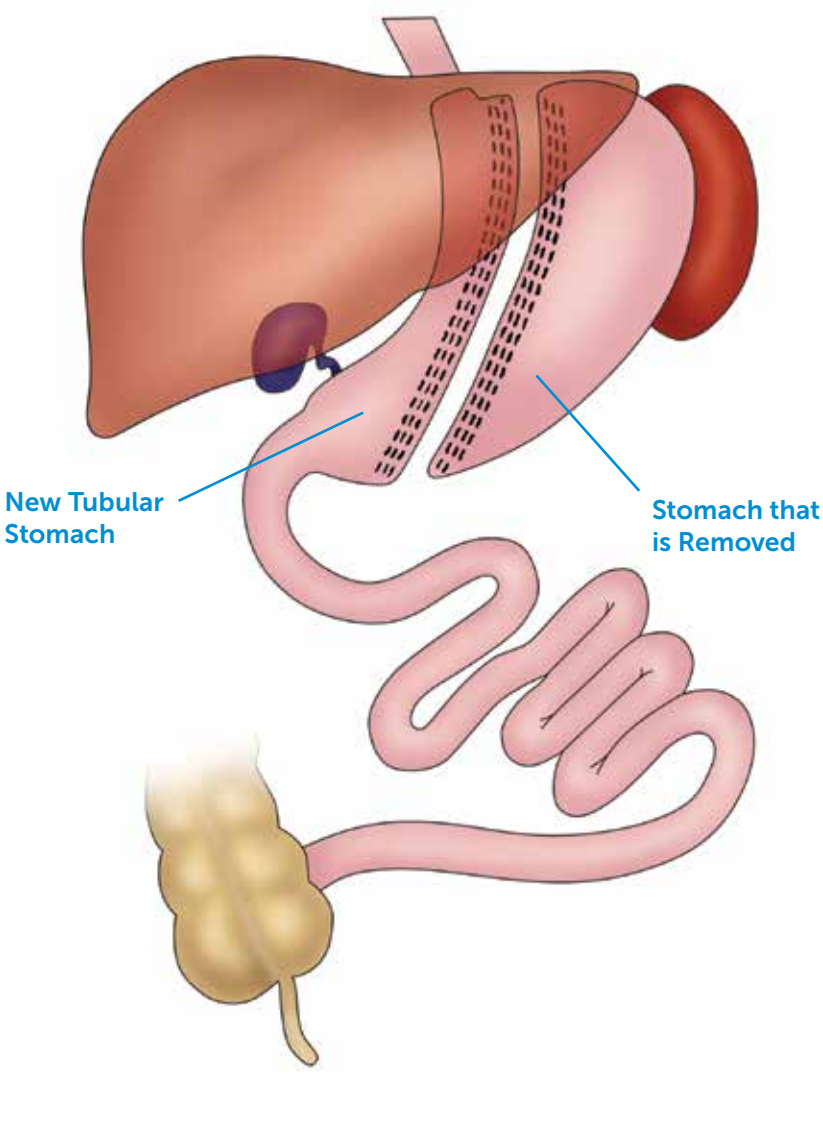
Single Anastomosis Duodenal Ileostomy with Sleeve Gastrectomy (SADI-S)



The following pages will review the above procedures. Please read about the procedure that you have mutually agreed upon with your surgeon.

How the Laparoscopic Sleeve Gastrectomy Works

The sleeve gastrectomy is a restrictive weight loss surgery. The procedure is designed to reduce the size of the stomach and its ability to distend so that you will feel full sooner and your appetite is decreased. The stomach is stapled vertically, and approximately two-thirds of the stomach is completely removed. You are left with a tubular stomach conduit that holds 100-200 ml. The surgery also results in changes to the gut hormones that can aid weight loss. This surgery does not result in malabsorption and is not a reversible procedure. The sleeve gastrectomy procedure is a tool that can allow you to lose substantial excess weight. However, you will be most successful if you are motivated to make and maintain certain lifestyle changes that must last for the rest of your life.



What is Roux-en-Y Gastric Bypass Surgery?

An Overview

The Roux-en-Y gastric bypass (or simply, gastric bypass) is the most common surgical weight loss procedure in the U.S., because it can produce reliable weight loss with an acceptable level of risk and minimal side effects.

The surgery actually alters the path that food takes from the stomach to the small intestine. Your surgeon will start at the top of your stomach, creating a small pouch about the size of a golf ball, which can hold only a few ounces of food at a time. The remaining lower section of the stomach is permanently separated from the rest of the stomach. The small intestine is then cut below the stomach at the area between the duodenum and the jejunum, which is rearranged to allow the new stomach pouch to empty directly into the jejunum.

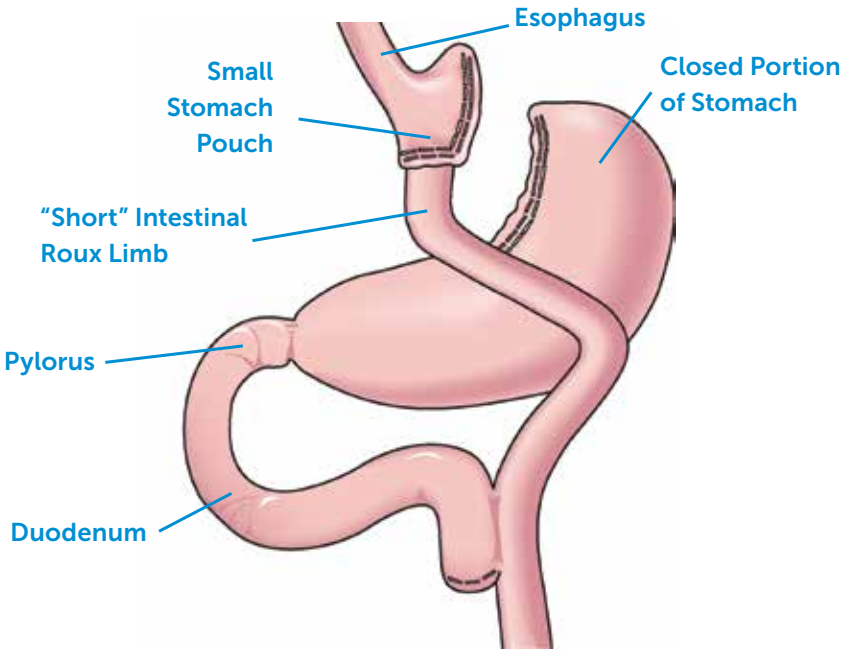
In other words, a large portion of the stomach and the top two-thirds of the small intestine are now "bypassed" in the digestive process. The lower end of the duodenum is then reconnected further down the jejunum to allow the flow of digestive juices from the bypassed section of the stomach into the remainder of the bowel.

Food now travels from the new stomach pouch to the jejunum, the ileum, the colon (large intestine) and is then eliminated. Bile and digestive juices are still released from the bypassed stomach, traveling down the duodenum and into the jejunum through the new connection.

The surgery achieves its results by ensuring that the patient simply can't eat as much as before. The smaller stomach pouch creates an early sense of fullness, and the new rerouted anatomy helps restrict the type and amount of food that can be eaten, while also bypassing calorie absorption.

The gastric bypass procedure is a tool that could potentially allow you to lose substantial excess weight. However, you will be most successful if you are motivated to make and maintain certain lifestyle changes that must last for the rest of your life.

NOTE: For additional anatomical details, please refer to the diagram in "Understanding the Digestive Process."



What is the Single Anastomosis Duodeno-Ileal Sleeve Gastrectomey (SADI-S) Surgery?

An Overview

The SADI-S is a surgical weight loss procedure that can produce reliable weight loss with an acceptable level of risk and minimal side effects.

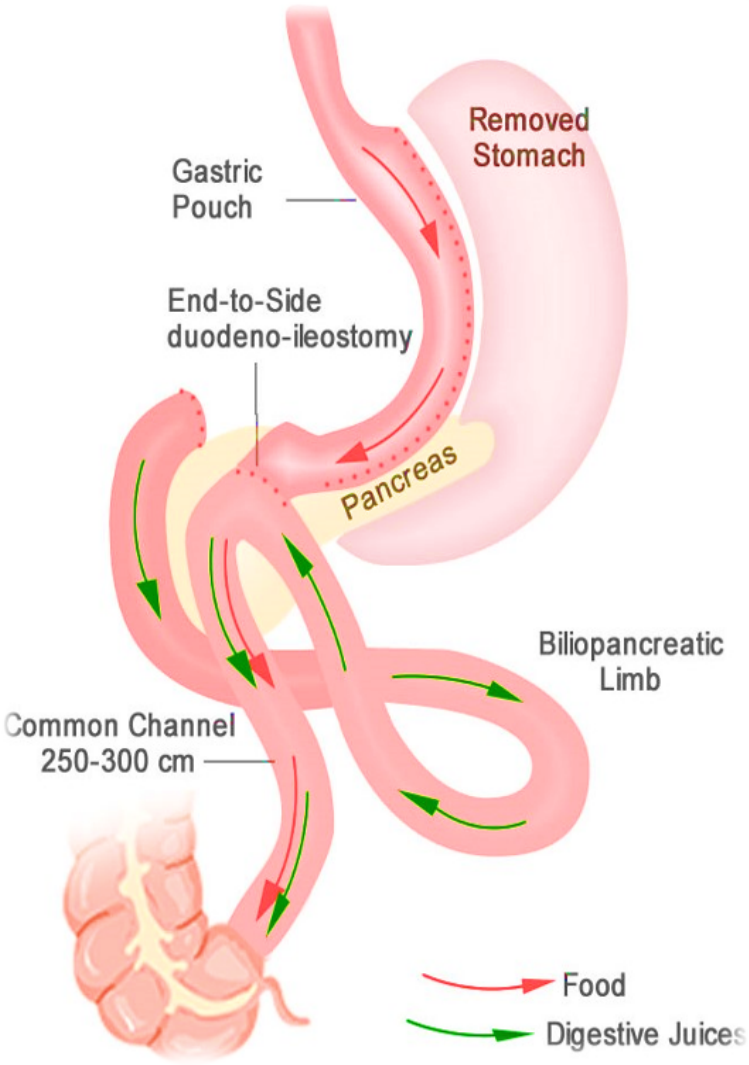
The surgery alters the path that food takes after it leaves your stomach and enters your small intestine. This procedure is both restrictive and malabsorptive.

The restrictive procedure includes removing a portion of your stomach. The new shape and size of the stomach decrease the amount of food that can be eaten. This causes an early sense of fullness.

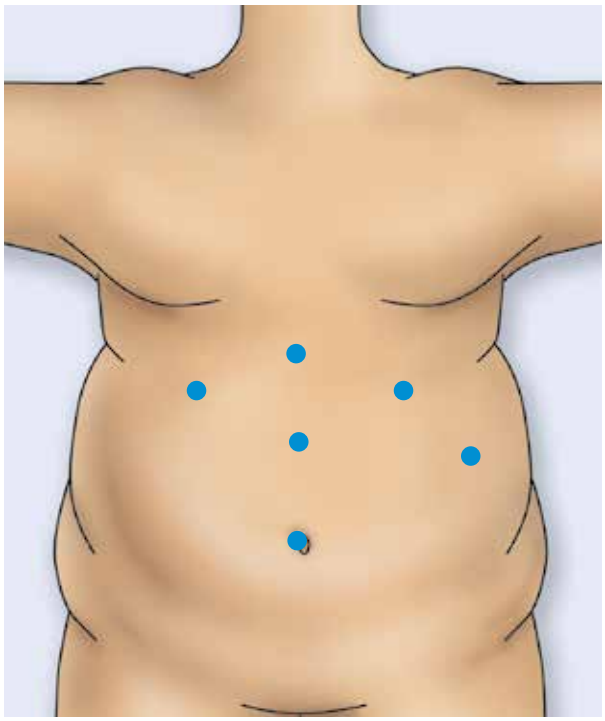
The malabsorptive procedure includes bypassing part of the small intestine. The distal small bowel is connected to the smaller stomach below the pylorus. The pylorus is a valve at the end of your stomach and works to prevent intestinal contents from reentering the stomach. The pylorus also limits the size of food particles passing into the intestine, aiding in the digestion of food.

The procedure is designed to reduce the size of the stomach and its ability to distend, so you will feel full sooner and eat lesser amounts. The new, rerouted anatomy helps restrict the type and amount of food that can be eaten while also bypassing caloric absorption.

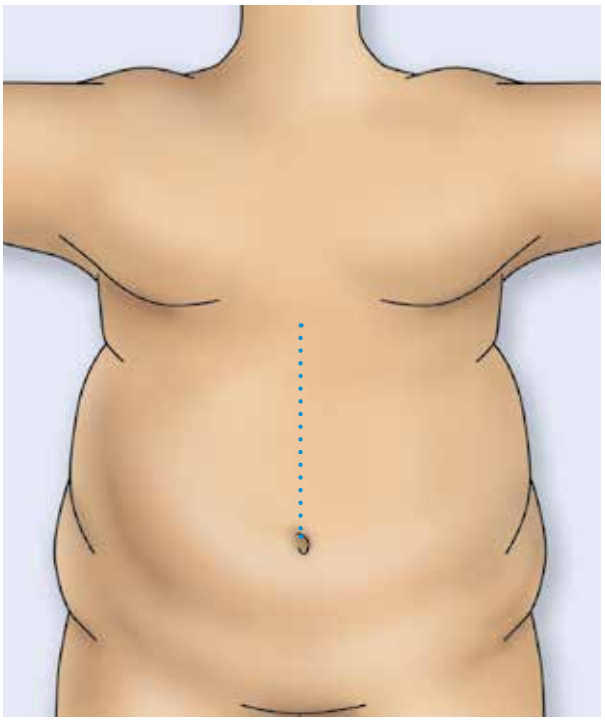
The SADI-S procedure is a tool that can allow you to lose substantial excess weight. However, you will be most successful if you are motivated to make and maintain certain lifestyle changes that must last for the rest of your life.



Laparoscopic vs Open Surgery



Laparoscopic Bypass (5-7 incisions)



Open Bypass (midline incision)

A laparoscopic operation is performed with the aid of a laparoscope, which is a fiberoptic tube and light source connected to a small video camera. The camera allows your surgeon to visualize the abdominal organs on a television monitor while using surgical instruments inserted through six small incisions in the abdominal wall.

Laparoscopic procedures are less invasive than traditional procedures, reducing pain and risk of wound complications. Recovery and hospital stays are usually shorter, too.

Laparoscopic procedures for obesity use the same surgical principles as do "open" procedures. The laparoscopic procedure is simply more precise and uses smaller abdominal incisions. Summa Bariatric Care surgeons are specifically trained and experienced in performing laparoscopic surgery. You should know, that not all patients are candidates for this type of procedure, and it is not completely free of complications.

Your surgeon will determine if you are a candidate for laparoscopic surgery at the time of your initial evaluation.

Your surgeon may decide to perform your surgery with robotic assist. This means that the surgeon plans on using additional equipment to perform the surgery.

Surgical Risks Associated with Weight Loss Surgical Procedures

The risks of this procedure are outlined below. Please read very carefully. It summarizes some of the most common risks associated with weight loss surgical procedures.

1. **Breakdown of the gastric staple line or breakdown of Gastrointestinal anastomosis (connection):** Occasionally, the staple line on the stomach remnant (sleeve gastrectomy) or at the surgical connections (RYGB or SADI), will not heal well and may break down. This could generate a sequence of complications that may lengthen your hospital stay. In some instances, you may have to undergo an additional surgical procedure.

2. **A Blood clot:** A blood clot, also known as deep vein thrombosis, can form in your arms or legs. A pulmonary embolism (PE) refers to a blood clot that breaks loose from inside a vein (usually in the calf or thigh) and travels to the heart or lungs. It is a complication that can be fatal. We do everything possible to prevent this by using blood thinning medications and by using leg compression devices while in you are in the hospital. These leg compression devices fit around your feet or legs and gently massage your tissues to keep blood moving. **You can reduce your risk of blood clots by walking both before, and as soon as you are able, after surgery.** The risk for blood clots continues after you are home. For this reason, it is recommended that you walk for 5 minutes every hour you are awake. It is important that you know the signs and symptoms of blood clots to watch for at home.

3. **Bleeding:** Bleeding may occur during the surgical procedure or in the early postoperative period. In rare circumstances, you may require a transfusion of blood products, if needed. Your surgeon will discuss the need for a transfusion with you and explain the risks of such transfusions.

4. **Injuries to other intra-abdominal organs:** As with all surgical procedures, injuries to other surrounding organs could occur. Your surgeon will attend to them as needed

5. **Pneumonia:** Pneumonia is an infection in the lungs, most often caused by bacteria, viruses or fluid collection in the lungs. This condition can sometimes occur after surgery and general anesthesia and can be very dangerous. Therefore, preventive measures are taken: postoperative respiratory therapy, oxygen per nasal cannula, coughing and deep breathing and hourly use of incentive spirometer and early ambulation are things that can prevent pneumonia.

6. **Infection:** While the incidence of infection is low, anytime an incision is made into the skin the risk of infection exists. You must shower daily with antibacterial soap for the first week after surgery to reduce surface bacteria. Be sure to dry off well after showering. Signs of infection include fever, redness, warmth or drainage from incision. Call your surgeon if you notice any of these signs.

7. **Gastroesophageal reflux disease (GERD):** There is an increased chance that gastric reflux can occur, specifically with the sleeve gastrectomy. The exact reason why the sleeve procedure could contribute to the worsening of reflux or the development of GERD is not always known. One reason could be that the sleeve procedure may decrease the lower esophageal sphincter tone or narrow the pylorus.

Late complications

As reported in medical literature, certain complications may occur after this procedure has been performed, months or even years later. The most significant are as follows:

1. **Hernias:**
   a. Internal Hernias: An internal hernia can occur if a weakness occurs in the stomach lining. Internal hernias have the highest incidence after the RYGB. Surgical intervention is needed to repair internal hernias.
   b. External Hernias: An external hernia refers to a section of the bowel that protrudes through the abdominal wall. These are more common in open weight loss surgery and other general surgical procedures but can occur with laparoscopic procedures as well.

2. **Stricture of the gastric tubule (conduit) or anastomosis:** The gastric tubule (sleeve) or the connection between the stomach and the small intestine can become narrow, restricting the flow of food. In some patients, the gastric tubule or connection may narrow and restrict the passage of food and fluids. This complication is managed by endoscopic dilatation.

3. **Ulcers:** The use of non-steroidal drugs (NSAIDS), smoking and exposure to second hand smoke, are known to cause ulcers following weight loss surgery. Ulcers can be a serious complication and can require surgical repair. **Do Not smoke or take NSAIDS after surgery.**

4. **Stool changes:** It is not unusual to experience intermittent loose stools immediately after surgery. While loose stools usually occur and resolve during the first week, chronic diarrhea that does not get better is not a common side effect. Due to dietary changes, constipation may occur. Maintaining adequate hydration (64 ounces of liquid per day) and using over-the-counter medications (stool softeners, MiraLAX, etc.) will help manage constipation.

5. **Vitamin deficiency:** Weight loss surgical procedures restricts your ability to eat large quantities of food. Therefore, certain nutrients and vitamins must be supplemented to meet the recommended US daily requirements. Vitamins that you will now need to take are: Complete Multivitamin with iron, calcium, vitamin B12, Vitamin B1, and Vitamin D3. **These will be required for the rest of your life.** Biotin is recommended for maintenance of healthy hair, skin and nails following surgery, but not required. The number one reason for long-term vitamin deficiency is patient noncompliance.

6. **Hair thinning:** Some hair loss is unavoidable, usually starting in the third month after surgery. Generally, this is only temporary and will fully resolve by the end of the first year. It occurs partly in response to having had a major surgery and exposure to anesthesia, as well as the sudden calorie and protein deprivation experienced just after surgery. With proper nutrition, it is rare for a patient to have thinner hair a year after surgery than the amount they had before surgery. Some patients have fuller and healthier hair because the body's hormone balance has improved with weight loss. Do not overeat protein calories thinking this will prevent hair loss. The following are ways to minimize hair loss.
   - Make sure you meet your daily protein requirement (Above 60 grams).
   - Take a Biotin supplement (up to 5000 mcg daily).
   - Continue to take all other recommended vitamins.
   - Use a mild, protein-based shampoo and reduce the number of times you wash your hair.
   - Ease the pulling/tension on your hair when styling
   - Suspend hair-coloring, braiding, weaving and chemical processing to give your hair a rest

7. **Kidney problems:** Although rare with this procedure, kidney stones can occur. Remember to drink plenty of fluids (daily goal is 64 ounces) to flush the by-products of protein from your system and to keep yourself adequately hydrated. One way to determine how well hydrated you are is to use the color of your urine as a guideline. Yellow is well-hydrated and on target, orange is too concentrated and means you need to increase your fluid intake. Brown is seriously dehydrated, and you will need to work to consistently increase your fluid intake.

8. **Symptomatic dumping syndrome (primarily with RYGB):** Early and late dumping has been reported in patients after weight loss surgery. Dumping is caused by rapid passage of food from the pouch into the small intestine. Dumping may be caused by eating or drinking any highly concentrated foods, whether sweet (candy, juices) or salty (pretzels). After surgery, food passes rapidly into the small bowel. This is referred to as "early dumping." Suddenly your heart will pound and beat rapidly; you may feel dizzy, and overwhelmingly tired. Your bowels may gurgle and churn. You will feel bloated and gassy. This might be followed by loose stools and even vomiting. It is not dangerous, but it can be frightening to the uneducated patient. "Late dumping" is caused by an insulin response to the ingested food. You may feel flushed, sweaty, fatigued, and experience all the signs of hypoglycemia (low blood sugar). **You can avoid early and late dumping by avoiding the foods that cause dumping: sugars, starches, fried foods, fats and high glycemic foods.**

   The glycemic index refers to how swiftly the sugars from the food enter the bloodstream after eating. Each person has a different tolerance to concentrated foods, and will discover what your personal "safe foods" will be as you progress throughout your post-operative life. Person A might have no problem with bananas, Person B might dump every time one is eaten, and Person C might be able to do a rare banana only if it is a little bit green. You will learn what trigger foods might be. Be aware that these may change over time. What you tolerate early in your post-operative course may be different than what you tolerate months down the road, and vice versa. Every body is different.

9. **Emotional changes:** It is important to be aware that emotional changes can occur after surgery. Many patients experience a period of time after surgery where they may feel "out-of-sorts" and perhaps mildly depressed. Irritability and annoyance with loved ones may also occur. These feelings are related to a shift in endorphins, the chemicals that produce happy feelings in our brains. Often, these endorphins were available from those foods that are not being consumed after surgery, (carbohydrates, phenols and sugars). You can create your own endorphins by increasing your physical activity to stimulate the natural release of the same chemicals. Over time, you will learn how to create your own endorphins. Try taking a walk if you feel blue or irritable.

Importance of Informed Consent

Informed consent is one of the most important aspects of all healthcare environments. Providing informed consent means more than signing your name on a medical form. Providing informed consent means that a discussion has taken place between you and your doctor that covers the risks, possible outcomes or even additional options before any treatment or procedure takes place. Informed consent is an important agreement between doctor and patient that shows you have choices and a voice in how your healthcare is navigated by all who are involved.

The next pages are examples of the informed consent forms you will be asked to sign. They are included for you to review.

SUMMA HEALTH
WEIGHT MANAGEMENT INSTITUTE (WMI)

INFORMED CONSENT

STAPLING PROCEDURE:

- **Laparoscopic/Robotic Sleeve Gastrectomy**

Definition of the Procedure:

This procedure is an advanced laparoscopic metabolic weight loss surgical procedure. It is a procedure that is performed through keyhole incisions and is designed to promote surgical weight loss. This ultimately may lead to a resolution of most medical co-morbidities associated with morbid obesity. This procedure will transect (cut) the stomach dividing the stomach into two parts. The surgically created small stomach tube will receive your food intake. The remaining segment of your stomach will be completely and permanently removed from your body. Your food will pass through the remaining small portion of the stomach and pass normally through your small intestines.

The most common risks of this procedure, as well as the impact of this procedure on your future lifestyle have been explained to you by your surgeon and the team of professionals caring for you. Please read the following very carefully. It summarizes some of the most common risks associated with this procedure. It is important that all your questions are answered, and you feel fully informed. More information about the procedure, risks, preoperative preparation, hospital stay and postoperative recovery can be found in the **Surgical Patient Education Manual** and is reviewed in the required preoperative class.

The metabolic weight loss surgical procedure commonly called "sleeve" or "vertical" gastrectomy is a form of gastric restrictive procedure involving gastric resection.

Surgical Risks Associated with the Sleeve Gastrectomy Procedure:

Breakdown of the gastrointestinal staple line (leak): Occasionally the staple line on the stomach will not heal well and may fail, causing a "leak" A leak can cause a sequence of complications that may lengthen your hospital stay. In some instances, you may have to undergo additional testing or surgical procedure(s).

Injuries to other intra-abdominal organs: As with all surgical procedures, injuries to other organs may occur. Your surgeon will attend to them as needed. Additional procedures or treatments may be required.

GERD: GERD (Gastroesophageal Reflux Disease) is a well-documented potential occurrence after sleeve gastrectomy. Definitive management may require additional medications or surgical procedures.

Bleeding: Bleeding may occur during any surgical procedure or in the early post-operative period. You may require transfusion of blood products, as needed. Your surgeon will explain the risks of such transfusions and obtain consent for any transfusions.

Blood clots (DVT): A blood clot that forms in your legs or arms is called a Deep Vein Thrombosis (DVT). A Pulmonary Embolism (PE) refers to a blood clot that breaks loose from inside a vein and travels to the heart to lungs. This is a complication that can be fatal. We do everything possible to prevent this from happening using blood-thinning medications and leg compression devices while you are in the hospital. These leg compression devices fit around your legs and gently massage your tissues to keep blood moving. You can reduce your risk of blood clots by walking both before, and as soon as you are able, after surgery.

PATIENT LABEL

Summa Health

Summa Health System

Early or late cardiac complications that could lead to death: Any surgical procedure carries a risk of cardiac or respiratory complications that could lead to death.

Surgical wound infection: Any time an incision is made to the skin for surgery there is a chance that an infection could develop. Preoperative antibiotics will be administered to reduce the risk of a wound infection.

Returning to the hospital: In some cases, patients may need to return to the hospital after going home. This can happen if symptoms develop that require medical attention such as fever, worsening pain, signs of infection, inability to tolerate diet/liquids, signs of a blood clot, bleeding or any concern that could suggest a complication.

Insufficient weight loss: While you will lose weight after this procedure it is impossible to predict the exact amount. If medically indicated this procedure does have the possibility to be converted to a malabsorptive procedure in order to promote further weight loss.

Late Complications Associated with Sleeve Gastrectomy:

As reported in medical literature certain complications may occur after this procedure has been performed months or years later. The most significant are as follows:

External (abdominal wall) hernias: An external hernia refers to a section of the bowel (or fatty tissue) that protrudes through the abdominal wall. These are more common in open procedures and other general surgical procedures but can occur with other laparoscopic procedures as well. This may require further surgical intervention.

Vitamin Malabsorption: This procedure creates a selective malabsorption of certain foods (fats, especially) and nutrients that you eat. Certain vitamins and minerals may not be absorbed well enough for you to meet the recommended US daily requirements. This is especially true of Vitamins B1, B12, folate and the mineral iron. For this reason, we require that you take multivitamin supplementation daily. These will be required for the rest of your life. The number one reason for long term vitamin deficiency is patient non-compliance.

Bowel Changes Including Constipation and Diarrhea: It is not unusual to experience intermittent constipation or diarrhea immediately postoperatively. While these may occur, they should resolve during the first month after surgery. They also may last for up to several months after surgery as your body adjusts to the new intestinal connections. Chronic diarrhea that does not get better is not a common side effect of this procedure. Constipation can also occur as your diet changes. Stool softeners or mild laxatives may be needed to help improve constipation.

Hair Loss: Some hair loss is unavoidable, usually starting in the third month after surgery. Generally, this is only temporary and will fully resolve by the end of the first year. It occurs partly in response to having had a major surgery and exposure to anesthesia, as well as the sudden calorie and protein deprivation experienced just after surgery.

Renal Problems: Although rare with this procedure, kidney stones can occur. Remember to drink plenty of water to flush the by-products of protein from your system and to keep yourself adequately hydrated.

Ulcers: Due to changes to your anatomy, there is a higher risk of ulcers. Use of Non-Steroidal Anti-inflammatory Medications (NSAIDS) and smoking are both known to cause ulcers following weight loss surgery. Ulcers can lead to complications and the need for re-operations. Do not smoke or take NSAID medications following surgery.

Smoking and exposure to secondhand smoke: This is known to cause multiple complications after weight loss surgery, including ulcers, pain, additional surgeries, and/or death. It is extremely important that you do not smoke before weight loss surgery, and that you do not smoke after surgery.

Emotional Changes: It is important to be aware that emotional changes can occur after surgery. Many patients experience a period of time after surgery where they may feel "out of sorts" and perhaps mildly depressed or irritable. These feelings are related to a shift in endorphins that occurs after surgery. Increased activity and adjustment to your new eating habits can increase endorphins. Your team of professionals is available to help you work though any emotional changes.

Pregnancy after surgery: If you are a woman of child-bearing age, it is strongly advised that you do not get pregnant for at least twelve to eighteen months after your surgery. It is important that you discuss with your physician what the most effective form of birth control for you is. By delaying a post-operative pregnancy until this time, you are better assured that you will be able to get the proper nutrition for the health of your baby and yourself and have a happy and healthy outcome.

Patient Attestation:

- ✓ I understand why this procedure is needed (indications), any reasons why this procedure may not be advised (contradictions), and other options available to me(alternatives).
- ✓ I understand the benefits of this procedure may include but are not limited to:
  - o Improvement of chronic conditions such as diabetes, hypertension, high cholesterol, sleep apnea, joint pain etc.
  - o Elimination or reduction of current medications (insulin, antihypertensives, etc.)
  - o Overall improvement in my quality of life such as mobility, sleeping, increased energy etc.
  - o Loss of excess body weight
- ✓ I have been given the Summa WMI annual procedure volumes and the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP) Aggregate Event Rates document that compares Summa outcomes against national results. (See attachment)
- ✓ Applicable risks associated with the **Sleeve Gastrectomy** have been adequately explained to me.
- ✓ Complications associated with the **Sleeve Gastrectomy** have been adequately explained to me.
- ✓ Realistic expectations following this procedure have been discussed with me.
- ✓ I understand that I need to actively participate in all aspects of the WMI's program. I have read the **Surgical Patient Education Manual** and attended the preoperative education class. I am aware that additional information is available on the Summa WMI website.
- ✓ I am aware that postoperatively, my eating habits will change as described by the WMI team. For optimal outcomes and long-term success, I am committed to lifelong follow up with the bariatric team.

I attest the above information has been discussed/provided to me by my surgeon and the Weight Management Institute care team in a way I understand, and I have had the opportunity to ask and have all my questions answered.

_____	_____	_____
Patient Signature	**Date**	**Time**

PATIENT LABEL

Summa Health™

Summa Health System

SUMMA HEALTH
WEIGHT MANAGEMENT INSTITUTE (WMI)

INFORMED CONSENT

ANASTOMOTIC PROCEDURES:

- **Laparoscopic/Robotic Roux-en-Y Gastric Bypass**
- **Laparoscopic/Robotic Sleeve Gastrectomy with Single Anastomosis Duodeno-ileostomy (SADI-S)**
- **Laparoscopic/Robotic Single Anastomosis Duodeno-ileostomy (SADI)**
- **Laparoscopic/Robotic One Anastomosis Gastric Bypass (OAGB)**
- **Laparoscopic/Robotic Biliopancreatic Diversion With Duodenal Switch (BPD-DS)**

Definition of the Procedure:

These procedures are advanced laparoscopic metabolic weight loss surgical procedures. They are procedures that are performed through keyhole incisions and are designed to promote surgical weight loss. This ultimately may lead to a resolution of most medical co-morbidities associated with morbid obesity. These procedures will transect (cut) the stomach dividing the stomach into two parts. The surgically created small stomach tube will receive your food intake. The remaining segment of your stomach may be completely and permanently removed from your body. The food will pass through the remaining small portion of the stomach and pass normally through your small intestines. In addition, the remaining segment of your stomach continues to produce stomach acid and digestive enzymes but will not receive any food intake. The surgeon creates a new connection from your stomach pouch to your small intestine that will bypass a portion of your small bowel in the process. This bypass changes how your body absorbs food and nutrients. This weight loss procedure is both restrictive (reducing the size of your stomach) and malabsorptive (altering the path food takes through the digestive system).

The most common risks of these procedures, as well as the impact on your future lifestyle have been explained to you by your surgeon and the team of professionals caring for you. Please read the following very carefully. It summarizes some of the most common risks associated with these procedures. It is important that all your questions are answered, and you feel fully informed. More information about your individual procedure, risks, preoperative preparation, hospital stay and postoperative recovery can be found in the **Surgical Patient Education Manual** and is reviewed in the required preoperative class.

Surgical Risks Associated with Anastomotic Metabolic Weight Loss Surgical Procedures:

Breakdown of the gastrointestinal staple line (leak): Occasionally the staple line on the stomach will not heal well and may fail, causing a "leak" A leak can cause a sequence of complications that may lengthen your hospital stay. In some instances, you may have to undergo additional testing or surgical procedure(s).

Injuries to other intra-abdominal organs: As with all surgical procedures, injuries to other organs may occur. Your surgeon will attend to them as needed. Additional procedures or treatments may be required.

GERD: GERD (Gastroesophageal Reflux Disease) is a well-documented potential occurrence after sleeve gastrectomy. Definitive management may require additional medications or surgical procedures.

Bleeding: Bleeding may occur during any surgical procedure or in the early post-operative period. You may require transfusion of blood products, as needed. Your surgeon will explain the risks of such transfusions and obtain consent for any transfusions.

Blood clots (DVT): A blood clot that forms in your legs or arms is called a Deep Vein Thrombosis (DVT). A Pulmonary Embolism (PE) refers to a blood clot that breaks loose from inside a vein and travels to the heart to lungs. This is a complication that can be fatal. We do everything possible to prevent this from happening using blood-thinning medications and leg compression devices while you are in the hospital. These leg compression devices fit around your legs and gently massage your tissues to keep blood moving. You can reduce your risk of blood clots by walking both before, and as soon as you are able, after surgery.

Early or late cardiac complications that could lead to death: Any surgical procedure carries a risk of cardiac or respiratory complications that could lead to death.

Surgical wound infection: Any time an incision is made to the skin for surgery there is a chance that an infection could develop. Preoperative antibiotics will be administered to reduce the risk of a wound infection.

Returning to the hospital: In some cases, patients may need to return to the hospital after going home. This can happen if symptoms develop that require medical attention such as fever, worsening pain, signs of infection, inability to tolerate diet/liquids, signs of a blood clot, bleeding or any concern that could suggest a complication.

Insufficient weight loss: While you will lose weight after this procedure it is impossible to predict the exact amount. If medically indicated this procedure does have the possibility to be converted to a malabsorptive procedure in order to promote further weight loss.

Late Complications Associated with Anastomotic Procedures:

As reported in medical literature, certain complications may occur after this procedure has been performed months or years later. The most significant are as follows:

Anastomotic Stricture or Stenosis: The gastro-enterostomy refers to the connection between the new stomach pouch and the small bowel created during the surgery. The attachment is made to be a certain size to restrict rapid emptying of the pouch into the small bowel to promote a sense of fullness (satiety). In some patients, the connection can become narrow, restricting the flow of fluids and food. This can lead to nausea, difficulty swallowing or vomiting. This complication is managed by using an endoscopic dilation, a procedure that gently widens the narrowed area. It is usually performed in the Endoscopy Suite, using light sedation and throat numbing medicine.

Hernias:

Internal hernias: An internal hernia is a protrusion of internal organs through intestinal mesentery or tissue. Internal hernias may require a surgical procedure to correct.

External (abdominal wall) hernias: An external hernia refers to a section of the bowel (or fatty tissue) that protrudes through the abdominal wall. These are more common in open procedures and other general surgical procedures but can occur with other laparoscopic procedures as well. This may require further surgical intervention.

Vitamin Malabsorption: This procedure creates a selective malabsorption of certain foods (fats, especially) and nutrients that you eat. Certain vitamins and minerals may not be absorbed well enough for you to meet the recommended US daily requirements. This is especially true of Vitamins B1, B12, folate and the mineral iron. For this reason, we require that you take multivitamin supplementation daily. These will be required for the rest of your life. The number one reason for long term vitamin deficiency is patient non-compliance.

Symptomatic Dumping Syndrome: Early and late dumping has been reported in patients after anastomotic procedures. Dumping is caused by rapid passage of food from the pouch into the small intestine. Dumping may be caused by eating or drinking any highly concentrated foods, whether sweet (candy, juices) or salty (pretzels). Before surgery, the stomach has a valve at the top and bottom, and serves as an acid-filled storage tank, breaking food intake down into small, component parts and passing it to the small bowel in increments.

After surgery, food passes directly into the small bowel, without being digested as much as before surgery. This shift can lead to symptoms like bloating, cramping and loose stools. This is referred to as "early dumping". You may feel your heart will pound and beat rapidly; you may feel dizzy and overwhelmingly tired. Your bowels may gurgle and churn. You may feel bloated and gassy. This might be followed by loose stools and even vomiting. It is not dangerous, but it can be frightening if you are not aware this could happen. "Late dumping" is caused by an insulin response to the ingested food. You may feel flushed, sweaty, fatigued, and experience all the signs of hypoglycemia (low blood sugar).

You can avoid early and late dumping by avoiding the foods that cause dumping. In other words: concentrated sugars, starches, fried foods, fats and high glycemic foods. Each person has a different tolerance to concentrated foods, and you will discover what your personal "safe foods" will be as you progress throughout your post-operative life. You will learn what trigger foods might be. Be aware that these may change over time, as your surgical tool matures.

Bowel Changes Including Constipation and Diarrhea: It is not unusual to experience intermittent constipation or diarrhea immediately postoperatively. While these may occur, they should resolve during the first month after surgery. They also may last for up to several months after surgery as your body adjusts to the new intestinal connections. Chronic diarrhea that does not get better is not a common side effect of this procedure. Constipation can also occur as your diet changes. Stool softeners or mild laxatives may be needed to help improve constipation.

Hair Loss: Some hair loss is unavoidable, usually starting in the third month after surgery. Generally, this is only temporary and will fully resolve by the end of the first year. It occurs partly in response to having had a major surgery and exposure to anesthesia, as well as the sudden calorie and protein deprivation experienced just after surgery

Renal Problems: Although rare with this procedure, kidney stones can occur. Remember to drink plenty of water to flush the by-products of protein from your system and to keep yourself adequately hydrated.

Ulcers: Due to changes to your anatomy, there is a higher risk of ulcers. Use of Non-Steroidal Anti-inflammatory Medications (NSAIDS) and smoking are both known to cause ulcers following weight loss surgery. Ulcers can lead to complications and the need for re-operations. Do not smoke or take NSAID medications following surgery.

Smoking and exposure to secondhand smoke: This is known to cause multiple complications after weight loss surgery, including ulcers, pain, additional surgeries, and/or death. It is extremely important that you do not smoke before weight loss surgery, and that you do not
smoke after surgery.

PATIENT LABEL

Summa Health™

Summa Health System

Emotional Changes: It is important to be aware that emotional changes can occur after surgery. Many patients experience a period of time after surgery where they may feel "out of sorts" and perhaps mildly depressed or irritable. These feelings are related to a shift in endorphins that occurs after surgery. Increased activity and adjustment to your new eating habits can increase endorphins. Your team of professionals is available to help you work though any emotional changes.

Pregnancy after surgery: If you are a woman of child-bearing age, it is strongly advised that you do not get pregnant for at least twelve to eighteen months after your surgery. It is important that you discuss with your physician what the most effective form of birth control for you is. By delaying a post-operative pregnancy until this time, you are better assured that you will be able to get the proper nutrition for the health of your baby and yourself and have a happy and healthy outcome.

Patient Attestation:

- ✓ I understand why this procedure is needed (indications), any reasons why this procedure may not be advised (contradictions), and other options available to me(alternatives).
- ✓ I understand the benefits of this procedure may include but are not limited to:
  - o Improvement of chronic conditions such as diabetes, hypertension, high cholesterol, sleep apnea, joint pain etc.
  - o Elimination or reduction of current medications (insulin, antihypertensives, etc.)
  - o Overall improvement in my quality of life such as mobility, sleeping, increased energy etc.
  - o Loss of excess body weight
- ✓ I have been given the Summa WMI annual procedure volumes and the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP) Aggregate Event Rates document that compares Summa outcomes against national results. (See attachment)
- ✓ Applicable risks associated with the anastomotic procedure have been adequately explained to me.
- ✓ Complications associated with the anastomotic procedure have been adequately explained to me.
- ✓ Realistic expectations following this procedure have been discussed with me.
- ✓ I understand that I need to actively participate in all aspects of the WMI's program. I have read the Surgical Patient Education Manual and attended the preoperative education class. I am aware that additional information is available on the Summa WMI website.
- ✓ I am aware that postoperatively, my eating habits will change as described by the WMI team. For optimal outcomes and long-term success, I am committed to lifelong follow up with the bariatric team.

I attest the above information has been discussed/provided to me by my surgeon and the Weight Management Institute care team in a way I understand, and I have had the opportunity to ask and have all my questions answered.

_____	_____	_____
Patient Signature	**Date**	**Time**

PATIENT LABEL

Summa Health™

Summa Health System

Frequently Asked Questions

Q: Why am I having the procedure I am having?

A: At your first visit with the surgeon, your surgeon reviewed your medical history and discussed with you your knowledge of what procedure you were interested in. The procedure that was best for you was chosen.

Q: If my surgeon is doing my surgery laparoscopically, why do I sign a consent form that states, "possible open'?

A: Laparoscopic and open are terms used describing how the surgeon accesses your organs. The plan is to do the surgery laparoscopic but occasionally, the procedure cannot be completed laparoscopically and the surgeon needs to make a larger incision.

Q: Why do I need to know about the complications that could be associated with weight loss surgery?

A: It is important that you have all the information related to surgery so that you understand the consent you sign for surgery. It is important that you play an active role in your recovery and having knowledge about your surgery will help you.

Q: What should I do if any of these complications happen after surgery?

A: Throughout your journey, you will be given education. You will be provided phone numbers to contact staff. We do have a surgeon on call 24/7 for urgent matters. For any emergency situations, you should call 911. MyChart is also helpful to reach your care team for questions and appointments.

Q: Will I have excess skin when I lose weight after surgery?

A: This is different for everyone. For some people, the skin will tone up. In others, there may be excess skin around the the middle or other parts of your body. If you are interested in plastic surgery, a referral can be made for you to a plastic surgeon. This would be done after weight loss has plateaued. Removing excess skin can be considered cosmetic and may not be covered by insurance. If the excess skin is causing medical problems, your insurance plan may cover the surgery.

Summa Health™

Preparing for Surgery

Section 6

Preparing for Surgery

As you prepare for surgery, now is the time to arrange for an adult (18+) to stay with you for several days and nights after you are discharged from the hospital. You will remain independent in your daily activities, but you need someone with you 24/7 for safety reasons. You can plan for your discharge to occur the day after your surgery. Please make arrangements now for who will be staying with you. Not having this plan in place could result in surgery delay or cancellation. On the day of discharge, parking validation is available .

The person transporting me home and staying with me 24/7 is:

_____

Weight Management Institute Bariatric Care Center

For urgent care needs and after business hours, we have a surgeon on call 24/7 that you can reach by calling **330.375.6590.**

If you think you are having a medical emergency call 911.

You Have a Surgery Date!

Once you have a surgery date, the following appointments will be arranged:

Preoperative Education Class

You will be assigned a virtual class that is required before surgery. This class reviews information that is in your educational manual that you need to know to ensure a safe surgical experience and recovery. You will need to register for this class on our website. You will then receive an email with directions on how to join the class at your scheduled time. This is an interactive class, watching videos on our website does not take the place of attending class.

Date_____

Final Pre-Op Visit

This visit is approximately 3-4 weeks before your surgery date and is located at your surgeon's office. At this appointment, you will have the opportunity to speak with your surgeon and ask any questions you have about your procedure. We will also review the before surgery diet that you will be on for 1-3 weeks prior to surgery. There are certain medications that need to be stopped prior to surgery so this appointment is important to review your medication list so you can have your surgery as planned. This appointment will be scheduled when your surgery is scheduled.

Date_____

Preadmission Testing (PAT)

This visit is approximately one week prior to your surgery and is in Williams Tower on the ground floor. At this visit, you will have blood work done, an EKG and a final review of your chart to make sure you are safe for surgery. This appointment takes approximately one hour and no children under 15 can accompany you. This appointment will be scheduled when your surgery is scheduled.

Date_____

One Week Post-Operative Visit

This appointment will be scheduled for you the week following your surgery at your surgeons office. You will see your surgeon and dietitian at this visit. The day of your appointment will be scheduled on the day that your surgeon has office hours so the day cannot be changed. This appointment is made ahead of time so that you have time to make arrangements so that you do not miss it. This appointment is required for your safety to review your incisions, diet and medications. This appointment will be scheduled when your surgery is scheduled.

Date_____

One Month Post-Operative visit

This appointment will be scheduled for you approximately one month after your surgery at your surgeon's office. This appointment is important to assess your healing and nutritional status. This appointment is made ahead of time so that you have time to make arrangements so that you do not miss it. This appointment will be scheduled when your surgery is scheduled.

Date_____

Support Group Session

Support groups can be beneficial in helping you navigate all the changes that occur after surgery. While these changes can be exciting, they can also be overwhelming. Talking with people who have gone through similar things or will be going through these changes, can be helpful. We will facilitate your first attendance at a support group and encourage you to visit our website to view the schedule of additional support groups that you can register to attend.

Date_____

Preoperative Education Expectations

Upon completion of the preoperative education class for weight loss surgery, you will be able to:

Make a commitment to weight loss surgery lifestyle changes.

- Verbalize at least three changes that will have to be made in your diet following surgery.
- Verbalize at least two changes in lifestyle that will have to be made following surgery.
- State the importance of taking vitamin supplementation for life.
- Understand that you will need to take a proton pump inhibitor medication such as omeprazole or pantoprazole for six months after surgery.
- Understand that estrogen needs to be stopped 4 weeks before surgery.

Understand the procedure.

- Describe how your digestive procedure will change with the surgical procedure you will have.
- Understand the difference between the laparoscopic and open approaches to weight loss surgery and your surgeons plan.

Understand the importance of regular follow-up after surgery.

- State the expected frequency of follow-up visits.
- Affirm your commitment to attend all follow-up visits.
- Acknowledge the need for regular blood work following surgery.
- State understanding of the purpose of support groups, where to find the schedule and how to sign up.

Have knowledge of items you can purchase before surgery to be prepared.

- Describe the type and amount of **vitamins and supplements** that will be required after surgery.
- To be nutritionally healthy, these vitamins and supplements need to be taken for life. This is typically an out-of-pocket expense unless your insurance company covers vitamins and supplements.
- Small plates, sippy cups, measuring cups and a blender are helpful to have to help with managing your food intake after surgery.

Understand the lifestyle changes you need to make now.

- Immediately after surgery, it is recommended that you avoid caffeine, alcohol and carbonated beverages. These substances can irritate your stomach and interfere with healing and weight loss. Your recovery may be easier if you begin gradually reducing or eliminating them from your diet before surgery.
- It may be helpful to begin practicing the **"30-minute rule"** (eating and drinking at least 30 minutes apart).
- Immediately after surgery, gum chewing is not recommended.
- Nonsteroidal anti-inflammatory medications (ibuprofen, naproxen, etc.) must be stopped 10 days before surgery and forever after surgery. While aspirin is classified as a nonsteroidal anti-inflammatory medication, it is often prescribed for medical reasons and can continue. Aspirin therapy needs to be discussed with your surgeon.
- Walking after surgery is very important, even while still in the hospital. It is helpful if you begin a walking routine prior to surgery.
- Smoking, and secondhand smoke, can cause injury to your digestive system after surgery. Negative nicotine testing prior to surgery is often required.

State understanding of the following at-home preparations to be done for surgery.

- **Before** surgery
  - You must have a plan for someone to stay with you 24/7 when you are discharged from the hospital (likely the day after your surgery).
- The **day before** surgery
  - You will drink only clear liquids (sugar-free if you are diabetic).
  - You will continue clear liquids up until two hours before the time of your surgery.
  - You will follow orders from your surgery team regarding medications you may or may not take.
- The **morning of** surgery
  - You will shower with Hibiclens as directed (be sure to apply to your abdomen). If you prefer to shower the evening before surgery, you may do so.
  - You will follow your Bariatric Team's orders regarding medications you may or may not take.

State understanding of what will happen during your hospitalization.

- Regarding pain management
  - Understand that pain medication will be given intravenously or orally.
  - Pain medication is written as a PRN medication — this means you must let your nurse know that you need it — you must ask for it.
  - Understand that walking relaxes your abdominal muscles and HELPS with pain.
  - Agree that you will walk the night of surgery. Staff will assist you if needed.
- Regarding nausea
  - Understand that nausea is often due to the anesthesia or to the surgery itself — long term nausea is not unexpected after surgery.
  - Anti-nausea medication is ordered as needed during your hospital stay and a prescription will be filled for use at home as needed.
  - Nausea after surgery is often caused by insufficient fluid intake
- Regarding equipment that will be connected to you
  - IV (intravenous)
    - Understand that you will be connected to an IV pump to administer IV fluids throughout your hospital stay.
  - Pulse oximetry
    - Understand that this is a device that looks like a clothespin, which clips onto your finger.
    - Understand this device measures the level of oxygen in your blood.
    - Agree that you will keep this device on as ordered.
  - Nasal oxygen
    - Understand this is plastic tubing that rests just under the nose, which may be used to deliver oxygen to maintain a safe oxygen level.
  - Sequential compression device
    - Understand these are VELCRO® cuffs that are wrapped around your lower legs.
    - Understand that these are worn to prevent blood clots in your legs during periods of time when you are lying in bed throughout your hospital stay. These are to be worn in bed even if you are walking frequently.
  - Abdominal binder
    - Understand this is put on in the operating room over your incision(s), and that it is secured with VELCRO.
    - Understand that this device supports your abdominal muscles and can decrease the pain you have when you move.
    - Wearing the abdominal binder is a comfort measure and is optional.
    - The binder may not be ordered by your surgeon.

Understand how your pain will be managed at home.

- Understand you will be prescribed medication to control your pain at home.
- Understand that all medication you take at home following surgery will be prescribed in a form you can take by mouth (oral).
- Understand that if you have a pain management contract with a pain management specialist, you need to notify them of your surgery and discuss a plan for post-operative pain control prior to coming to the hospital for your surgery.
- Understand that it is recommended to have Tylenol in your home to assist with managing any discomfort you have.

Understand the hospital stay

- Your nurse/hospital staff may need to wake you up several times throughout the night to provide care and ensure your safety.
- You can plan on being discharged home the day after surgery.

Understand how we will work together with you to prevent postoperative complications.

- Such as pneumonia
  - Understand that it is very important to keep the air moving in your lungs.
  - Agree that you will do coughing and deep breathing exercises after surgery.
  - Agree that you will splint your incision when coughing and moving to decrease pain using a pillow or other method.
  - Agree that you will use your incentive spirometer on your own 10 times EVERY HOUR while awake in the hospital.
  - Agree that you will not stay in the same position for an extended length of time and sit up in a chair often.
  - Agree that you will walk the evening of surgery and frequently thereafter.
- Such as blood clots
  - Agree that you will walk the evening of surgery and every hour while you are awake.
  - Agree that you will not cross your legs or ankles for prolonged periods of time.
  - Agree that you will wear your leg cuffs when in bed throughout your hospital stay.
  - Agree that you will take your blood thinning medication (Heparin or Lovenox) as ordered.
- Such as wound/incision infections
  - Understand that you will likely have five-to-six small surgical incisions.
  - You may have an open surgical incision, if you do, the nursing staff will provide care instructions prior to going home from the hospital.

- State the signs of infection, including redness, warmth, drainage or an increased temperature.

Understand the diet you will follow after surgery.

- After surgery, when you get to your room, you will follow the surgeon's order for diet. You may sip clear liquids from one ounce plastic cups (do not exceed more than one ounce every 30 minutes). Your bedside nurse will educate you on what you are allowed to have.
- Understand that your surgeon may order an upper GI X-ray for the next morning. If this test is ordered, you will not be allowed oral fluids after midnight until the test is complete:
  - If the X-ray is ordered, transportation will come the morning after surgery to transport you in a wheelchair to have the test perfomed.
- Understand that if the X-ray shows that there are no leaks present, you will be allowed to resume a clear liquid diet.
- If an upper GI X-ray has not been ordered, you will continue the one ounce every 30 minutes of clear liquids.
- If you have the upper GI X-ray done, the contrast you drink during the test can cause loose stools for several days.

Understand how you will begin the clear liquid diet.

- Agree that you will only SIP fluids.
- Understand that you will write down everything you drink on the Fluid Intake Record kept at your bedside.
- Agree that you will work hard to drink one fluid ounce every 30 minutes while awake after surgery and continue on post-op day one.
- Agree that you will work hard to drink one fluid ounce every 15 minutes, post-op day two.
- Understand that you will be discharged home on a clear liquid diet, and that on postoperative day three you may add full liquid diet items to your diet.
- You will remain on the clear liquid diet for the first two postoperative days, and then on the clear and full liquid diet only, until your first postoperative office visit with your surgeon.

Understand the following additional miscellaneous information:

- Understand that you will be able to take a shower on post-op day two if you had a laparoscopic procedure.
- Bowel function usually returns within 24 hours following a laparoscopic surgery.
- Understand that walking will improve bowel function and minimize gas pains.
- Agree that you will keep the first two postoperative appointments; these are mandatory and will be scheduled for you at the time your surgery is scheduled. Typically, your follow up appointments will be as follows:
  - 1 month
  - 3 months
  - 6 months
  - 12 months
  - 18 months
  - 24 months
  - Yearly for life
- If you are a woman of childbearing years, you must have a contraceptive plan in place for after surgery. Pregnancy is not recommended for 12-18 months after surgery due to nutritional concerns.
- If you have sleep apnea, you need to bring your CPAP/ Bipap machine to the hospital the day of your surgery. Continuous use of your CPAP/Bipap machine is needed for your safety. The physician who treats your sleep apnea will be able to tell you when you no longer need CPAP/Bipap.
- If you are having the gastric bypass or SADI, after surgery, do not take any time-controlled or extended-release medications. Your anatomy has been altered and you no longer have the ability to absorb these medications efficiently. If you have been prescribed any of these types of medications, you should contact the prescribing physician for direction. It will not harm you to take these medications in the interim; however, the absorption is questionable. If you have the sleeve gastrectomy, it is okay to continue to take these kinds of medications.

Summa Health™

Patient Name: _____

DOB: _____

MR: _____

I affirm that:

__ I attended the weight loss surgery preoperative class AND have read the educational manual in its entirety.

__ I have been instructed in all areas listed on this form.

__ I will bring my CPAP/BIPAP machine to the hospital and use it as ordered after surgery.

__ I had all of my questions answered.

__ I have a plan for someone to stay with me 24/7 after I am discharged from the hospital.

__ I understand that if I am a female of childbearing age, I will postpone pregnancy for 12-18 months after surgery.

_____

Patient Signature **Date**

Weight Management team member: _____

(**initials**)

_____

Patient Name **Date of birth**

Summa Health™

Important Information About Medications Before Surgery

Medications that are classified as a Nonsteroidal Anti-inflammatory (NSAIDS) must be stopped 10 days prior to surgery and are not to be taken after surgery. Examples of these medications include but are not limited to: ibuprofen, Motrin, Advil. Aleve, Meloxicam and Aspirin (325mg tablet). Continuing to take these medications prior to surgery could result in excessive bleeding, interactions with anesthetic drugs or otherwise prevent proper healing. After surgery these medications increase the risk of ulcer formation in your digestive tract.

Medications that contain estrogen need to be stopped four weeks prior to surgery. This includes devices, such as the NuvaRing. It is important to contact the prescribing physician to confirm that you are not receiving estrogen in any form for four weeks prior to surgery. In most cases, estrogen can be resumed four weeks after surgery.

Medications that are classified as anticoagulants are typically stopped three-to-five days prior to surgery. Your surgery team will collaborate with the ordering physician and will let you know what day to stop the medication prior to surgery and when to restart it after surgery. Examples of anticoagulation medications include but are not limited to: Warfarin, Coumadin, Eliquis, Xarelto.

If you take 81mg of aspirin, it is typically continued daily up until the day of surgery. Your surgery team will let you know if this is ok and provide further instructions.

Medications that are classified as anti-platelet medications are typically stopped five-to-seven days prior to surgery. Examples of anti-platelet medications include but are not limited to; Pletal. Plavix and Brillinta. Your surgical team will collaborate with the ordering physician and will instruct you what day to stop taking this medication prior to surgery and when to start after surgery.

If you take medications that are classified as GLP-1s and SGLT-2s, your care team will provide instructions when to hold them prior to surgery.

Please notify your surgical team for any changes in your medication regimen as your prepare for surgery. Do not stop taking medication unless instructed to do so. The surgical team will review your medication list and instruct you on any medications that need stopped prior to surgery. **The Preadmission Testing (PAT) team will instruct you on what medication you should take the morning of your surgery.** Typically, your PAT appointment is one week prior to your surgery date.

On the morning of your surgery:

- Please follow the instructions that were given to you at your PAT appointment related to what medications to take.
- Please refer to Preoperative Diabetic Medication Protocol handout for management of diabetic medications.
- If you routinely use an inhaler, it is ok to continue to use it and bring it to the hospital with you.
- You do not need to bring your home medications to the hospital with you.
- Only take medications that you were instructed to take by PAT team.

If you are having the gastric bypass or SADI, after surgery, do not take any time-, controlled- or extended-release medications. Your anatomy has been altered and you no longer have the ability to absorb these medications efficiently. If you have been prescribed any of these types of medications, you should contact the prescribing physician for direction. It will not harm you to take these medications in the interim; however, the absorption is questionable. If you have the sleeve gastrectomy, it is ok to continue to take these kinds of medications.

Following surgery, you MUST refrain from taking NSAID medications for the rest of your life.*

*Exception–aspirin if prescribed by a physician.

Preoperative Diabetic Medication Protocol

If you are a diabetic patient and are taking insulin, please note the following:

Your insulin requirements will likely change while you are on the preoperative diet. On the day before surgery, your diet will consist of sugar-free, clear liquids only. Your insulin requirement will also be different on this day. It is very important that you contact the physician who prescribes your insulin prior to this day to make them aware of this dietary change.

Follow the directions given to you by the prescribing physician on how you are to manage your insulin dose on the day you are drinking sugar-free, clear liquids only. Typically short-acting insulins, taken with meals are stopped, and long-acting insulins may be cut in half, but be sure and follow your physician's directions.

If you are a diabetic patient and are taking oral agents to control your blood sugars, please note the following:

On the day before surgery, while you are on a sugar-free, clear liquid diet, take whatever your usual dose(s) is or take whatever you may have been told to take while on the pre-op diet.

If you have been prescribed medications that are classified as GLP-1s (Ozempic, Victoza, Mounjaro, Trulicity or Zepbound), you must stop these medications one week prior to your surgery date.

For all diabetic patients, please note the following:

When checking your blood sugars on the day before surgery, if they are low and you are symptomatic, make sure that you drink a clear liquid juice to help bring your blood sugar up, such as apple, white grape or white cranberry. Do not drink orange juice to bring up your blood sugar; orange juice is considered a full liquid juice, consuming it will impact your ability to have surgery.

It is imperative that you have a blood glucose monitor to check your blood sugars.

Glucose control in the months leading up to surgery is important — please work with the physician who manages your diabetes.

Please make an appointment with the physician who manages your diabetes for one week after your weight loss surgery.

Summa Health™

Weight Management Institute

Preoperative Diet for Weight Loss Surgery

Your surgeon has ordered a restricted diet for you before your surgery. Following this strict diet will reduce the size of your liver, making the surgery easier for your surgeon, thus decreasing the risk of complications.

Meal Plan Start on _____

- You must follow the meal plan as written
- If a food item is not listed on this sheet, you are not allowed to have it while on the pre-operative diet
- If you are experiencing low blood sugar notify your primary care provider immediately
- Acceptable cooking methods: baking, broiling, grilling, air frying
- No deep frying, nothing battered, no breading, no oil
- Acceptable salad dressing substitutions include: lemon juice, balsamic vinegar or red wine vinegar
- No regular salad dressings
- You may add any seasonings that do not add calories
- No sugar, honey, syrup, etc.

The chart below describes how much of what food options to have each day.

Food Group	Quantity per Day	Food Options
Protein Shake	Two shakes	Atkins Advantage, Boost Glucose Control (Boost products are lactose and gluten free), Boost Calorie Smart, Carnation Instant Breakfast, No Sugar Added EAS Advantage Edge, Ensure Max, Fairlife, Nurri, Premier Protein, etc.
Lean Meat	Three to four oz. (cooked weight)	Chicken, turkey, fish, lean beef (round, loin, sirloin, tenderloin), pork tenderloin, tofu One egg is equal to one oz. meat
Vegetables	Two cups of non-starchy vegetables	• Amaranth or Chinese Spinach • Artichoke • Artichoke hearts • Asparagus • Baby corn • Bamboo shoots • Bean sprouts • Beans: green, waxed, Italian, yard long beans • Beets • Broccoli • Brussels sprouts • Cabbage: green, red, bok choy, Chinese • Carrots • Cauliflower • Celery • Chayote • Daikon radish • Eggplant • Greens: collard, kale, mustard, swiss chard, turnip • Hearts of palm • Jicama • Kohlrabi • Leeks • Mushrooms • Okra • Onions • Pea pods • Peppers • Radishes • Rutabaga • Salad greens: arugula, chicory, endive, escarole, kale, lettuce, radicchio, romaine, spinach, watercress • Sprouts • Squash: acorn, butternut, cushaw, summer, crookneck, spaghetti, yellow, zucchini • Sugar snap peas • Tomato • Turnips • Water chestnuts
Protein Bars	One bar	Aloha, Barebells, Built, David's, Kind Protein Max, Luna, Nature Valley Protein Crunch, One Bar, Orgain Protein Snack Bar, Power Crunch, Protein Special K, Quest Protein, South Beach, Zone Perfect Crunch, Zone
Soup	Two cans	Campbell's Healthy Request Chicken Noodle Soup, Progresso Light Zesty Santa Fe Style Chicken, Progresso Light Beef Pot Roast, Progresso Light Italian Style Wedding, Progresso 99% Fat Free Chicken Noodle Soup, Campbell's Condenced Heart Healthy Chicken Noodle soup, Campbell's Chunky Healthy Request Chicken Noodle Soup

WMI-26-83872

Sample Daily Plan

Breakfast:	One protein shake
Snack:	One protein bar
Lunch:	One can of soup and one cup of vegetables
Snack:	One protein shake
Dinner:	Four oz. lean meat, one cup of vegetables and one can of soup

Please see reverse side for a list of what fluids you are allowed to drink while on this pre-operative diet.

It is important that you stay hydrated.

Below are examples of fluids that are permitted.

Fluids

Staying hydrated before and after surgery is very important. You must drink 64 ounces (oz.) per day of **non-carbonated, non-caffeinated** and **sugar-free** beverages.

Acceptable Fluids:

- Water
- Decaffeinated tea
- Decaffeinated coffee
- Flavored water (as long as it's **carbonation free** and calorie free)
- Sugar-free sports drinks
- Sugar-free popsicles and sugar-free gelatin

WMI-26-83872

The day before your surgery, you are ONLY allowed clear liquids. Clear Liquids only on

_____.

- Clear liquids include the following: tea, soda, apple juice, white grape juice, white cranberry juice, Gatorade, black coffee, popsicles and water. (Reminder: Red Kool-Aid and popsicles may cause your stools to appear red-tinged)
- No dairy products (milk, ice cream, yogurt), solid foods or sherbet.
- No alcohol of any kind.
- Nothing to eat or drink two hours before the time of your surgery (for all surgeons).
- You will be provided additional information at your PAT appointment one week before your surgery date.

On the morning of your surgery day:

1. Shower before surgery (either the evening before or the morning of surgery): wash your abdomen with Hibiclens solution, available at most drug stores. In the shower, cover your abdomen with the solution, which is a pink, antibacterial liquid soap. Let it stand for five (5) minutes, and then rinse it off. Repeat the procedure. Use Hibiclens instead of the soap you normally use in the shower.
2. Take the medication that your surgical team/ PAT instructed you to.
3. You may use your inhaler if one is prescribed.

Please discuss any additional questions you may have regarding the preoperative instructions with your surgeon at the final office visit prior to surgery. If you have any questions, please call our office at **330.375.6590**.

What to Bring to the Hospital

While you can plan on being in the hospital for one night, the following items may be brought with you to make your hospital stay more comfortable.

- PJ pants, shorts or a robe. You will be walking in the halls throughout your stay.
- Long phone charger cords. The hospital rooms have many outlets but a long cord will make it easier for your phone to be handy.
- Chapstick. The mouth is often dry after surgery, a favorite Chapstick or lip balm can be helpful.
- Hygiene items. The hospital has deodorant and tooth paste available but you may prefer your own brand.
- Cane or walker. If you cannot ambulate without use of a cane or walker, please bring it.
- Sleep Apnea Machine. You need to bring your CPAP or BIPAP machine to the hospital.
- Educational Manual. Bringing this education manual to the hospital; it will help you with learning.
- Co-pay. The medication prescriptions you will be prescribed for after surgery will be delivered to your room prior to being discharged. If you have a co-pay for these medications, you can pay in your room by card or cash. Payment can also be called in by a family member if it is done prior to discharge.

What you do not need to bring with you to the hospital:

- Home medications. The medications that you routinely take at home do not need to be brought to the hospital. Your medication list will be reviewed while you are there, and you will be given individual instructions on what medications to take after surgery.

Preoperative Checklist

Before your surgical date, you should have:

- ○ 1. Stopped taking aspirin, products containing aspirin and non-steroidal anti-inflammatory agents (NSAIDS, such as Motrin and ibuprofen) for 10 DAYS prior to surgery unless prescribed by a physician.
- ○ 2. Stopped taking estrogen supplements four weeks prior to surgery date. This includes devices that deliver estrogen.
- ○ 3. Stopped taking medications that are classified as GLP-1s one week prior to your surgery date (Ozempic, Victoza, Trulicity, or Zepbound).
- ○ 4. Stopped taking blood thinning medications such as Coumadin/Warfarin as directed by your cardiologist or prescribing physician.
- ○ 5. Stopped taking vitamins 10 days prior to surgery date.
- ○ 6. Followed your dietitians instructions for preoperative diet.
- ○ 7. Followed a clear liquid diet the day before surgery. Examples: Liquids you can see through, popsicles. (See list in Diet and Nutrition section for more acceptable liquid diet foods).
- ○ 8. Refrained from alcohol.
- ○ 9. Refrained from dairy products and sherbet the day before surgery.
- ○ 10. Had no solid foods the day before.
- ○ 11. Taken a Hibiclens shower to wash your entire body either the evening before or the morning of surgery. (See instructions on preceding page.)
- ○ 12. No food (including candy, mints or gum), milk, milk products, gelatin, broth, protein or energy drinks the day of surgery. Read labels carefully.
- ○ 13. Refrained from eating or drinking anything two hours before your surgery time.
- ○ 14. Checked with your surgeon's office/CM/PAT staff to find out which of your medications you may take or which ones you should hold.
- ○ 15. Identified an adult, 18 years old or older, to stay with you for several days/nights after you are discharged from the hospital after surgery.
- ○ 16. Called your PCP to discuss any medications you take that are slow/extended release (XR, ER, SR, XL).* These will need to be changed to a regular release form to assure absorption after surgery.
- ○ 17. Made arrangements to assure you can attend the scheduled postoperative appointments that have been made for you. If you need these appointments adjusted, call your surgeons office BEFORE your surgery date.
- ○ 18. Make an appointment with the physician who manages your diabetes and blood pressure medications for one week after surgery.
- ○ 19. If you are a woman of childbearing age, have a birth control plan.

If you have any questions, please call our office at 330.375.6590.

*If your procedure is the RYGB or SADI

Preoperative Education Expectations

What You Should Know Before Surgery

- What are three changes I need to make to my diet after surgery?

  1. _____

  2. _____

  3. _____

- How long will I be taking vitamin supplements after surgery?

  _____

- Is my surgery restrictive or malabsorptive and restrictive?

  _____

- Will my surgery be laparoscopic or open?

  _____

- What procedure am I having?

  _____

- I can plan on being in the hospital_____ night(s) when I have surgery.
- I commit to attending the follow up visits **Yes/No**
- I will get blood work done in a timely manner as directed **Yes/No**
- Where can I find the WMI support group schedule?

  _____

- Do I know what vitamins I need to take after surgery?

  _____

- What items have I bought, or will I purchase at home to make following the diet protocol easier?

  _____

  _____

- Am I allowed to have caffeine or carbonated beverages after surgery? **Yes/No**
- How long do I need to refrain from alcohol after surgery? _____
- How long do I need to stop drinking fluids before eating my meal?

  _____

- Am I allowed to chew gum after surgery? **Yes/No**
- Nonsteroidal anti-inflammatory medications (ibuprofen, naproxen etc.) need to be stopped 10 days before surgery and cannot be taken for life after surgery. **True/False**
- Why can't I smoke after surgery and need to avoid secondhand smoke?

  _____

- _____ will stay with me 24/7 when I go home after surgery.
- I am only allowed to drink

  _____

  the day before surgery.

- How do I know what medications I am supposed to take the morning of surgery?

  _____

- I will buy the soap called

  _____

  to shower with either the night before surgery or the morning of.

- While I am in the hospital, I need to notify the _____ if I am having pain or feeling nauseated.
- I know that walking after surgery _____ my discomfort.
- Nausea can _____ if I do not drink enough of my fluids.
- I will be connected to an _____ for my entire hospital stay to receive intravenous fluids.
- Sequential Compression devices will be on my lower legs to help prevent blood clots an I will where them anytime I am _____.
- If I have an abdominal binder (elastic band) on after surgery, I must wear it at all times. **True/False**
- I will be _____ to always use my CPAP machine when I am sleeping.
- When I am discharged from the hospital, I will be given prescriptions for pain and nausea medications to be taken as needed. It is ok to swallow medications. **Yes/No**
- I have notified my pain management doctor that I am having surgery. **Yes/No/N/A**
- I am not allowed to take anti-inflammatory medication such as Ibuprofen or Naproxen at home, but it is recommended that I have _____ at home to help manage any discomfort I am having.
- I will be woken up several times during the night while I am in the hospital. **True/False**
- I will be able to walk to the bathroom after surgery. **Yes/No**
- I will be given an incentive spirometer to help exercise my lungs. I can use this on my own without being told _____ times/hour.
- Sitting with my legs crossed can _____ the risk of blood clots.
- The signs of a blood clot in my legs or arms are: _____ _____
- If I need to go home with the order to give my self-injections to help prevent blood clots, I will do so as directed. **Yes/No**
- When I get home, I will walk _____ to help prevent blood clots.
- I am **allowed/not allowed** to go up and down stairs when I get home.
- I will monitor my surgical incisions for signs of infection. Signs of infection are:
  1. _____
  2. _____
  3. _____
  4. _____
- I need to have a _____ at home to monitor for a fever.
- The day of my surgery, after I am awake, I will be allowed to _____ clear liquids for comfort.
- If my doctor orders an UGI test to be done the morning after surgery, I will not be able to have anything to eat or drink after midnight. **True/False**
- I will go to radiology the morning after surgery in a wheelchair to radiology and will drink contrast while standing up. **True/False**
- The contrast I drink for the UGI may cause me to have _____.
- I will always _____ fluids after surgery and will not gulp or drink fast.

- I will work hard to drink the amount of fluids that is recommended. True/False
- I will only be allowed clear liquids the first _____ days after surgery.
- I will be allowed to shower the _____ day after surgery.
- I will not swim or take a tub bath for _____ after surgery.
- _____ will drive me to my appointment with my surgeon the week after my surgery.
- If I am a woman of childbearing years, I understand that fertility increases after surgery and I should avoid getting pregnant for _____ after surgery due to nutritional concerns.
- I will _____ all my follow up visits with the Weight Management Institute and will avoid no-showing for my appointments.
- If my procedure was the gastric bypass or SADI, I should avoid taking medications that are _____ release due to absorption.

I have or will read the entire education manual.

Signature _____.

I have had all my questions answered.

Signature _____.

Miscellaneous Information

It is important that you have a plan in mind for your arrival home after discharge from the hospital.

If you live alone or are the only adult at home, we require that you identify an adult to stay with you for the first several nights to assist with any potential emergency needs you may have.

If you are enrolled in Pain Management, please let your Nurse Case Manager know. Your Nurse Case Manager will ask for the specifics of this plan with contact information prior to your discharge home from the hospital.

Typically, new medications prescribed for you for home will be filled by the hospital pharmacy prior to your discharge. Please be prepared with a means by which to provide payment (copay).

It is required that all patients see their surgeon at the initial post-op office visit before returning to work. You can discuss your return to work date at this appointment.

You must have an unblocked phone line at home to enable the surgeons to return your calls if you call the answering service.

A blocked phone line or a phone on "do not disturb" makes it extremely difficult to communicate with you in a timely manner. If you do have a blocked phone line, you must provide us with an alternative phone number, or you must have your existing phone line unblocked.

Please make sure your voicemail box is not full and is able to receive important messages.

Please sign up for MyChart®. This is an efficient way to communicate with your team and receive test/lab results.

If you have diabetes and take either oral medications or insulin, you must have a glucometer for home use after surgery. It will be necessary for you to check your blood sugars postoperatively.

You must have a thermometer at home. You will be checking your temperature twice daily until your first office visit.

Please remember to bring your CPAP or BiPAP machine with you to the hospital on the day of the surgery.

A family member or support person can be present when the Nurse Case Manager reviews your going home instructions.

Your Nurse Case Manager will call your home the next day to see how you are recovering.

Frequently Asked Questions

Q: If my insurance changes before I have surgery, what should I do?

A: Notify the office immediately, your new insurance may not have the same benefit that covers the surgery.

Q: How long will I be in the hospital for surgery?

A: You can plan on staying one night.

Q: Why do I have to have someone stay with me after surgery?

A: You need someone with you in the immediate recovery phase for safety reasons in the event of an emergency. You should be able to continue to take care of yourself after surgery as you were before surgery.

Q: Can I go to a care facility after I am discharged from the hospital?

A: Stays at nursing facilities need to be justified by meeting certain criteria for insurance to pay for. Typically, patients who are not in a facility prior to surgery, do not need to be after. For insurance to pay for a facility, an assessment of the need for it, has to be done while you are in the hospital and cannot be pre-arranged by the WMI. The need for a care facility after weight loss surgery is rare and not anticipated.

Q: Do I have to attend the virtual preoperative class before surgery?

A: Yes, once you have a surgery date, it is required that you attend this class. Attendance is taken. You will get instructions on how to sign up for this class when you get approved for surgery.

Q: Can I watch the videos on the website instead of attending the preoperative class?

A: No, the video is provided in case you need a review.

Q: What happens at the Preadmission Testing(PAT) appointment?

A: This appointment is the final "check" and review that you are safely ready for surgery. Your medical history will be reviewed and any blood work or tests will be completed at this time.

Q: How do I know what medications I need to take the morning of surgery?

A: You will get instructions if any medications need to be held prior to surgery by your providers. The PAT team will tell you what medications you need to take the morning of surgery.

Q: If I am feeling well, is it necessary for me to go to my post operative visit after surgery?

A: Yes, this is imperative for a medical provider to assess you to ensure your safety. Follow up for life with your weight loss team is needed to be successful and healthy.

Q: Why do I need to be on a restricted diet in the weeks prior to surgery?

A: The restricted preoperative diet helps shrink the size of your liver prior to surgery and can reduce fat in the abdomen, making it safer for surgery.

Summa Health™

Your Hospital Stay

Section 7

Day of Surgery, Step-By-Step

1. You will arrive at the Same Day Surgery Center **two (2) hours before your scheduled surgery time.** The Same Day Surgery Center is located on the Summa Health System – Akron Campus at 141 N. Forge Street. You can park in the Main Parking Garage off Fountain Street. You will receive a phone call the day before your surgery to confirm arrival and surgery time.

2. The Same Day Surgery Center (SDSC) is located inside the Williams Tower. The staff there will help prepare you for surgery. You will be asked to put on a hospital gown and to remove all undergarments. Please remove all jewelry (including piercings), glasses, wigs, hairpins, barrettes, make-up, dentures and contact lenses.

3. An IV will be started in the SDSC, at which time blood may be drawn for lab work. You will receive fluids and antibiotics through the IV before surgery begins. You will also receive medicine to prevent blood clots. This medicine is given as a subcutaneous (under the skin) injection.

4. The anesthesiologist and nurse anesthetist will visit you in SDSC and perform a pre-op evaluation.

5. Once you have been prepped for surgery, a family member may be able to be at your bedside. Children under 15 are not permitted. Please check with the hospital for current visitation policies or call **330.375.3000**.

6. You will be brought to the operating room, where you will be greeted by the bariatric surgical team. All people working in the operating room wear masks, head coverings and special clothing.

7. The operating room will feel cold to you. The temperature is usually kept a little low so that the drapes and the bright lights used during surgery do not cause you to become too warm. Blankets are available if you become too chilled.

8. You will be given general anesthesia once you have been correctly positioned on the operating table and have had an opportunity to speak with your surgeon.

9. Once your surgery is completed, you will be moved to the Post Anesthesia Care Unit (PACU). As you awaken from the anesthesia, you will feel groggy. You may have an oxygen mask over your face or a cannula delivering oxygen through your nostrils. Do not remove either of these. You may have an elastic binder around your abdomen. You will also have compression cuffs on your lower legs to help prevent blood clots.

10. You will remain in the PACU until you are recovered and awake. Once recovered, you will be transferred to the bariatric surgery floor. The rooms are private, meaning you will not have a roommate. The staff there are specially trained to care for postoperative bariatric patients. You will travel to the floor in your bed. Family members will need to follow the hospital visitation policy.

Day of Surgery, Step-By-Step (continued)

11. We encourage you to get out of bed and ambulate with assistance as soon as you are able. **All patients are required to walk the evening of the day of surgery.** Early ambulation helps you to:
    A. Recover faster and restore your bowel activity.
    B. Fully expand your lungs to aid in preventing pneumonia.
    C. Prevent blood clots.
    D. Achieve better pain control by relaxing the abdominal wall.
    E. Relieve sensations resulting from the gas placed in your abdomen during surgery (shoulder, chest and abdominal discomfort).
    F. Relieve post-op nausea.

12. Due to the gas that is placed in your abdomen during surgery, you may experience some shoulder, chest and abdominal pain as you recover. Getting up and walking and sitting up in the chair is one of the best ways to help alleviate these sensations. Your hospital room will have a recliner chair for your use.

13. Some of the nausea you feel after surgery is due to the anesthetic, and some is a result of the surgical procedure itself. Besides walking, sitting upright can help to relieve some of the nausea. Once you are allowed fluids by mouth, gravity (sitting upright in a chair) will assist the passage of fluids by mouth into your stomach, which may be swollen after surgery.

14. Your postoperative education will be ongoing throughout your hospital stay.

15. Please check with the hospital for the current visitation policy. If a family member is permitted to spend the night with you and they choose to do so, please be aware that sleep is interrupted several times throughout the night in order for the staff to care for you and ensure your safety.

Day Before Surgery and Post-Op Dietary Protocol

Before you are discharged home, the diet protocol for the following week will be reviewed in detail. It is important that you review the expected diet progression that is in this manual prior to surgery date.

Day Before Surgery

- The day before surgery, you are only allowed to have clear liquids. You are allowed to drink clear liquids up to two hours before surgery
  No gelatin! No broth – all clear liquids must be milk-free!

Day of Surgery

(after you wake up from surgery):

- Typically, you will be allowed to sip on clear liquids for comfort. You may not exceed more than one ounce every 30 minutes. You will be given one ounce plastic cups.
- If you have an upper GI x-ray ordered for the next morning, you will have nothing by mouth after midnight.

Post-op Day 1:

(one ounce every 30 minutes)

- Resume clear liquid diet after Upper GI (if scheduled). Clear liquids after surgery must be sugar free, caffeine free and carbonation free.
- If no Upper GI, continue with one ounce of clear liquids every 30 minutes, using one ounce plastic cups.
- Record intake on intake record form provided to you.

Post-op Day 2:

(one ounce every 15 minutes)

- Continue clear liquid diet
- Continue to use one ounce plastic cups that are supplied to you.
- Continue to record intake on the intake record from provided to you.

Post-op Day 3:

- Begin full liquid diet and continue until your next office visit.
- **Continue to consume clear liquids** (sugar free, caffeine free, and carbonation free) with a goal of 64 ounces a day.
- Do not use straws after surgery. Straws can cause introduction of air into your stomach which can cause a false sense of fullness and may increase nausea.

While you are in the hospital, you will get a recording sheet to keep track of your fluid intake. It also includes directions on using incentive spirometer and walking. It is highly recommended that you use this tool to help your recovery.

Postoperative Fluid Intake Record

- You will be allowed to begin clear liquids when your surgeon says it is ok to do so. After surgery, you may be able to have sips of clear liquids for comfort but not more than one ounce every 30 minutes. You need to use the one-ounce plastic cups, no straws. The first full day will be one ounce every 30 minutes. The second day will be one ounce every 15 minutes. After two days of clear liquids, you will be able to add in full liquids (1/4 cup, three times a day).
- Use a clear medicine cup at bedside to measure what you drink.
- Medications may be taken whenever they are brought to you. Use whatever amount of water you need to swallow the medications. This is "bonus" water.
- Walk in hallway at least three times per day
- Sit up in recliner at least three times per day
- Full liquid meal options are explained in your Education Manual under section 6 "Diet and Nutrition"

o 7:00 a.m.	o 6:00 p.m.	o 7:00 a.m.	o 12:30 p.m.	o 6:00 p.m.
o 7:30 a.m.	o 6:30 p.m.	o 7:15 a.m.	o 12:45 p.m.	o 6:15 p.m.
o 8:00 a.m.	o 7:00 p.m.	o 7:30 a.m.	o 1:00 p.m.	o 6:30 p.m.
o 8:30 a.m.	o 7:30 p.m.	o 7:45 a.m.	o 1:15 p.m.	o 6:45 p.m.
o 9:00 a.m.	o 8:00 p.m.	o 8:00 a.m.	o 1:30 p.m.	o 7:00 p.m.
o 9:30 a.m.	o 8:30 p.m.	o 8:15 a.m.	o 1:45 p.m.	o 7:15 p.m.
o 10:00 a.m.	o 9:00 p.m.	o 8:30 a.m.	o 2:00 p.m.	o 7:30 p.m.
o 10:30 a.m.	o 9:30 p.m.	o 8:45 a.m.	o 2:15 p.m.	o 7:45 p.m.
o 11:00 a.m.	o 10:00 p.m.	o 9:00 a.m.	o 2:30 p.m.	o 8:00 p.m.
o 11:30 a.m.	o 10:30 p.m.	o 9:15 a.m.	o 2:45 p.m.	o 8:15 p.m.
o 12:00 p.m.	o 11:00 p.m.	o 9:30 a.m.	o 3:00 p.m.	o 8:30 p.m.
o 12:30 p.m.		o 9:45 a.m.	o 3:15 p.m.	o 8:45 p.m.
o 1:00 p.m.		o 10:00 a.m.	o 3:30 p.m.	o 9:00 p.m.
o 1:30 p.m.		o 10:15 a.m.	o 3:45 p.m.	o 9:15 p.m.
o 2:00 p.m.		o 10:30 a.m.	o 4:00 p.m.	o 9:30 p.m.
o 2:30 p.m.		o 10:45 a.m.	o 4:15 p.m.	o 9:45 p.m.
o 3:00 p.m.		o 11:00 a.m.	o 4:30 p.m.	o 10:00 p.m.
o 3:30 p.m.		o 11:15 a.m.	o 4:45 p.m.	o 10:15 p.m.
o 4:00 p.m.		o 11:30 a.m.	o 5:00 p.m.	o 10:30 p.m.
o 4:30 p.m.		o 11:45 a.m.	o 5:15 p.m.	o 10:45 p.m.
o 5:00 p.m.		o 12:00 p.m.	o 5:30 p.m.	o 11:00 p.m.
o 5:30 p.m.		o 12:15 p.m.	o 5:45 p.m.	

Please check the boxes as you complete:

Post-op Day #1:
Walk in hallway at least three times per day

☐ ☐ ☐

Sit up in chair at least three times per day

☐ ☐ ☐

Mark each hour you have used your incentive spirometer, at least ten times

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Post-op Day #2:
Walk in hallway at least three times per day

☐ ☐ ☐

Sit up in chair at least three times per day

☐ ☐ ☐

Mark each hour you have used your incentive spirometer, at least ten times

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

The Journey of a Thousand Miles Begins with One Step ~ Lao Tzu

The distance between patient room doorways is 14.2 feet, that is approximately six steps. One lap around the nursing unit, H6, is 176 yards, that is 211 steps! For reference, a football field is 120 yards. So, one lap around H6 is more than one length of a football field!

* Please ask your staff for assistance to walk if needed *

Please write down your questions.

Your Hospital Stay

	Day of Surgery	Post-Op Day 1/Discharge
Patient and Family Information and Education	• You have been admitted to a surgical unit in the hospital that is well equipped to handle the special needs of the post-op bariatric patient. • Special bariatric equipment is available to you to provide you with a comfortable and safe post-op recovery. • You will be cared for by nurses trained in the management of post-op bariatric patients. • Bring this bariatric manual with you to the hospital and keep it with you during your admission.	• Continue to ask your nurse for assistance when necessary. • A Transitional Care Coordinator will be stopping by to assist you with any resources you may need at the time of discharge. • Please inform your Transitional Care Coordinator and your case manager of any special needs you may have at the time of discharge. • Your bariatric nurse care manager will provide you with daily support and continue to reinforce your post-op education. • Review home-going instructions with your nurse. • Your bariatric nurse care manager will provide you with a discharge folder containing additional instruction sheets to add to your notebook.
Pain Control	• You will have IV and/or oral pain medications ordered to control your pain. • If you are uncomfortable or your pain is not adequately controlled, notify your nurse.	• Oral pain medications will be available at your request to keep you comfortable. • You will receive a home-going prescription for pain medication at the time of your discharge.
Activity/ Circulation	• Getting out of bed is important for your recovery. • Your nurse will help you sit in the chair the evening of your surgery. • You will walk, as tolerated, with assistance the evening of your surgery. • Compression cuffs will be applied to your lower legs and must be worn while in bed to maintain blood flow and prevent clots. • You will receive injections of a blood thinner medication to assist in blood clot prevention.	• Begin to increase your activity. • Walk in the hall at least three times a day, asking for assistance if you need it. • Sit in a chair when drinking your Bariatric Clear Liquid Diet at least three times per day (in the Diet and Nutrition section of this book). • Continue to wear your compression cuffs when lying in bed. • Perform activities as independently as possible. • You may not shower until post-operative day 2. • Continuing medication to prevent blood clots at home is determined on an individual basis, check with your RNCM. • At home, it is expected that you will walk for 5 minutes every hour that you are awake.

	Day of Surgery	Post-Op Day 1/Discharge
IV and Medications	• You will have an IV for fluids and medications.	• Your IV will continue to provide you with the necessary fluids. • You will continue to have an IV in place until the time you are discharged.
Diet	• You will be allowed to sip on clear liquids to provide comfort. Your bedside nurse will provide instruction on what you are allowed to have. • The maximum amount you are allowed to have is one ounce every 30 minutes. • You will be provided one ounce plastic cups to drink all of your fluids out of. Liquids must be sugar free, carbonation free and caffeine free. • If your surgeon orders an upper GI x-ray for the next morning, you will have nothing to eat or drink after midnight.	• If the result of your x-ray permits, you may resume the Clear Liquid Diet (in the Diet and Nutrition section of this book). • Continue your clear liquid diet when discharged. You may advance to a full liquid diet on post-op Day 3, in addition to clear liquids. You will receive further diet and nutrition education in the Bariatric Care Center. • Vitamins are typically held for the first postoperative week to help avoid nausea.
Elimination	• Let your nurse know each time you urinate. The amount of urine you produce will be measured. • Normal bowel function will return soon. Tell your nurse when you pass gas or have a bowel movement. • Your nurse will be keeping an account of all fluids going in and coming out of you.	• Your nurse will continue to monitor your fluids in and out. • It is necessary for you to pass urine on your own prior to being discharged. • Continue to let your nurse know if you pass gas or have a bowel movement. Repositioning in bed and walking will improve bowel function. • The fluid you drink for the upper gastrointestinal (UGI) may cause diarrhea. • It is not necessary to have a bowel movement prior to being discharged home.
Respiratory	• You may receive oxygen by nasal tube or mask after surgery. • You will be shown how to use an incentive spirometer. • Inhale slowly, 10 breaths every hour, through the spirometer while you are awake. You should use the incentive spirometer independently (you do not need to be told to use it). • Take deep breaths and cough every hour while awake. These exercises will help maintain maximum lung capacity.	• Continue to use your incentive spirometer at least 10 times per hour. • Continue your coughing and deep breathing exercises. • Take your incentive spirometer home with you and continue to use it until you are back to normal activity.

	Day of Surgery	Post-Op Day 1/Discharge
Incision Care	• You will have five (5) - seven (7) small incisions located on your abdomen, secured with steri-strips/ external staples. • Your nurse will be checking these incisions several times a day. • Wearing the abdominal binder is optional. • If you have had the RYGB, you may have a packing in your left lower incision covered with gauze. This packing will be removed prior to discharge home.	• You may wash around the steri-strips/staples that secure the incisions. • If you were given an abdominal binder, you may wear it for comfort but it is not required that you wear it. You may launder it if it becomes soiled. • You may shower on the second day after surgery, continue to wash the incisions. Do not worry if the steri-strips begin to come loose. You may remove the steri-strips at home 5 days after surgery. • If you have staples to your incisions, they will be removed at your next office visit with your surgeon. • You may have an open incision on your left lower abdomen. Keep this incision covered with clean, dry gauze. Change the gauze daily, no packing is necessary • Do not use ointments, lotions or powders on your surgical incisions.
Bloodwork/ Tests	• Your nurse will be drawing blood in order to properly monitor certain chemical levels in your body.	• If ordered, you will be going to Radiology for an upper gastrointestinal series (UGI) test to confirm that you can resume taking fluids by mouth. • You will be transported to the UGI in a wheelchair. • Bloodwork will be done daily until you are discharged home.
Discharge Teaching	• You will receive ongoing education throughout your stay. A staff member will meet with you to assess for any home care needs.	• Your doctors, nurses, dietitians, social workers, physical and respiratory therapists will be working together to make sure you have a safe discharge plan. • Your case manager will review your discharge instructions with you. • Prescriptions for pain and nausea medications to take as need at home will be written. • Your first two postoperative appointments have been made for you and will be given to you at discharge. It is very important that these appointments are kept.
Home Medications	• The case manager will review your home medications and order what is needed. Do not take any medications without being told to do so. You will be receiving blood thinner injections throughout your stay to help prevent blood clots. • You do not need to bring any home medications with you to the hospital.	• You will need to take a Proton Pump Inhibitor medication at home. This needs to start the day after you are discharged, and it is important to take daily as prescribed for the first six months regardless of symptoms of heartburn/GERD. • Some patients will need to take a blood thinner injection at home- this will be discussed with you prior to surgery, and the RN will teach you how to administer before you go home. • If you still have your gallbladder, you will be prescribed a medication called Actigall (Ursodiol) at your next office visit. This helps prevent gallstone formation. • If you had the RYGB or SADI, call the ordering physician about any extended or delayed medications you are taking.

Frequently Asked Questions

Q: Should I bring my home medications with me to the hospital?

A: No, just a current list of your medications.

Q: Am I allowed to get up and walk in the hospital halls without assistance?

A: The first few times you get up after surgery, you need to have someone with you to make sure you are stable. Once staff assesses you and you are comfortable with walking alone, you can do so. We encourage walking. Please ask staff for assistance if you need it.

Q: I don't take insulin at home but I heard I might get it in the hospital?

A: Sometimes after surgery, the stress on your body can cause a rise in blood sugar levels. A sliding scale of short acting insulin may be used while you are in the hospital to control your blood sugars to aide in healing.

Q: When can I shower after surgery?

A: You will shower the second day after surgery and it is recommended that you use the preoperative soap, Hibiclens, or and antibacterial soap like Dial, on your abdomen.

Summa Health™

Instructions for Home after Surgery

Section 8

All Procedure Post-Op Instructions

Roux-en-Y Gastric Bypass SADI Sleeve Gastrectomy

1. If your surgical incisions are covered with steristrips, you can remove them five days after surgery. It is helpful to remove them in the shower. It is ok if they fall off on their own. If your incisions have staples, they will be removed at your next office visit with your surgeon. If you feel the staples are catching or rubbing on your abdominal binder or clothing, you may place a bandage over them. You may have an open incision on your left lower abdomen; keep this incision covered with clean, dry gauze. Change this dressing daily; no packing is needed. If you were given an elastic binder, you may wear it, as you desire, for comfort.

2. You may shower the second day after surgery. Wash your incisions with the Hibiclens you bought before surgery or Dial. Use only soap and water on the surgical sites and pat the incisions dry. Do not use ointments, lotions or powders.

3. If your incisions begin to look infected (e.g., swelling, redness, drainage or pain), please notify your case manager.

4. Take your temperature twice a day for the first postoperative week. Call if your temperature is greater than 101° F. A fever could be a sign of infection or surgical complication.

5. Resume your home medications as directed by your surgeon and your case manager. Make an appointment with your prescribing physician if you are taking medication for your blood pressure or diabetes. You will need close follow-up regarding your medical conditions, as you may soon be off many of these medications.

6. No aspirin or aspirin-containing medications should be taken unless directed by your surgeon. These include medications that are classified as non-steroidal anti-inflammatory (NSAIDS) such as ibuprofen, Aleve, Naprosyn. It is okay to take acetaminophen (Tylenol).

7. Do not take multiple medications at one time. Take two-to-three at a time. Wait 20 to 30 minutes before taking additional medications.

8. If you have had the gastric bypass or SADI procedure, do not take any time-release, controlled-release, or extended-release medications. This includes any enteric-coated medications. Your anatomy has been altered, and you no longer have the ability to absorb these medications efficiently. If you have been prescribed any of these types of medications, you should contact the prescribing physician for direction. It will not harm you to take these medications in the interim; however, absorption is questionable.

9. Do not take your calcium, vitamin b12, multivitamin, or Actigall (if ordered) until after your next office visit with your surgeon. The Proton Pump Inhibitor medication (Prilosec, Protonix, etc.) that was ordered for you, should be taken daily starting the day after you are discharged home.

10. Follow our food guidelines closely. Remember, clear liquids for the first two days after surgery. No sugar, caffeine or carbonation. Your fluid requirement is 64 oz. per day. You may advance to full liquids on postop day three. This is in addition to the clear liquid diet. The diet advancement protocol is outlined in your education manual.

11. No alcoholic beverages at all during the first 18 months post-op.

12. No lifting, pushing or pulling over 15 lbs. for one month. You may go up and down stairs. No driving for one week after surgery. Do not drive if you are taking prescription pain medication.

13. Walking as part of your daily activities is required immediately. It is recommended that you should walk for 5 minutes every hour you are awake to help decrease the risk

of blood clots after surgery. Walking helps prevent blood clots from forming. A blood clot that forms in your legs or arms is called a Deep Vein Thrombosis (DVT). Signs of DVT include pain, redness, swelling and warmth. A blood clot that travels to your lungs is called a Pulmonary Embolism (PE). Symptoms of a PE include shortness of breath, pain with breathing, chest pain/discomfort or rapid heartbeat.

14. If you drank contrast for the UGI x-ray while you were in the hospital, it can cause loose watery stools for several days. Some patients experience bloating or constipation after surgery. It is okay to use over-thecounter medications such as Gas-X, Miralax or stool softeners to help relieve these symptoms.

15. You can begin exercising (walking is always allowed) in four-to-six weeks but must be cleared by your surgeon at your one-month appointment.

16. Use your incentive spirometer from the hospital for the first postoperative week as instructed, 10 times every-other hour while awake.

17. Prior to returning to work, you will be seen, evaluated and cleared by your surgeon.

18. With surgical procedures, you can experience some level of discomfort or pain and everyone is different. Take your pain medicine or acetaminophen (Tylenol), so that you are comfortable enough to cough, take deep breaths and walk. If you have had the LRYGB, it is not unusual for lower left abdominal pain to return 10 to 14 days after surgery. Icing the area can reduce discomfort.

19. Fatigue is quite common in the first postoperative week. Rest appropriately in response to this fatigue. Remember that mobility after surgery is very important. You must not remain in a sitting or recumbent position for long periods of time.

20. If you have obstructive sleep apnea and have been prescribed a CPAP machine, you must continue to use this device after surgery.

21. Please call the Weight Management Institute at 330.375.6590 if you have any questions or concerns during business hours: Monday through Friday, 8 a.m. to 4:30 p.m.

22. The answering service may be called during nonbusiness hours at 330.375.6590.

23. If you have a medical emergency, call 911 or go to the closest hospital emergency room.

24. Call your surgeon if you have any of the following:
    - Temperature greater than 101° F.
    - Redness, pain, swelling or drainage from any of the incisions
    - ANY shortness of breath, chest pain, leg/arm swelling or leg/arm pain (in one or both of your legs/arms)
    - Rapid heart rate
    - Nausea or vomiting with the inability to keep liquids down
    - Bleeding from your rectum
    - Frequently feeling dizzy or light-headed, inability to walk
    - Abnormal drain color appearance if you have a drain
    - Inability to pass urine or pass gas

25. Your follow-up office visits with your surgeon at the Weight Management Institute are located in the discharge folder. These are required visits and important for your safety and recovery.

Summa Health™

Weight Management Institute

Nutrition Discharge Instructions

Day One and Day Two
Clear Liquid Diet

Day One: Today
Start the clear liquid diet.
You can have 1 fluid ounce (oz.) every 30 minutes.

Day Two: Tomorrow
Continue the clear liquid diet.
You can have 1 fluid oz. every 15 minutes.

Examples of clear liquids:
- 1 oz. water (can add sugar-free flavoring packets)
- 1 oz. broth (chicken, vegetable, beef, bone broth)
- 1 oz. decaf tea or decaf coffee (black – no milk or cream) (may use artificial sweeteners)
- 1 oz. sugar-free gelatin
- 1 oz. sugar-free popsicle
- 1 oz. Gatorade Zero

From Day Three to Your One Week Postop Office Visit

You can have 1/4 cup (2 oz.) of one full liquid item three times a day.

Continue to drink clear liquids with a goal of 64 ounces a day.

Examples of full liquids:
- Skim milk
- Greek yogurt
- Sugar-free pudding
- Well-mashed cottage cheese
- Thinned cream of wheat
- Protein drinks

Fluids on Full Liquid

- It is very important to drink 64 oz. of fluids per day.
  - Water, Gatorade Zero, sugar-free popsicles, and sugar-free Jell-O count as fluid.
  - Note: protein shakes and milk are counted as a meal, NOT fluid.
- Once on full liquid, you do not have to portion out fluid in 1 oz. cups, you'll just sip throughout the day.
- Please also make sure to space fluid out 30 minutes before and after a meal, and never drink with your meals.
- Please do not use a straw because the suction pressure puts strain on the stomach incision.

Vitamins and Minerals

Please do not restart any vitamins and minerals until your next appointment. This helps decrease nausea in the immediate recovery phase.

Questions

Should you have any questions regarding your diet, the Registered Dietitians can be reached at **330.375.6590, option 3** or via MyChart.

WMI-24-72431(EDITED FOR BINDER)/KG/1-26

Medications

The following medications may be prescribed for you after surgery.

Prilosec (omeprazole)

This medication belongs to a class of medications called Proton Pump Inhibitors (PPIs). These medications decrease the amount of acid in the stomach.

- Take daily as directed, regardless of presence or absence of symptoms of reflux.
- Begin taking **the morning after you are discharged** from the hospital.
- Typically, you will take this medication for six months after surgery.
- See the reverse side for possible side effects.

Actigall (ursodiol)

This medication belongs to a class of medications called Bile Acids. This medication is used to decrease the risk of gallstone formation during the rapid weight loss phase for patients who still have their gallbladder.

- Take one tablet twice daily as directed, 10–12 hours apart.
- You will get the prescription for this medication at your next office visit.
- Do not start taking this medication until after your first post-operative office visit with your surgeon.
- Typically, you will take this medication for three months after surgery.
- See reverse side for possible side effects.

Lovenox (enoxaparin)

- All patients prior to surgery will have a Venous Thrombosis (VTE) Risk assessment done.
- The VTE risk assessment helps determine the risk of a patient getting a blood clot after surgery.
- All patients will need to wear compression devices while in the hospital, and at home walk five minutes every hour you are awake and not cross legs at home.
- For patients that are at increased risk, you or a family member will need to give lovenox injections to further help prevent blood clots.
- You will be taking this medication twice daily for either two or four weeks.
- You will receive more Information and instructions at your before-surgery appointment with the surgeon and in the hospital.

Medication Side Effects

Prilosec (omeprenele)

Common side effects include:

- Diarrhea or constipation
- Headache
- Nausea/vomiting
- Stomach pain
- Cold Symptoms: stuffy nose, sneezing, sore throat

Call your doctor if you experience any of the following:

- Bone pain
- Fast or irregular heart rate
- Dark urine
- Unusual tiredness
- Vision changes
- Red, swollen or peeling skin
- Unusual bruising or bleeding

Actigall (ursodiol)

Common side effects include:

- Constipation/diarrhea
- Dry skin or rash
- Headache
- Indigestion or metallic taste
- Muscle or joint pain
- Nausea
- Stomach pain
- Tiredness

Lovenox (enoxaparin)

Common side effects include:

- Bleeding at injection site
- Bruising at injection site
- Nausea
- Diarrhea
- Bleeding or hemorrhage

These are not a complete list of all possible side effects. If you have any questions about these medications or the side effects, please contact the Weight Management Institute at **330.375.6590**.

Signs of an Allergic Reaction

Get emergency help if you have any of these signs of an allergic reaction:

- Hives
- Shortness of breath
- Chest pain or tightness
- Swelling of your face, lips, tongue or throat
- Unusual hoarseness

What to Expect After Surgery

1. You will walk the evening of your surgery. That includes walking to the bathroom, staff will assist you as needed. It is important that you increase your activity after that as you can tolerate.

2. You MUST cough and deep breathe after surgery. Use your incentive spirometer 10 (10) times per hour during hours when you are awake. You do not need to be told when to use the incentive spirometer, please use it independently. Your bedside nurse will provide you with the incentive spiromenter upon arrival to your room. Please ask for any assistance in using it.

3. You need to wear compression sleeves on your lower legs when in bed while in the hospital. Wear them while in bed, even if you have been up walking. Ask staff for assistance with removing them or putting them back on.

4. If you feel nauseated, let the nursing staff know so that they can give you anti-nausea medication. Do not wait until the nausea gets worse.

5. After surgical procedures, some level of discomfort is expected. Narcotic and non-narcotic medications will be ordered for you as needed in oral form and intravenously. Communicate with your bedside nurse about your medication options.

6. Do not lift anything over fifteen (15) pounds for one month following surgery.

7. It's okay to use stairs.

8. You may shower on the second day after your surgery, but do not bathe in a tub or swim for four (4) weeks after surgery.

9. Do not drive for one week following surgery or while you are taking narcotics

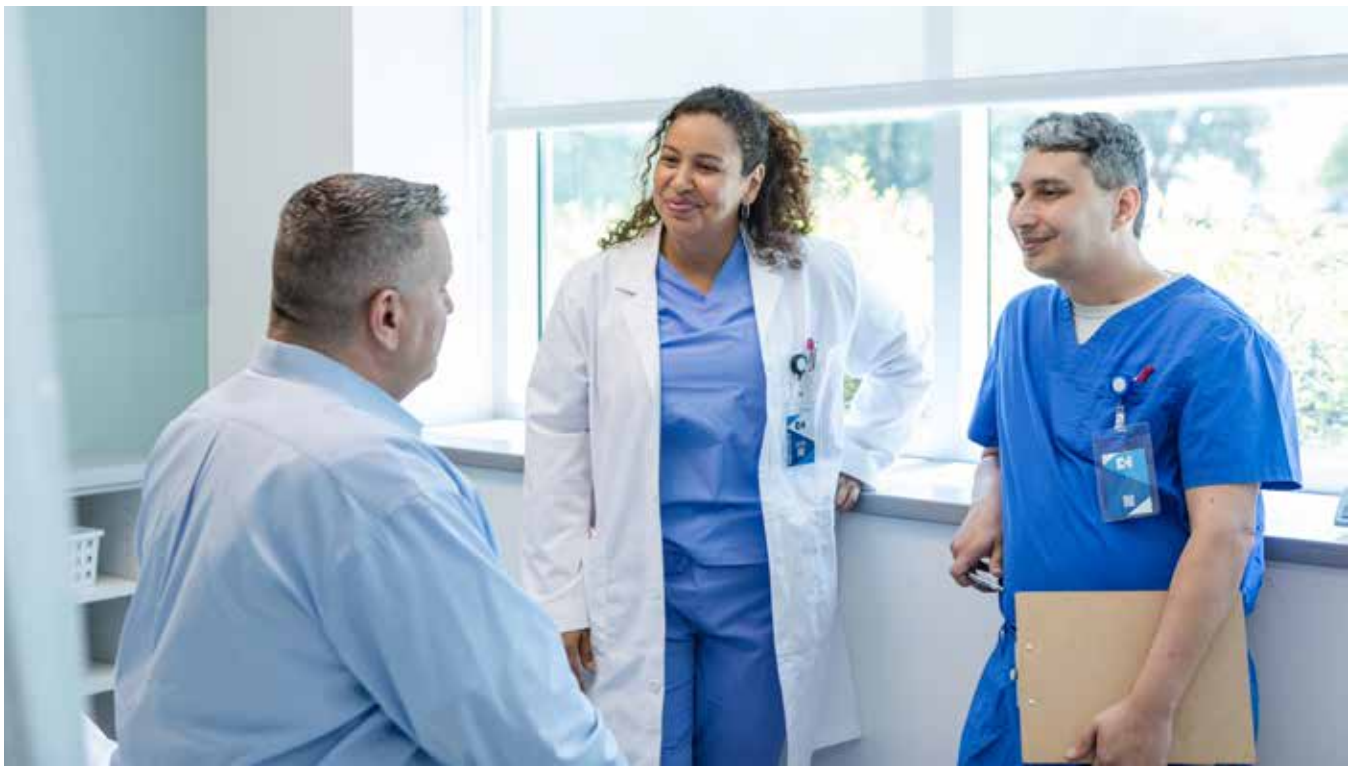
10. Your nurse will review all your home/routine medications with you and will provide instructions on when to resume taking them at home.

11. Typically, you may return to work four weeks from your surgery date. If you have a sedentary job, you may be able to return to sooner. You must see your surgeon after surgery prior to returning to work.

12. Walking often after surgery is encouraged and necessary to help prevent complications.

Follow-up Visits

- Post-op weight loss surgery patients will return to the Weight Management Institute 5-10 days after surgery. This is your one-week post-operative appointment. This appointment will be scheduled and mailed to you and reviewed again with you at the time of discharge. Remember, MyChart is a good way to keep track of upcoming appointments.
- After your first two post-op office visits, you will make appointments at the intervals that your surgeon indicates. Regular visits are essential to ensure your safety.
- Your visits are scheduled with either the surgeon, Advanced Practice Practitioner or an Obesity Medicine Specialist.
- Labwork is required before every office visit, beginning with the one-month visit. Labwork should be obtained 5-7 days prior to your office visit.
- For optimal surgical results and to ensure your safety, it is in your best interest to make and keep your appointments.
- It is your responsibility to make and keep all your appointments. Problems may develop years after surgery. Keeping this schedule of appointments will allow us the opportunity to assess for any problems before they become serious.
- Ongoing support following weight loss surgery has been shown to lead to the best long-term outcomes.
- You will be assigned an initial Support Group session. You will need to register for additional sessions thereafter. Please refer to our website for the schedule and registration instructions.
- You are strongly encouraged to attend surgical weight loss support groups for the rest of you life. Registration for the support groups is found on the Summa Health website.



Summa Health™

Weight Management Institute

Life After Bariatric Surgery: What to Expect

Bariatric surgery is a significant life event. In the weeks and months following surgery, patients lose weight and start to experience improvements in their health and quality of life. In addition, there are some challenges that patients may experience following bariatric surgery.

Bariatric patients may experience one or more of the following challenges:

Mood Concerns

Many patients can feel out of sorts for a period after surgery (irritability, anxiety, depression, sadness, low energy). Patients may even have buyer's remorse or regret about having surgery. These feelings may last for weeks to months.

Disordered Eating

Post-operative eating patterns such as avoiding certain foods out of fear of them making you sick or skipping meals, have been linked to poorer weight loss and/or weight gain.

Body Image Concerns

Rapid weight loss may lead to patients experiencing loose, sagging skin which can lead to dermatological issues and/or psychological distress. It can also be challenging to process rapid weight loss and patients may take some time to adjust to their new body. It is not uncommon for patients to still see themselves as overweight despite significant weight loss.

Relationship Concerns

Lifestyle changes necessary for successful weight loss may cause disruptions in relationships with friends, family and romantic partners.

Unrealistic Expectations

Patients often set unrealistic expectations and goals for themselves after surgery. They may find that their weight loss is slower than they anticipated or that their weight loss has not resolved the issues they thought it would. This can lead to feelings of disappointment and frustration.

Stigma and Societal Perceptions

Patients can face stigma or judgement about having bariatric surgery including being told that they took the easy way out. Although this is the farthest from the truth, it can lead to feelings of shame or defensiveness.

Social Pressures and Situations

Social gatherings can become stressful situations after bariatric surgery because of the types of foods available, the expectations regarding consumption or the pressure from others.

Unwanted Attention

After surgery, patients may experience a change in how they are treated by others or the amount of attention they receive. They may also struggle with answering questions from others about their weight loss.

Negative Coping

Prior to surgery, some patients may have used food to cope with stress and other negative emotions. When this strategy for coping is no longer available after surgery, patients may turn to another unhealthy way to cope with negative emotions such as alcohol or other substance use.

Weight Regain

Maintaining long-term weight loss requires a lifelong commitment to dietary, behavioral and physical activity changes. Patients can struggle with life stressors, returning to old eating habits and lack of motivation (especially during the weight maintenance phase) which can contribute to weight regain.

If any of the concerns found on the previous page apply to you, check out the resources below:

Weight Management Institute Support Groups

Online Support Forums:

- Bariatricpal.com
- Obesityhelp.com
- Bariatriceating.com

Recommended Reading:

- *The Emotional First-Aid Kit: A practical guide to life after bariatric surgery* by Cynthia L. Alexander
- *A Complete Guide to Obesity Surgery: Everything You Need to Know About Weight Loss Surgery and How to Succeed* by Brian G. Woodward
- *Before and After: Living and Eating Well After Weight loss Surgery* by Susan Leach
- *The Success Habits of Weight Loss Surgery Patients* by Colleen Cook
- *Breaking Free from Emotional Eating* by Geneen Roth

Each patient's experience after bariatric surgery is unique. However, it is common to face some challenges after bariatric surgery or to feel isolated or uncertain at times. It is essential to have a network of family and/or friends to support your journey. It is also important to have self-compassion and to ask for additional help when needed. Through this journey, the goal is to improve your health and longevity.

If you would like additional support, feel free to make a follow up appointment with the Weight Management Institute licensed psychologists by calling **330.375.4680**.

Please note that plastic surgery after weight loss is not part of the Weight Management program. However, referrals can be made after weight has stabilized.

Summa Health™

Diet and Nutrition

Section 9

Pureed (Blender) Diet

These foods require no chewing and are easy to swallow. Follow this diet for 10 days. All foods must be pureed in a blender.

General Guidelines

- ¼ cup (2 oz) five times a day or three-to-four times daily with a goal of 60 grams protein per day.*
- Remember to drink liquids 30 minutes after meals, limit fluids with a meal.
- Portions should be ¼ cup. Stop eating if you are full before you consume the entire quantity.
- Use smaller forks and spoons.
- Do not eat high-sugar foods.
- 64 oz. of fluids daily is your goal. Take small sips.
- Do not drink liquids with a straw.
- Cook meat, turkey and chicken in a slow cooker to lessen dryness.
- Recommended protein drinks are listed in this manual.
- Baby food is not recommended.

*Please note: You may not meet the protein goal in the first month after surgery.

Meal Ideas

Meal	#1	#2
Breakfast	• 1 egg poached or deviled egg made with LF mayo • ¼ cup (2 oz.) blended peaches	• ¼ cup (2 oz.) thin cream of wheat cereal with skim milk
AM Snack	• ¼ cup (2 oz.) blended chili	• ¼ cup (2 oz.) No Sugar Added Carnation Instant Breakfast in nonfat (skim) milk
Lunch	• ¼ cup (2 oz.) blended turkey with broth • ¼ cup (2 oz.) blended LF cream soup	• ¼ cup (2 oz.) blended beef • ¼ cup (2 oz.) blended green beans
PM Snack	• ¼ cup (2 oz.) SF pudding with protein powder	• ¼ cup (2 oz.) blended soup
Dinner	• ¼ cup (2 oz.) ground pork with broth, blended • ¼ cup blended baby pears	• ¼ cup (2 oz.) lean ground beef, blended • ¼ cup thin instant mashed potatoes with protein powder
Evening Snack	• ¼ cup (2 oz.) Greek yogurt	• ¼ cup (2 oz.) SF pudding with protein powder

***Remember to stop eating if you are full before you consume the entire quantity.**

Abbreviation	Meaning
LF	Low-Fat
SF	Sugar-Free

Soft Diet: NO nuts, skins, seeds or salads

Follow this diet for **two weeks.**

General Guidelines

- Peel fresh fruit/vegetables prior to eating.
  - Vegetables should be well cooked and soft so that a fork mashes through them.
- Consume 1/4 cup (2 oz.) of food per meal, or three to five times daily.
- Chew all foods to the consistency of baby food or applesauce before swallowing.
- REMEMBER — fluids must be consumed 30 minutes after your meals. 64 ounces of fluids daily are recommended. Do not use a straw.
- REMEMBER — have protein at every meal and snack. Protein is an important nutrient in the healing process and aids in weight loss.
  - More than 60 grams of protein daily is essential.
  - A recommended list of protein drinks and bars is provided.
- Avoid dry and crunchy foods

Meal Ideas

Meal	#1	#2
Breakfast	• 1 egg scrambled • ¼ ripe banana	• 2 ounces of a protein bar (usually about ½ a protein bar)
AM Snack	• ¼ cup (2 oz.) Greek yogurt	• 1 oz. string cheese • ¼ apple, peeled
Lunch	• ¼ cup (2 oz.) tuna with 2 tsp. light mayo	• 1-2 oz. lean ground beef • ¼ cup French cut green beans
PM Snack	• 2 ounces of a protein bar (usually about ½ a protein bar)	• 1 hard boiled egg • ¼ cup (2 oz.) cup unsweetened applesauce
Dinner	• ¼ cup (2 oz.) baked fish • ¼ cup (2 oz.) steamed carrots	• ¼ cup (2 oz.) lean ground beef • ¼ cup (2 oz.) cup light peaches
Evening Snack	• ¼ cup (2 oz.) low-sugar Greek yogurt	• ¼ cup (2 oz.) cup sugar-free pudding

***Remember to stop eating if you are full before you consume the entire quantity.**

Bariatric Diet (1 Month After Surgery)

Congratulations, you have made it to the next step! As you start to eat regular foods, it is essential that you continue to incorporate the items from all the food groups into your meals. Become familiar with the nutrition guidelines found below as they will remain in place for the rest of your life. Continue to avoid nuts, skins and seeds until your are at least one-month post-op.

Nutrition Guidelines

1. Each meal should have at least 50% protein along with non-starchy vegetables and/or high fiber carbohydrates.
2. Slowly introduce new food items and only one new item at a time. This will help you determine if you can tolerate that food, as some foods will be easier to tolerate than others. If you discover that you cannot tolerate a food the first time you eat it, you may try again in a few weeks. Avoid any items with skins or seeds until you are at least one-month post-op.
3. Eat slowly, taking small bites and chew food well (at least 20–40 times) before swallowing. Always try to stop eating either before or when you begin to feel full.
4. Always consume your protein foods first; treat your protein intake as an "event." It is a priority to meet your daily requirements. Your daily goal is more than 60 grams of protein.
5. Use high protein supplements to meet your daily protein needs, if necessary.
6. Water or calorie-free beverages should be consumed to meet your daily need of 64 fluid ounces. Avoid drinking during your meal or within 30 minutes after eating solid foods.
7. Be sure to avoid all caffeine, carbonated beverages and alcohol.
8. Fluids should be consumed slowly. Sip any fluid or beverage, do not gulp or use a straw.
9. Continue to take a multivitamin with iron daily, a calcium citrate supplement three times dally and a Vitamin B12 sublingually once a week, Vitamin D3 and Vitamin B1 daily. Also, take any other vitamin/ mineral supplements as directed.
10. Regularly engage in exercise — walking, low-impact aerobics, swimming and strength training. Physical activity will promote and help you maintain your weight loss.

Post-Op Months	Snack / Meals	Frequency times/day
0-3	¼ cup (2 oz)	5
3-6	¼ - ½ cup (2-4 oz)	3-5
6-12	½-1 cup (4-8 oz)	3-5
Maintenance	½-1 cup (4-8 oz)	3 (1-2 snacks optional / as needed)
		Meal frequency may vary as it is patient specific

Bariatric Diet (1 Month After Surgery)

It is important that patients are mindful of the foods that are permitted as well as the foods that should be avoided while on a bariatric maintenance diet.

Food Group	Permitted	Avoid	Tips
Protein	• Chicken, turkey, lean pork, beef, fish (no skin) • Low-fat deli meats: turkey, ham or chicken • Reduced-fat cheeses, low-fat cottage cheese • Water-packed tuna or fish • Gardenburgers, tofu, soy meat alternatives • Creamy peanut butter • Eggs, egg substitutes • Dried beans and lentils	• High-fat meats and gristle in meats • High-fat lunch meats (bologna, salami, hot dogs, sausage) • High-fat cheeses such as cheddar or Swiss • Fried foods • High-fat gravies and sauces	• Bake, broil, roast or grill meats • Try ground turkey in place of ground beef • Frozen entrees such as Lean Cuisine, Healthy Choice, Smart Ones may be used occasionally.
Dairy	• Skim, fat-free or 1% milk • Lactaid, soy, cashew, pea or almond milk (unsweetened) • Low-fat, low-sugar milks / milk substitutes • High-protein milk / milk substitutes	• 2% or whole milk • Chocolate milk • Sweetened milks or alternative milks like oat/rice milk	
Vegetables	• Any cooked or raw vegetables • Tomato juice or V8	• Fried vegetables • Vegetables in cream or cream sauces (unless made with low-fat ingredients)	• Be sure to chew well • No large pieces • Make vegetables part of your daily meals
Fruits	• Fresh fruit • Frozen fruit • Canned fruit in its own juice • Sugar-free fruit juice	• Canned fruit in heavy syrup • Sweetened frozen fruits • Regular and less-sugar fruit juices	• Chew all fruits well
Carbohydrates / Starches	• Brown rice, protein, chickpea, lentil, quinoa brown rice pasta • Unsweetened hot or cold cereal • Mashed potatoes, sweet potatoes, corn, peas, winter squash • Sprouted grain bread • High-fiber crackers (2 or more grams of fiber per serving) • Low-fat cream soups	• French fries • Sweet breads, Danishes, donuts • Sweetened cereals • Biscuits, croissants, store-bought muffins • High-fat cream soups	• Choose breads and cereals with 2g+ of fiber per serving • Sprouted grains will give you a greater feeling of fullness • Breads or tortilla shells with 5g+ of fiber per serving
Fats	• Light margarine, light mayonnaise • Low-fat / low-sugar salad dressing • Canola or olive oil • Light cream cheese or sour cream • Non-stick cooking sprays	• Regular margarine, butter, cream cheese or sour cream • Regular mayonnaise • Cream or half/half - Bacon, bacon grease	• Use all fats sparingly • Use flavorings such as herbs, spices and lemon to help season foods

Snacks / Desserts Desserts should be consumed in moderation (small portions with a serving of protein)	• Fat-free, sugar-free ice cream • Pretzels, rice cakes • Sugar-free puddings or Jell-O • Plan animal or graham crackers • Sugar-free fruit ices • Sugar-free popsicles	• Potato chips, corn chips, any high-fat chips • High-fat ice cream or milkshakes • Cakes, pies, cookies, candy • High-sugar, high-fat desserts	• Avoid constant snacking on pretzels, crackers, etc., this can lead to weight gain • Each snack should contain a good source of protein plus complex carbohydrates
Beverages	• Water, sugar-free flavored waters • Decaf coffee or tea • Any sugar-free or unsweetened beverages • Crystal Light or other sugar-free drinks	• Sugar-sweetened fruit drinks, Kool-Aid, iced tea or lemonade • Carbonated beverages • Sugar-sweetened juices • Alcohol	• Fluids should be consumed 30 minutes after meals
Miscellaneous	• Artificial sweeteners • Sugar-free Jell-O • Light syrups • Sugar-free jams and jellies	• Regular sugar, brown sugar, honey, corn syrup • Regular syrup • Regular jams and jellies • Agave	

Sample Meals

Below are example snacks and meals that adhere to patient dietary guidelines. Be sure, similar to the provided examples, to vary the foods and beverages that you eat and drink.

Meal / Snack	Example One	Example Two
Breakfast	• ½-cup oatmeal with protein powder • ½-cup melon	• ½ slice sprouted grain bread with 1 Tablespoon of peanut butter • ½-cup of blueberries or blackberries
Snack One (a.m.)	• 4 to 8 oz. protein shake	• 1 piece of string cheese • ½ of an apple
Lunch	• ½ a turkey sandwich • ½-cup raw vegetables	• ½-cup vegetable soup • ¼-cup low-fat cottage cheese • ¼-cup pears
Snack Two (p.m.)	• protein bar	• 4 oz. low-sugar yogurt with protein powder • ½-cup of fresh berries
Dinner	• 2 oz. grilled chicken • ½ small, baked sweet potato with butter spray	• 2 oz. roast pork tenderloin • ¼-cup brown rice pilaf • ¼-cup steamed green beans with fresh herbs
Evening Snack (p.m.)	• sugar-free pudding with protein powder	• 4 to 8 oz. protein shake

Maintenance Diet

- Follow a balanced meal plan with adequate protein and a daily intake of vegetables, fruit, and healthy fats. (e.g. use MyPlate Nutrition guidelines- bariatric version)
- Plate should be comprised of 50% protein, 30% non-starchy vegetables, and 20% carbohydrates
- Consume at least 64 fluid ounces daily.
- Avoid the intake of high-calorie fluids including regular juices, soft drinks, and other sugar-containing beverages, alcohol, and full-fat dairy.
- Adhere to vitamin/mineral supplementation recommendations**.
- Have nutrition related laboratory values checked annually.
- Eat three meals a day to avoid grazing and nibbling. (1-2 snacks optional/ as needed)
- Self-monitor food intake, weight, activity, and emotions, seeking help if needed.
- Avoid concentrated sweets, highly saturated fats, and trans fats.
- Eat protein and high fiber-containing foods to enhance satiety and feelings of fullness.
- Practice mindful eating techniques such as:
  - Do not eat in front of television
  - Chew food well and eat slowly
  - Be aware of physical hunger
  - Avoid drinking fluids with meals; wait 30 minutes after meals for pouch or sleeve to empty before consuming large volumes of fluids
  - Use a small plate (7-9 inches) to help control portion size

Post-Op Months	Snack / Meals	Frequency times/day
Maintenance	½-1 cup (4-8 oz)	3 (1-2 snacks optional/as needed)
		Meal frequency may vary as it is patient specific

Micronutrient	Amount Daily
Iron	At least 45-60 mg
Thiamin (B1)	At least 12 mg (high risk pts 50-100 mg)
Vitamin B12	350-500 mcg
Folate (B9)	400-800 mcg // 800-1000 mcg (women of childbearing age)
Calcium	1200-1500 mg
Vitamin D3	3000-4000 IU
Vitamin E	10-20 mg
Vitamin A	5000-10,000 IU
Vitamin K	90-120 mcg
Zinc	8-22mg
Copper	1-2mg
Vitamin C	120-200 mg

References:

- American Society for Metabolic and Bariatric Surgery (ASMBS). Nutrition Guidelines for the Surgical Weight Loss Patient.
- Academy of Nutrition and Dietetics (AND). Evidence-Based Nutrition Practice Guidelines for Bariatric Surgery.
- National Institutes of Health (NIH). Obesity and Bariatric Surgery resources.
- Pocket Guide to Bariatric Surgery (AND). Weight Management Dietetic Practice Group
- Pocket Guide to Micronutrient Management (AND). Evidence-Based Nutrition Practice Guidelines for Bariatric Surgery.
- Your bariatric program's registered dietitian (for personalized guidance).

The Importance of Protein Following Surgery

Protein is essential in promoting optimal healing of your stomach and incisions after surgery and in maintaining muscle mass, which is always a challenge during a time of weight loss.

Because of this, you should eat a protein-rich food with every meal and snack. It will help you feel full longer and will help prevent overeating.

Some symptoms of low protein intake include poor healing, hair loss and fatigue.

Good sources of protein.

The chart below lists food that are especially high in protein.

Food Item	Protein Amount (g) per 1/4 cup (2 oz)	Food Item	Protein Amount (g) per 1/4 cup (2 oz)
Tuna	16g	Quinoa	8g
Turkey	16g	Cottage Cheese	7g
Beef	15g	Chili	6g
Pork Tenderloin	15g	Egg (1)	6g
Chicken	14g	Greek Yogurt	6g
Sardines	14g	Lentils	6g
Cheese	14g	Edamame	6g
Peanut Butter	14g	Protein Beverage	5.5g
Mung Bean	13.5g	Black, Kidney, Garbanzo Beans	5g
Fish	13g	Tofu	5g
Sunflower/Flax Seeds	13g	Non-fat Fairlife Milk	3.25g
Peanuts	12g	1% Milk	2g
Tree Nuts	12g	Pea Milk	2g
Chickpea Pasta	11g	Soy Milk	2g
Chia Seeds	10g	Navy, White, Great Northern Beans	2g
Protein Bar	10g	Green Beans	1g
Pumpkin/Squash Seeds	8g		

Remember: You will need to consume 60 or more grams of protein daily. Because you can only consume small amounts of food, you may need to use protein drinks or bars to reach that total.

Protein Shakes and Bars

You must consume 60 or more grams of protein per day. It is very helpful to use protein supplements to help you achieve this goal. All protein shakes, powders and bars should be less than 250 calories, less than 15 grams of sugar and contain more than 10 grams of protein.

Please check the list provided of recommended protein supplements that you can find at your local grocery store. They all meet the above criteria. If you find another product that you would like to use, please be sure it falls under the same guidelines. Please note that some flavors of a particular brand may not be gluten-free. Refer to the ingredients label to check if a product is gluten-free.

Please note: If a beverage has calories and protein, it counts toward your meals not your fluid total.

Bars:

- Zone Perfect
- Special K Protein
- Atkins Advantage
- Nature Valley Protein
- Kashi GOLEAN Crisp
- Kelloggs Fiber Plus Protein
- Luna (Gluten Free)
- Nugo (Gluten Free)
- Pure Protein (Gluten Free)
- Boost (Lactose Free)
- Quest Premier Protein
- Built Puff Bars

Shakes & Powders:

- Slimfast (RTD)
- Premier (RTD)
- Special K (RTD)
- Atkins Advantage (RTD)
- EAS Advantage Edge (RTD)
- Body Fortress Whey Protein Powder
- Carnation Instant Breakfast – No Sugar Added
- Muscle Milk Light (Gluten Free)
- Ensure High Protein (Gluten Free)
- Boost Glucose Control/ Calorie Smart (Gluten & Lactose Free)
- Isopure unflavored Protein Powder
- Ensure Max Protein
- Protein 20
- Gatorade Zero Protein

Key: RTD = Ready To Drink

Tips For Limiting Sugar Intake to Prevent Dumping Syndrome

1. Each meal and snack should have no more than **15 grams of sugar**.
2. Try Stevia® if you need a sweetener. It will not trigger dumping syndrome.
3. Avoid the following products that can trigger dumping syndrome:

- Alfredo sauce
- Baked goods
- Barbecue sauce
- Cake
- Candy
- Chocolate milk
- Cookies
- Creamy, high-fat dressing and sauces such as ranch dressing and alfredo
- Deep fried fish
- Donuts
- French fries
- Fried chicken
- Frozen yogurt
- Fruited yogurt
- Fruit drinks and ices
- Fudgesicles
- Granola
- Gum
- High sugar beverages
- Hot cocoa
- Ice cream
- Jelly/jam
- Jell-O (sugar free gelatin is ok)
- Prepared Kool-Aid
- Macaroni and cheese
- Muffins
- Pastries
- Pies
- Pop tarts
- Potato chips
- Processed carbohydrates such as white crackers, pretzels
- Puddings
- Regular soft drinks
- Sherbet
- Sweetened tea
- Sugar-frosted cereals
- Syrup
- Table sugar
- Tapioca

Foods to avoid:

Weight Management Institute

Bariatric Multivitamin Plan

To be taken daily:

Bariatric Multivitamin with Iron (45mg)

- Take one tablet, capsule, or chewable multivitamin a day
- Do not take within 2 hours of taking calcium citrate supplement

Calcium Citrate

- Take 500 mg three (3) times a day (total of 1500mg daily)
- Average cost for 6 months is $149
- Do not take within 2 hours of taking multivitamin with iron or iron supplements

Brands that contain the recommended amounts of nutrients:

ProCare Health: Bariatric Multivitamin with Iron (45mg)

- Chewable, tablet, or capsule
- **Average cost for six months is $96**

Bariatric Advantage: Ultra Solo with Iron (45mg)

- Chewable or tablet
- **Average cost for six months is $100**

Celebrate: Celebrate ONE 45

- Chewable or capsule
- **Average cost for 6 months is $98**

Bariatric Pal: Multivitamin One with iron (45mg)

- Chewable or tablet
- **Average cost for 6 months is $75-$124**

Calcium Citrate:

- Chews or tablets
- **Average cost for 6 months is $149**

Average estimated cost for six months of bariatric multivitamin + calcium citrate: $247

Optional:

Biotin

- Do not exceed > 5000mcg daily
- To help maintain hair, skin, and nails following surgery
- Can be taken at any time of the day with any other vitamin/mineral

** Please check with your pharmacist, physician, nurse practitioner, or dietitian if you are taking thyroid medication regarding supplement and medication timing needs

Snack/Meal	Bariatric Multivitamin Supplement Plan
Breakfast	One Bariatric Multivitamin with Iron
Wait 2-3 hours	
Snack	Calcium Citrate
Wait 2-3 hours	
Lunch	Calcium Citrate
Wait 2-3 hours	
Snack	Calcium Citrate
Wait 2-3 hours	
Dinner	

Over-the-Counter Vitamin Supplement Plan

To be taken daily:

Complete Multivitamin with Iron (18mg)
- Take 2 tablets a day (ie, Centrum Adult, Nature Made Complete, One A Day Women's, etc.)
- Do not take within 2 hours of taking calcium citrate supplements
- **Average cost for six months is $34**

Vitamin B12
- Take 500 mcg daily (dissolvable or sublingual form)
- **Average cost for six months is $9**

Vitamin B1
- Take 50 mg daily
- **Average cost for six months is $20**

Vitamin D3
- Take 4000IU daily
- **Average cost for six months is $16**

Calcium Citrate
- Take 500 mg three (3) times a day (total of 1500mg daily)
- **Average cost for 6 months is $149**
- Do not take within 2 hours of taking multivitamin with iron or iron supplements

Average estimated total for six months of over-the-counter supplementation + calcium citrate: $228

** Please check with your pharmacist, physician, nurse practitioner, or dietitian if you are taking thyroid medication regarding supplement and medication timing needs

Snack/Meal	Over-the-Counter Supplement Plan
Breakfast	Two (2) Multivitamins with Iron Vitamin B12
Wait 2-3 hours	
Snack	Calcium Citrate Vitamin B1
Wait 2-3 hours	
Lunch	Calcium Citrate
Wait 2-3 hours	
Snack	Calcium Citrate Vitamin D3
Wait 2-3 hours	
Dinner	

Optional:

Biotin
- Do not exceed > 5000mcg daily
- To help maintain hair, skin, and nails following surgery
- Can be taken at any time of the day with any other vitamin/mineral

Summa Health™

WMI-26-83185/KG/7-26

Hair Thinning Following Surgical Weight Loss

Nutritional complications following surgery for obesity may include vitamin and mineral deficiencies as well as insufficient protein intake.

These potential deficiencies can result in hair loss during the post operative period following weight loss surgery. Some hair loss following surgery is unavoidable, occurring partly in response to the stress of having had major surgery and exposure to anesthesia. Other contributing factors may include decreased calorie and protein consumption. Hair loss may begin two to three months after surgery and should resolve by the sixth to ninth post-op month. This hair loss is only temporary and it is unlikely that you will have thinner hair a year after surgery.

Hair loss can be minimized:

- Meeting your daily protein requirement (more than 60 grams) and eating high-protein foods
- Supplementing foods with high-protein products, such as protein powders
- Meeting your daily fluid requirement (above 64 ounces) to keep hair follicles hydrated
- Taking a Biotin supplement during the hair loss period:
  - Biotin: up to 5,000 mcg daily
- Take all recommended vitamins.
- Reduce tension and strain at the roots when styling your hair.
- Suspending hair-coloring, braiding, weaving and chemical processing to give your hair a rest.
- Use a mild shampoo and decrease the number of times you wash your hair.
  - There are biotin shampoos that you may try. However, they tend to be expensive and there is still a lack of evidence on their ability to reduce hair loss.

Diet/Nutrition Review

You must:

- Follow diet progression as ordered by your dietitian.
- Take your vitamins. Start them when we tell you to and take them faithfully.
- Sip liquids continually to prevent dehydration. Lifetime goal is 64 oz/day.
- Eat slowly, taking small bites.
- Chew food well (approximately 20 times) before swallowing.
- Drink your liquids in between meals. Avoid drinking during meals and 30 minutes after meals.
- Add new foods, one at a time, to assess tolerance.
- Eat protein-rich foods first to ensure sufficient intake – this is very important!
- Avoid foods that are high in sugar and fat.
- Stop eating solids and return to clear liquids for 24 hours if nausea and vomiting occur.
- Use a baby spoon or fork when you get to solid foods to ensure taking smaller bites.

Avoid:

- Eating or drinking past the first feeling of fullness.
- Lying down within one hour after meals.
- Using a straw to consume fluids; you may use a spoon or a "sippy" cup.
- Drinking carbonated beverages. They can cause irritation, discomfort and gas.
- Drinking alcoholic beverages for the 1st year following surgery.
- Drinking caffeine-containing beverages. Caffeine has been found to stimulate appetite and to cause a diuretic effect that could lead to dehydration.
- Chewing gum, as obstruction may occur if swallowed.

Bariatric Post-Op Diet Guidance

1. **What do portions look like for protein, vegetables, carbohydrates?**
   a. 50% of the plate should be protein
   b. 30% of the plate should be non-starchy vegetables
   c. 20% of the plate should be grains or starchy vegetables
   d. Recommended Portion Sizes:

Post-Op Months	Snack/ Meals
0-3	¼ cup (2 oz.)
3-6	¼ - ½ cup (2 – 4 oz.)
6-12	½ - 1-cup (4 – 8 oz.)
Maintenance	½ -1-cup (4 – 8 oz.)

2. **Is it a quarter cup total? Or a quarter cup of each? (From surgery to 3 months)**
   a. Quarter cup (2 oz) total - use a small (4") plate to make portions look larger. This will help your brain think it is getting more food than you are consuming.

3. **Can you provide a timeline on when to take my vitamins?**

Example supplement timeline:

Snack/Meal	Bariatric Multivitamin Plan	Over-the-Counter Multivitamin Plan
Breakfast	One Bariatric Multivitamin with Iron	Two Multivitamin with Iron Vitamin B12
Wait 2-3 Hours		
Snack	Calcium Citrate	Calcium Citrate Vitamin B1
Wait 2-3 Hours		
Lunch	Calcium Citrate	Calcium Citrate
Wait 2-3 Hours		
Snack	Calcium Citrate	Calcium Citrate Vitamin D3
Wait 2-3 Hours		
Dinner		

** please check with your pharmacist, physician, nurse practitioner or dietitian if you are taking a thyroid medication regarding supplement timing needs

4. **How many pills can I take at one time?**
   a. 2 – 3 depending on your comfort level

5. **What is the serving amount for the soft diet for protein drink?**
   a. 2 – 4 fluid ounces

6. **What is the serving size I should be eating on the soft diet?**
   a. Stay closer to the 1/4 cup total per meal

7. **Should I stay on the soft diet until my one month follow-up visit?**
   a. Yes! We will advance your diet at your one-month visit

8. **Should I add protein powder to snacks like pudding? I bought some unflavored.**
   a. Absolutely, if you would like. This adds some protein to a snack that has a little bit but could use a boost. Mix the protein powder in a little bit of water prior to adding it to the pudding to reduce the amount of dry clumps of powder that might happen.

9. **What should I look for in a protein bar?**
   a. Less than 250 total calories
   b. Less than 15 grams of sugar
   c. More than 8 grams of protein

10. **Would hummus be on the soft diet?**
    a. Yes.

11. **Can I have raspberries, blueberries, and strawberries if I puree them and strain out the seeds?**
    a. Continue to avoid all: nuts, seeds, skins, and salads until your one-month visit.

12. **Prior to surgery I ate sprouted bread. Will this be allowed on the soft or regular diet?**
    a. In moderation, this will be allowed on the maintenance diet, but not before then, as it contains seeds.

13. **Are egg noodles or Banza (chickpea) pastas allowed?**
    a. Chickpea noodles yes. The egg noodles are primarily wheat. Stay with a lentil or chickpea based pasta, and only a couple of bites.

14. **When will I be able to eat "normal" again?**
    a. You will be eating 3-5 small meals per day. One month after surgery you will be able to eat your new "normal" types of food.

15. **Why can I not eat certain foods after surgery?**
    a. Some foods are too dry, tough or dense and will be difficult to eat right away. The dietitian will guide you through your post-surgery dietary needs.

    Tips
    - Cook food low and slow in water or broth to maintain moisture.
    - Spit out any food that you cannot chew to an applesauce consistency.
    - Some foods might always be difficult to eat, these foods should be avoided.
    - Pasta, oatmeal, grits, white bread and rice might expand to create discomfort and cause vomiting — these can be added back into the diet slowly at the maintenance stage.
    - Chicken skin is fatty and does not chew up well

16. **What is a non-starchy vegetable?**
    a. All vegetables except: corn, beans, peas, lima beans and potatoes.

17. **What seasonings can I use?**
    a. Avoid seasonings that contain calories such as sugar, sauces, dressings, honey,
    b. After surgery, picer foods can be slowly reintroduced as tolerated.

18. **Why is it important to drink 64+ fluid ounces per day?**
    a. In general, this is the recommended amount of fluids for the average adult. The more you drink the better you will feel.

19. **When can I have caffeine again?**
    a. It is recommended that you avoid caffeine for one year after surgery Please talk to your surgeon at the one-year mark.

20. I have nausea

a. Are you drinking 64 fluid ounces per day?
b. Are you chewing your food well before swallowing?
c. Are you getting 15g of carbohydrates in some meals?
d. Hormonal fluctuations and healing process might cause nausea
e. Try Liquid IV or Gatorade Zero to reestablish some electrolytes
f. Dry meats and scrambled eggs might cause nausea as they are harder to digest
g. Did you wait 30 minutes after the snack or meal to resume drinking water?
h. Were the foods consumed, prior to getting nauseous, high in sugar or fat?

How to decrease nausea and keep foods down:

- Drinking lots of fluids and making sure you hit 64 ounces or more.
- When eating, try to slow down the process and chew as much as possible and make meals last 20 – 30 minutes.
- Keep a food log or use the Baritastic app to track the foods to see if there might be particular foods that are bothering you more than others and limit those foods.
- It is always okay to go backwards to different diet textures like the soft, pureed or even liquid diets if they help food stay down and help you get more nutrition while you heal.
- Make sure you are eating enough carbohydrates (at least 50 grams per day)

Low Blood Sugars After Bariatric Surgery:

- Recommend letting your Primary Care Provider know about your low blood sugars. Sometimes they can provide you a blood glucose monitor.
  - Symptoms of a low blood sugar: feeling weak, shaky, dizzy, sweaty, hungry, tired, confused, anxiety
  - If you feel these symptoms or if your blood sugar is less than 70, we recommend:
    - Eating a fast-acting carbohydrate. 4 ounces of regular juice mixed with 4 ounces of water is best for patients who have had bariatric surgery to help get your blood sugars back up.
    - After having this, wait 15 minutes without eating anything else. If you feel better after 15 minutes, then eat a meal. If you do not feel better, then have another round of the fast-acting carbohydrate and repeat the process.
    - If your blood sugar keeps dropping or you notice you continue to feel worse, then call 911.

Ways to prevent low blood sugars from happening:

- Follow the bariatric diet that we recommend.
- Consume three meals and up to two snacks.
- Always pair carbohydrates with protein
- Choose complex carbohydrates such as sweet potato, wild rice, quinoa, and sprouted grain breads.
- Avoid skipping meals and snacks.
- Avoid sweets, pops and simple carbs like rice and white breads. These spike blood sugar and cause low blood sugars after the spike to compensate.

Summa Health™

Weight Management Institute

Rehydration

Proper hydration prevents dehydration, which can lead to serious symptoms like dizziness and fatigue.

- Smaller stomach size after weight loss surgery means you can't consume large quantities of water at once, so **ongoing hydration throughout the day is key**.
- Proper hydration supports vital bodily functions, including digestion, circulation and temperature regulation.
- Avoiding dehydration is important to prevent nutrition-related hospital readmissions.
- Staying hydrated helps the body heal, increase energy levels and functions optimally during weight loss.

Signs of Dehydration

- Feeling thirsty/having dry mouth
- Constipation
- Fatigue
- Decreased skin turgor
- Decreased urine output or urine that is darker than normal
- Feeling lightheaded
- Nausea/difficulty taking in liquids

What to do if you are feeling dehydrated

- Continue to sip on fluids, a dry stomach leads to increased nausea.
- Take a Zofran (Ondansetron) with just enough water to get the pill down.
- Mix water and Gatorade Zero/Powerade Zero to make a 50/50 solution.
- One hour after taking the Zofran, drink one ounce of the solution every 15 minutes for 2 hours. If this is tolerated, drink one ounce of the solution every 5-10 minutes for 2 hours.
- Once this is tolerated, begin sipping as much as you are able for the remainder of the day.
- Focus on clear liquids only for the next 1-2 days, as hydration is critical to being able to tolerate food/protein.
- Continue to take Zofran every 8 hours for the next 24-48 hours.
- If there is no improvement in that time, please notify the office: **330.375.4199**.

Summa Health™

Weight Management Institute

Constipation

Constipation after weight loss surgery is common due to several factors:

- Dehydration after surgery
- Physical changes in the digestive system after surgery
- Change in Diet: Reduced fluid and fiber intake due to smaller food portions and less consumption of fruits and vegetables. In addition, high protein intake can cause constipation if you are not getting enough fiber.
- Vitamins and Supplements: certain supplements can increase constipation.
- Insufficient exercise to maintain regular bowel movements

Actions to take if you are constipated

- Keep track of your fluid. Goal is 64 ounces a day. Inadequate fluid intake can lead to constipation.
- For first 7-10 days after surgery, use Milk of Magnesia per bottle instructions (do not use if you have a history of kidney insufficiency)
- Take MiraLAX (generic brand is ok) before bed, for up to 3 nights or until you have a bowel movement.
- You may continue to take MiraLAX as needed per directions on bottle.
- Taking a stool softener, such as Colace, as needed, daily or twice daily can be helpful. Stool softeners can be purchased at any pharmacy.
- Dietary Fiber is important to help prevent constipation.
- Increase your activity.
- Smooth Move Tea is a tea that you can purchase at the grocery store (in the tea aisle) or online, that can help you have a bowel movement.
- Call the office if you have not had a bowel movement in 3-4 days, **330.375.4199**. If you are no longer passing gas, if your abdomen is bloated/distended or if you start vomiting, seek medical attention at an urgent care facility or Emergency Department.

Summa Health™

Exercise

Section 10

Exercise Basics

Exercise is very important for all of us. It builds strong muscles, a healthy heart, healthy lungs and it helps prevent dementia. It is also a great stress reliever. However, exercise is not a weight loss method and cannot overcome poor eating habits. We recommend moderate exercise for all of the reasons above, but be sure you focus first on your meal plan.

NOTE: As you exercise, it is normal that your heart rate will increase, that you will become tired and that you will experience muscle soreness.

Attire

1. Wear loose and breathable clothing. This will allow your body's natural cooling system of sweating and evaporation to work.
2. Wear comfortable walking shoes to significantly minimize your chances of being injured.
3. In cooler weather, several layers of clothing provide more insulation than one heavy article of clothing. Also make sure to cover your mouth and nose with a scarf.
4. Carry some form of identification with you when you exercise.

Beware

1. If you experience any of the following symptoms, you should STOP and seek medical attention before continuing with your exercise routine.
   a. Pain or tightness in the chest
   b. Pain in the neck, jaw, arms or teeth
   c. Irregular pulse
   d. Breathlessness
   e. Unusual joint or muscle pain
   f. Excessive fatigue or weakness
   g. Excessive sweating
2. Avoid extreme temperatures. If it is too hot or too cold, exercise indoors.
3. Avoid hilly terrain; level surfaces require less energy and place less stress on your heart.
4. Climate controlled environments such as shopping malls are perfect for increasing the length of your walk.

Commitment

You must be committed to your daily exercise routine.

1. Establish goals. Short-term goals of 1-2 weeks lead to a higher success rate than long-term goals.
2. Be flexible with yourself. It is OK to miss an exercise session when you know that you will be making it up at a different time. Use reinforcement rewards as you establish and meet your goals.

Assessing Your Heart Rate

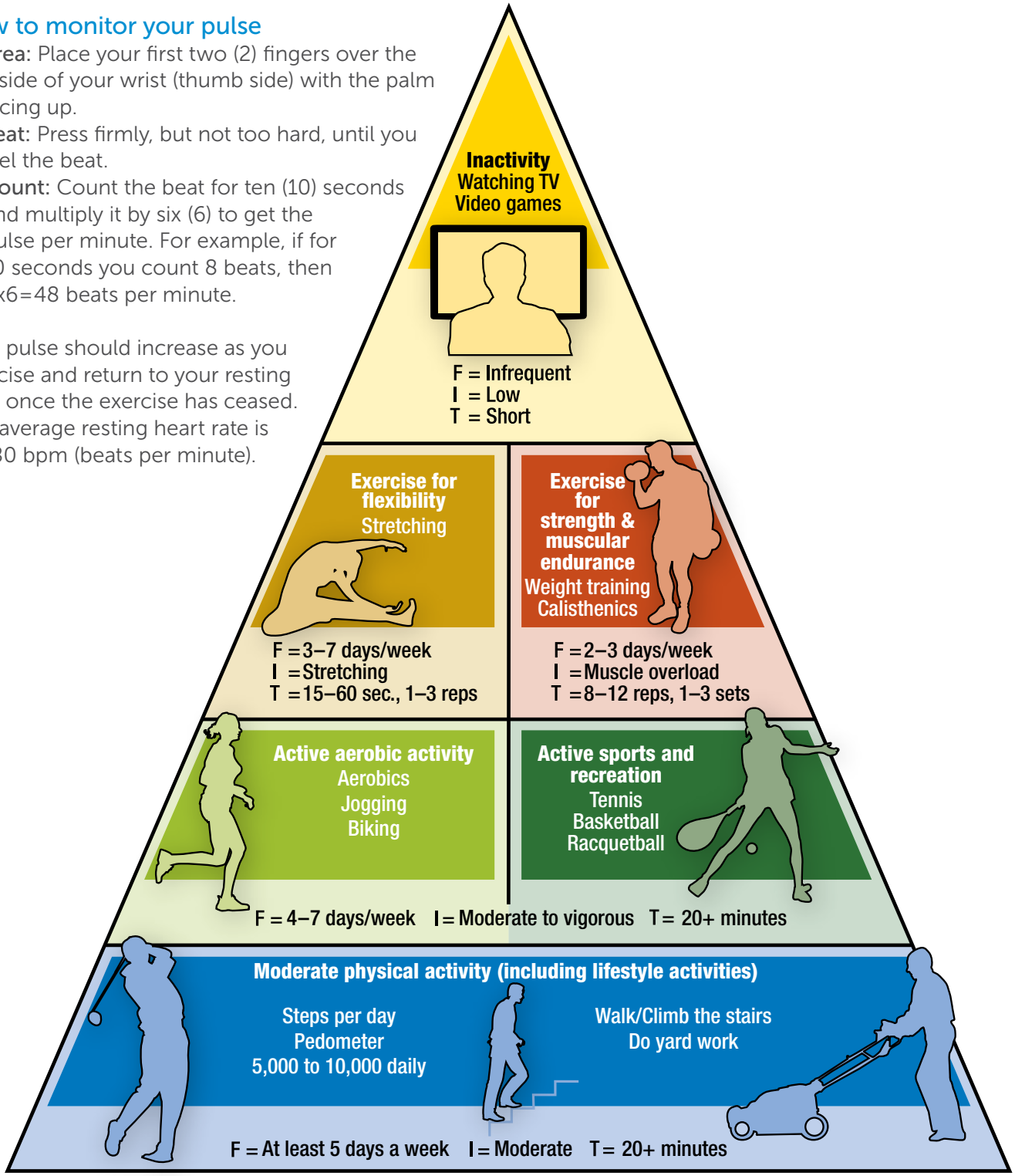
Pulse taking

Your pulse is the rate at which your heart is beating. During activity the body's normal response is to increase the rate at which the heart beats. So, counting your pulse is one way of checking your activity or exercise tolerance. As your personalized exercise prescription is developed your appropriate exercise target heart rate will be explained.

How to monitor your pulse

A. **Area:** Place your first two (2) fingers over the inside of your wrist (thumb side) with the palm facing up.
B. **Beat:** Press firmly, but not too hard, until you feel the beat.
C. **Count:** Count the beat for ten (10) seconds and multiply it by six (6) to get the pulse per minute. For example, if for 10 seconds you count 8 beats, then 8x6=48 beats per minute.

Your pulse should increase as you exercise and return to your resting level once the exercise has ceased. The average resting heart rate is 70-80 bpm (beats per minute).



Selecting a Good Walking Shoe

Attire

1. Bring the socks you generally wear walking to use while trying on shoes.
2. The right size for a walking shoe will be a size to a size and a half larger than your dress shoes. This is to accommodate the swelling in your feet while you walk.
3. Try on shoes later in the day or right after walking so your feet will have already swelled.

Breathable

1. The shoes should be breathable, and made of a flexible upper material such as leather or canvas/ nylon mesh.
2. The sole should be cushioned, such as a rubber material, and provide a firm heel with good arch support.

Comfort

1. The shoes should feel comfortable and light weight when you put them on – **DON'T BUY THEM THINKING YOU WILL "BREAK THEM IN."**
2. If you have a wide or narrow foot, look for a brand that can accommodate varying widths.
3. If any part of your foot feels like it may be rubbing on a rough spot of the shoe, try another shoe or style. You may develop blisters.

Overcoming Fitness Hurdles

There are three basic ways you can overcome the primary obstacles most people face when starting or maintaining a fitness program.

A. Activity

Choose an activity that you will enjoy (walking, biking, swimming) and that is accessible to most people. Use toys such as therabands, hand weights and exercise balls to enhance your workout and add diversity and fun. Utilize music with a personal radio, mp3 player or CD player. This will also add enjoyment to your exercise routine.

B. Buddy system

Select a friend or buddy to exercise with. There are statistics showing that people who exercise with a friend are more successful at exercising consistently, probably because you can keep each other motivated and accountable.

C. Consistency

Select a consistent time for your workout and build the time into your daily schedule.

Walking Program

Warm-Up (to help increase your heart rate and body temperature)

1. **Arm Circles:** raise both arms out to sides at shoulder level and make circles.
2. **Arm Lifts:** lift one arm in front of you, over your head, and then return to your side. Repeat with other side.
3. **Side-step:** Place your leg out to the side, and then bring back to the center. Repeat with other leg.
4. **Marching:** march in place, gently swinging your arms.

Heart rate intensity

Your resting heart rate (HR) is: _____

Your maximum HR _____(the highest your HR went during exercise) is:

60% of your maximum HR _____ (lower limit)

(When you exercise you should keep your HR at least this high)

80% of your maximum HR _____ (upper limit)

(When you exercise you should not let your HR get higher than this)

My target HR is _____beats per minute or _____beats in 10 seconds.

My target Rate of Difficulty (Rate of Perceived Exertion) on a scale from 9-20 is: _____ (When you exercise you should feel that you are working at a level of 11-13 on a scale from 9-20)

Exercise Frequency:

_____Days a week

_____Sessions a day

Exercise Duration: <10 minutes
11-20 minutes
21-30 minutes
31-45 minutes
>45 minutes

Cool-down (5 minutes)

1. **Marching:** March in place, gently swing your arms
2. **Side-bends:** Stand straight, with arms at your side. Gently bend sideways at the waist, reaching toward your knees.

Staying Active Pays Off!

Those who are physically active tend to live longer, healthier lives. Research shows that even moderate physical activity – such as 30 minutes a day of brisk walking – significantly contributes to longevity. A physically active person with such risk factors as high blood pressure, diabetes or even a smoking habit can get real benefits from regular physical activity as part of daily life.

Regular exercise can help lower blood pressure, control blood sugar, improve cholesterol levels and build stronger, dense bones.

AMERICAN COLLEGE of SPORTS MEDICINE

The First Step

Before you begin an exercise program, take a fitness test, or substantially increase your level of activity, make sure to answer the following questions. This physical activity readiness questionnaire (PAR-Q) will help determine your suitability for beginning an exercise routine or program.

- Has your doctor ever said that you have a heart condition or that you should participate in physical activity only as recommended by a doctor?
- Do you feel pain in your chest during physical activity?
- In the past month, have you had chest pain when you were not doing physical activity?
- Do you lose your balance because of dizziness?
- Do you ever lose consciousness?
- Do you have a bone or joint problem that could be made worse by a change in your physical activity?
- Is your doctor currently prescribing drugs for your blood pressure or a heart condition?
- Do you know of any reason you should not participate in physical activity?

If you answered yes to one or more questions, if you are over 40 years of age and have been inactive, or if you are concerned about your health, consult a physician before taking a fitness test or substantially increasing your physical activity. If you answered no to each question, then it's likely that you can safely begin fitness testing and training.

Selecting and Effectively Using a Pedometer

About Pedometers

The pedometer is a device that typically attaches to the belt or waistband and is designed primarily to count steps. More recently, some pedometers are also capable of counting steps while placed in a shirt pocket or in a bag if it's held snug to the body.

Pedometers are capable of recording ambulatory activity such as walking, jogging or running. They will not count steps during activities such as cycling, rowing, upper body exercise, etc.

How Do Pedometers Differ?

Pedometers can differ in the cost, internal mechanism and features.

Cost

Pedometers typically range in cost from $10-$50 depending on the features.

Internal Mechanism

There are different mechanisms by which pedometers function. One common type consists of a spring-suspended lever arm that moves up and down in response to vertical acceleration of the hip. This movement opens and closes an electrical circuit and a step is counted. Others use an accelerometer-type mechanism. (If you shake the pedometer up and down and it does not produce a clicking sound, it probably has an accelerometer-type mechanism).

Features

While steps are the fundamental unit of the pedometer, some devices also calculate distance walked and estimate calories burned. In general, pedometers are most accurate in counting steps, less accurate in calculating distance walked, and even less accurate at estimating caloric expenditure.

The calculation of distance walked requires the input of the user's stride length while the caloric expenditure feature requires the input of the user's body weight. Steps are the fundamental unit of the pedometer and all other features are dependent upon the device's step counting accuracy. Some of the new devices also estimate the total time spent walking at a moderate intensity.

Choosing a Pedometer

The following questions should be considered when selecting a pedometer:

What feature(s) am I most interested in?

Step counting is what most pedometers do best. Therefore, purchasing an accurate step counting pedometer should be a primary objective.

How can I test a pedometer's accuracy?

One way to test a pedometer's accuracy is to perform a 20-step test. To do this, position the device on your belt or waistband in line with your knee on either side of the body and reset your pedometer to zero. Take 20 steps at your typical walking pace. Check to see if the pedometer reads between 18 and 22 steps. If it does, it is likely a reasonably accurate step counter. If not, try repositioning it on your belt or waistband and try the test again. If your pedometer repeatedly fails this test, look into purchasing a different type.

What factors can affect pedometer accuracy?
Studies have shown that a variety of factors can potentially affect a pedometer's step counting accuracy, i.e. walking speed, waistband type, and abdominal size. In general, most pedometers are fairly accurate step counters at speeds of 2.5 mph and above. Even some of the more accurate pedometers miscount steps at slower speeds. With regard to waistband type, pedometers are generally more accurate step counters when attached to a firm waistband in an upright position (Loose waistbands typically result in a significant underestimation of steps). Abdominal size can also affect step-counting accuracy. Those with the horizontal lever arm mechanism appear to be more vulnerable to miscounting steps based on the tilt or angle at which the pedometer sits when fastened to the belt or waistband.

How do I use a pedometer to supplement my walking program?

First, determine your baseline physical activity level. To do this, wear the pedometer for one full week without altering your typical routine. If you are routinely active, continue being so but, if you are not habitually active, do not start during this one-week period.

You can use this step index to classify your activity level based on steps per day (keep in mind that if you regularly participate in non-ambulatory activity, your steps per day value will not accurately represent your activity level):

Steps per day	Activity Level
< 5,000	Sedentary
5,000-7,499	Low Active
7,500-9,999	Somewhat Active
10,000-12,500	Active
>12,500	Highly Active

*Developed by C Tudor-Locke and DR Bassett Jr. (2004)

For most healthy adults, 10,000 steps per day is a reasonable goal. If your baseline steps fall short of this value, try to increase your activity level by 1,000 steps per day every two weeks until you reach your goal. To put your step count into perspective, there are about 2,000 steps in a mile.

Children can also benefit from the use of pedometers. Typically active children should accumulate between 12,000 and 16,000 steps per day. Pedometers can be used to motivate children or youth to become more physically active.

To increase your daily step counts, look for opportunities to be more active. For example, take the stairs rather than the elevator, park at the far end of the parking lot (if it is safe to do so), go for walking breaks at work, etc. The instant feedback that a pedometer provides can serve as a motivator to accumulate more steps. Every step counts so even small increases added to your routine can make a difference.

AMERICAN COLLEGE of SPORTS MEDICINE

acsm.org

Selecting and Effectively Using Rubber Band Resistance Exercise

About Rubber Band Resistance Exercise

Originally used to train older adults in nursing homes, flexible bands now provide exercise options for beginning to advanced exercisers and athletes. The more you know about flexible bands, rubberized resistance cords and the machines that use them, the better you can choose the method that's right for you. It's all about finding the resistance that matches the exercise you need.

Elastic bands offer no resistance at first, then more and more resistance as they are stretched to their limit. The resistance changes again as the bands return to resting position. This pattern — changing from extension to return — is known as hysteresis.

Rubber bands, by their nature, offer very little resistance when first stretched (for example, over the first 10-30 degrees of their range of motion.) It is important to feel resistance early in the stretch — more easily accomplished with single rubber bands than with some resistance machines.

Strength Curves

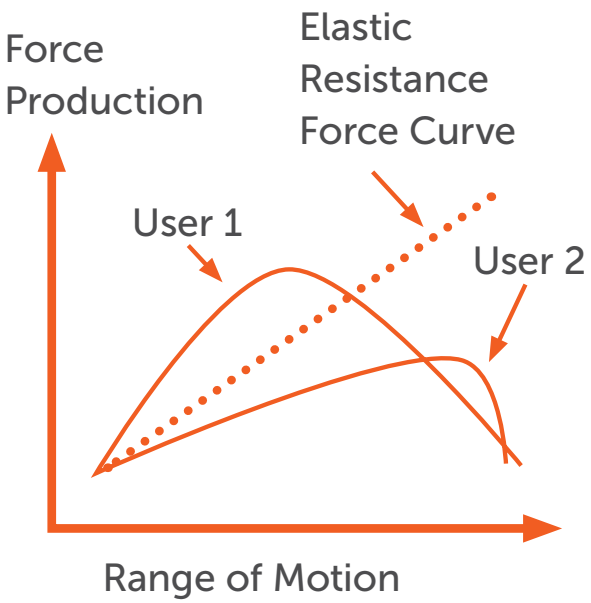
Every exercise can be illustrated by a curve showing the force used over a range of motion. The three primary strength curves are:

- Ascending (Force increases over the range of motion)
- Bell (Force is greatest in the middle of the range of motion)
- Descending (Force decreases over the range of motion)

Variations among exercises and individuals can affect the shape of these curves as well as the timing and degree of force used in each exercise. Exercise loading should match the strength curve to ensure that appropriate force is applied to the muscle.

Take, for example, arm curl exercises using elastic bands. Too much resistance would prevent smooth motion through the entire range. Resistance that is below the starting strength of the arm curl movement allows normal repetition of the movement.

It is important to be able to choose resistance to suit the exercise. For example, chest presses need more resistance than arm curls. The following graph shows the resistance of an elastic band (dotted line) compared with the strength of curves of two different users. Greater strength gives User 1 force greater than the band's resistance, while User 2 has insufficient force throughout the entire range of motion. Neither user is well matched with this particular band.



Choosing Resistance Bands

When choosing from among the wide variety of rubberized resistance equipment available, ask:

- What exercises will I perform with the resistance bands? This tells you what range of resistance you'll need to adequately develop the muscle.
- What are the bands made of? Natural rubber latex, with its superior strength and elasticity, makes the best bands. Synthetic rubber is reinforced with additives that can cause the band to become harder and less elastic.
- How are the bands constructed?
- Understanding how bands are made can help you determine quality of construction and how they can be used in a variety of exercises. While any rubberized band provides resistance, heavier use requires a more durable product.

Some features of bands include:

- Bonded Ends: A ¼-inch strip of rubber is bonded at the ends to make a continuous band. This joint is a weak spot that can break during exercise.
- Extruded Rubber: Strands of rubber are wound together like spaghetti, making it very strong. The bonded ends, though, are a weak spot.
- Over-layered: A strip of rubber is overlapped and bonded into a continuous band. The center of the overlapped section is very strong, but both ends are weak.
- Layered on Mandrills: Bands are built in layers, forming a continuous band. The first and last layers should finish on different planes, at least 3 inches apart. This forms a one-piece band with no weak spots.

Exercises

Rubber band exercises can be used for a variety of drills, such as:

- Running and agility side-to-side drills
- Power exercises such as squat jumps and conventional resistance exercises
- Traditional exercise such as chest press, arm curl, and squats
- As always, safety is the primary consideration. Consider band strength.

Safety Questions

- Before using a resistance band or rubber band machine, ask a number of questions, especially when there are multiple users. Rubber bands should be checked at rest and when stretched to their usable length. Examine them carefully, asking:
  - Is the resistance smooth and flexible in use?
  - Are there signs of wear from repetitive use, including cracks or worn endings?
  - Are there signs of weather exposure— such as sun, water or cold- making the rubber cracked or pale?

AMERICAN COLLEGE of SPORTS MEDICINE

acsm.org

Selecting and Effectively Using Stability Balls

About Stability Balls

Stability balls provide an inexpensive, low-tech, lightweight, colorful and fun means of improving core stability, muscular strength and endurance, balance, flexibility and functional fitness. Stability balls were developed in Italy in the 1960s. They were first used in rehabilitative therapy by Dr. Susanne Klein-Vogelbach, founding director of a physical therapy school in Switzerland. The balls were introduced in the United States in 1989. Stability balls (a.k.a. Swiss balls or physioballs) can help anyone improve his or her fitness, they allow a variety of exercises with or without external resistance, and can be used to overload the muscles. Stability balls also work the core muscles (abdominals, back muscles, hip flexors and extensors). Because the ball itself is unstable, these muscles are actively engaged throughout each exercise.

Selecting a Stability Ball

Stability balls range from small to extra-extra-large. Choose a ball size that allows you to sit on it with erect posture with your hips and knees at 90 degrees based on your height and leg length:

- 30-35 cm if < 4'10" (145 cm) tall
- 45 cm for 4'8"-5'5" (140-165 cm)
- 55 cm for 5'6"-6'0" (165-185 cm)
- 65 cm for 6'0"-6'5" (185-195 cm)
- 75 cm for those over 6'5" (>195 cm)
- 85 cm ball for heavier or long-legged exercisers

A smaller ball may be more useful as a handheld object for sitting or standing range of motion and balance exercises. A smaller ball can also be used to perform crunches with the ball between or behind the knees.

Maintenance and Durability

Stability balls are durable and will last a long time with proper care:

- Follow the manufacturer's directions for proper inflation and check inflation on a regular basis. Use stability balls on a clean, smooth surface (floor or carpet), free of debris and sharp objects that could produce wear on the balls' surfaces or puncture them.
- Clean stability balls regularly with water or mild soapy water for comfort and sanitary reasons. Avoid using chemical cleaners that may damage the covering.
- Stability balls can be stored on racks made specifically for that purpose, on stackers, or in a net suspended from the wall or ceiling to save space.

Safety

Using a stability ball safely starts with proper inflation and care (described earlier). To increase your safety while using a stability ball:

- Maintain the natural curves in your back while exercising.
- Increase your stability by placing your feet about shoulder-width apart (or wider for better balance). Put a mat in front of the ball to act as a cushion in case of a fall.
- Use a wall behind the ball to keep the ball from rolling out backwards from underneath you, and to prevent you from falling directly to the floor should the ball slip forward.
- Place chairs on either side of the ball to provide lateral stability (if needed) while exercising in a seated position.
- Always use good movement technique and control.
- Remember to breath throughout each exercise.
- Avoid ballistic movements (bouncing or fast movements of the joints) on the stability ball because they reduce your control of the movement and increase the risk of muscle strain and/or joint sprain.

In addition, it is important to follow a proper exercise progression to reduce your risk of injury and gain optimal training benefits. Begin by developing the ability to maintain your balance while sitting on the ball before adding movement of the limbs or trunk or adding external resistance with free weights, resistance bands, or a medicine ball.

Other Considerations

As your core stability, balance and strength improve, you can achieve a progressive overload (i.e., challenging yourself further in different ways in order to achieve additional fitness benefits) in a number of ways:

- Practice transitions from one position to another.
- Make your base of support less stable by moving feet or hands closer and farther away from the ball.
- Vary your position on the ball so it supports less of your body weight (e.g., in crunches or push-ups) so you are lifting more weight against gravity.
- Add a dynamic balance challenge by adding movement on, over or around the ball with one or both limbs (on the same or opposite sides of the body). Increase your volume of training (e.g., increase the resistance used, or repetitions or sets performed). Use a larger stability ball, rather than a smaller one, for added challenge.

Using Stability Balls

Stability balls can be used in a variety of ways to achieve different aspects of fitness.

- Stretching: lying over the ball on your back to stretch abdominal muscles, on your stomach to stretch back muscles, on your side to stretch abdominal oblique muscles. Sit on the ball with legs in front and reach forward to stretch the hamstrings.
- Increase muscle strength/endurance without external weight: lie on your back on ball and perform crunches; perform push-ups with knees, shins, or feet on ball; lie on your stomach on ball and perform back extensions, or perform squats by placing the ball between your back and a wall and move up and down.
- Increase muscular strength and endurance by performing exercises with dumb bells or other external resistance: lying supine (chest presses, triceps extensions) or prone on the ball (flies), or other exercises while sitting on the ball.

Important Points to Remember:

Stability balls have multiple applications: improving core stability, static and dynamic balance, strength, flexibility and can enhance functional performance of Activities of Daily Living, or ADLs. Stability balls can be used to improve sports performance. They can also be incorporated as part of an injury rehabilitation program. You can do an entire workout with a stability ball or you can use one as part of a well-rounded exercise program for greater variety and effective development or core stability.

AMERICAN COLLEGE of SPORTS MEDICINE

acsm.org

Selecting and Effectively Using a Home Treadmill

Selecting a Home Treadmill

Treadmills are a popular choice of equipment for those who want to engage in physical activity. Below are useful guidelines for you to consider before making a purchase.

Be sure to try it out before you buy. Doing so will allow you to find a treadmill that meets your specific needs. A treadmill may be either motorized or human-powered. Manual treadmills are less expensive and safer because the running belt stops moving when you do. However, manual treadmills usually have smaller running belts, making it difficult to jog or run, let alone maintain a brisk walk. Often, the difficulty in getting the belt to move smoothly on a non-motorized treadmill increases the likelihood of holding on to the handrail in an effort to generate power, causing an inconsistent pace. This inconsistent pace may cause muscle strain or difficulty in elevating your heart rate. Additionally, the holding on may elevate blood pressure from breathholding. Exercise at home should be easy and something to look forward to. If it is difficult to get the machine to work, you are less likely to exercise. For these reasons, you may want to consider a motorized treadmill.

Safety

- Stability of platform when level and with elevation: feels solid, not wobbly
- Doesn't have parts that hit you or cramp your movements in an unnatural fashion
- Automatic emergency shut-off key, clip or tether
- Side rails or safety bars for balance: they should be reachable and sturdy, but out of the way of swinging arms

Maintenance and Durability

- Is the company reliable and reputable?
- Can the treadmill be easily assembled and maintained?
- Cost of maintenance?
- Does the treadmill come with a warranty? What does the warranty cover and for how long?
- Are local technicians available for service?

Power and Performance

- Treadmill motor: should have a minimum continuous duty rating of 1.5 h.p. motor (2.5 to 3.0 h.p. is preferred). To test the motor, plant your feet firmly on the belt while the machine is running at its lowest speed, checking for any hesitation, groaning or grinding.
- Power supply: Does the treadmill require 110 or 220v? 220v will probably require circuit alterations in the room where it will be used.
- Belt size: Should be at least 18 to 20 inches wide and 48 inches long. Narrow, short running belts make it more difficult and less enjoyable because the chances of tripping or falling off the belt increase with a narrow belt. The platform should be low to the floor and have ample space to straddle the treadmill belt.
- Speed range should be 0.1 to a minimum of 8 mph. This speed range should satisfy most walkers as well as runners. Low starting speed is an important issue. We recommend a safe starting speed of 0.1 mph with slow incremental increase in belt speed. The stop should be a smooth stop (not sudden). The motor should be able to maintain speed regardless of treadmill elevation and weight of user.
- Incline should range from 0 percent to at least 10 percent. Incline mechanisms can be either electric or manual. Manual cranks are found generally on lower-end treadmills to keep the price down. The treadmill should not wobble at high elevations.

Operation

- Is the control panel accessible and easy to read?
- Does the control panel have the capacity for manual use separate from software used for automated programming?
- Is the noise level acceptable?
- Is the belt heavy duty as to not stretch with extended use?

Other Considerations

- Weight of treadmill
- Space available and height of ceiling
- Aesthetics
- Storage potential
- How accurate is the calibration?

Using a Home Treadmill

Treadmills should be positioned away from walls to avoid injury due to falls. Be sure that the back of the treadmill has at least six to eight feet of clearance from a ledge, wall or window. The power supply and wiring should be located away from walking paths or taped to prevent tripping when stepping on or off the running belt.

Make sure the running belt is properly adjusted before use. Belts that are too loose or too tight will cause wear and tear on the treadmill, which result in expensive repair or replacement costs. The deck beneath the belt should be laminated to protect it from friction wear and tear. This deck absorbs the hundreds of pounds of force from each step.

Make sure that you follow the directions included with purchase for maintaining the belt connection. Increased friction and heat will cause "amp draw," which pulls power away from the electrical components of your machine. Discuss appropriate lubrication and maintenance with the sales people at the store where you purchased your treadmill.

Your treadmill should come equipped with arm grips, siderails or safety bars. These are excellent for defining the running/walking area for your exercise bout. They allow you to catch yourself if you trip or fall. When stepping off a treadmill while the belt is moving it is advisable to use these rails for safety.

The treadmill should come equipped with an emergency shut-off key, clip or tether. These are a safety must, especially with young children around. The tether feature is preferred, since an automatic stop button may not be in reach as you fall.

Many treadmills come with sophisticated electronic displays that allow you to design workouts to your needs. For some, this programming is basically a motivation and selling point. All you need is enough variety to keep your workouts motivating and interesting. The bare minimum display and programming features should include distance, speed, time, incline and possibly calories expended. It is important that you are able to use the treadmill in the manual mode.

Important Points to Remember:

Before you get on: Before you get on the treadmill, experiment with the controls. Speed it up, slow it down, increase and decrease the incline and test the emergency off button.

Posture when walking or running: Shoulders back, head up and slightly forward, chin up and abdominals tight. Look forward, not down at your feet.

Stride Length: Relax and maintain the normal stride you would use when walking on the ground. Don't chop your steps.

Where you are: It is important to pay attention to where you are on the treadmill. Don't drift sideways or allow yourself to go to the back of the belt.

Make it a habit: A treadmill is only as good for your health as the frequency with which you use it. Set a specific time of day, set a specific number of minutes and make it a routine.

AMERICAN COLLEGE of SPORTS MEDICINE

acsm.org

Selecting and Effectively Using a Running Shoe

One shoe fits all?

Not necessarily! There are numerous brands and styles of shoes on the market today; however, there is no one best brand. Running shoes should be selected after careful consideration. Some factors to keep in mind when looking for a new shoe include past experiences with shoes, problems with your current shoe, biomechanical needs (arch type, pronation, orthopedic injuries, etc.), environmental conditions, running and racing requirements. It pays to do a little homework.

The characteristics of your foot

First, you need to decide what shape of shoe you need based on your foot type. A stability shoe works best for a normal foot with a normal arch, a motion-control shoe is good for a flat foot with a low arch, and a cushioned shoe works for a rigid foot with a high arch.

The wet test:
Moisten your foot with water and stand on any surface that will leave an imprint of your foot.

Normal arch:
Has a normal-sized arch and leaves an imprint that has a flare but shows the forefoot and heel connected by a wide band. A normal foot lands on the outside of the heel, then rolls inward (pronates) slightly to absorb shock. Runners with a normal foot and normal weight are usually considered biomechanically efficient.

Low arch:
Flat feet have a low arch and leave a nearly complete imprint of the sole of the foot, and indicate an overpronated foot that strikes on the outside of the heel and rolls inward excessively.

High arch:
High-arched feet leave an imprint showing a very narrow band connecting the forefoot and heel. This type of foot doesn't pronate enough (underpronated), and therefore is not an effective shock absorber.

Check out your old shoes: Old shoes show a pattern of wear that helps determine running style. Examine the soles of your shoes for a pattern of wear. Next, put your shoes on a table and look from the back of the shoe to the heel. If your shoe tilts to the inside, you may be one who overpronates. If your shoe tilts to the outside, you may have a high arched foot. Keep in mind that these are guidelines and that not every foot is absolutely one of these types.

Normal Arch | Low Arch | High Arch

Guidelines for Purchasing Shoes

Purchase running shoes from a good running shoe store or from someone knowledgeable about matching the correct type of running shoes based on your foot type and stride patter. They can help you with fit as well as specific characteristics of the shoe for which you are looking. They can also keep you informed of manufacturing changes in your favorite brand of shoe.

Watch for shoes with excessive wear. Worn shoes often amplify a foot problem and injuries can occur when a shoe is worn too long before being replaced. Analyze the need to purchase new shoes based on the number of miles on your old pair of shoes, not by the amount of tread left on the outer sole. It varies among shoes and individuals, but most estimates place mid-sole breakdown, and the increased potential for injury, at around 400-500 miles. For some, this means replacing shoes before they show major wear.

- Eighty-five percent of the public wears shoes that are too small. Running shoes may need to be a half to a full size larger than street shoes. Check for adequate room at the top. There should be at least a half-inch of space between the top of the shoe and the longest toe. The shoe should have adequate room at the widest part of the foot. The shoe shouldn't be tight but it shouldn't slide around either, and your heel should fit snugly into the rear of the shoe.
- Try shoes on later in the day and bring the socks you normally run in. Try on several pairs of shoes in the category closest to your foot type. Make sure you try on both shoes and keep them on your feet for about 10 minutes to make sure they remain comfortable. Most good stores will allow you to run up and down the block to experience what running will feel like.
- Consider purchasing two pairs of running shoes. Alternating their use increases the life expectancy of each pair.
- Once you've purchased new shoes, don't try them out for the first time with a 12-mile run or a heavy track workout. Rather, run easily in the shoe for only a short distance. The key point is to have sufficient time to break the new pair in through logging around 60-70 miles.

After you have wisely selected your new running shoe, take it home, put it on and enjoy the run!

This brochure was written by Shannon Crumpton. Reprinted with permission of the American College of Sports Medicine. This is a product of ACMS's Consumer Products Committee.

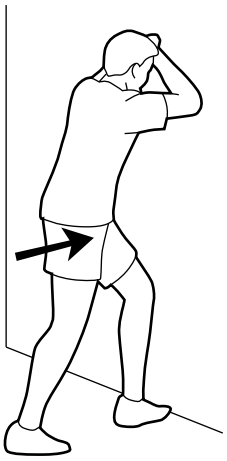
AMERICAN COLLEGE of SPORTS MEDICINE

acsm.org

Stretches

Warm up:

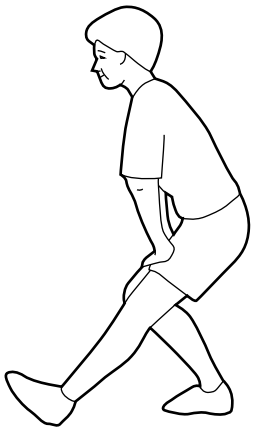
Warm up can include activities such as: walking around the room, stepping side to side, riding a bike for five minutes, or walking on the treadmill for 5 minutes. **Stretches are not warm-ups! Stretch only warm muscles. Hold each stretch 30 – 60 seconds. Watch your back!**



Lower Body stretches (standing):

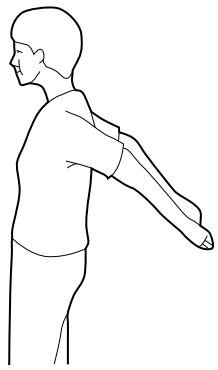
Calf Muscle

1. Stand facing a wall or an exercise bar.
2. Move your right foot back, keeping your leg straight.
3. Move your left foot forward with the knee bent. Make sure your knee is in line with your ankle.
4. Press the heel of your right foot into the floor.
5. You should feel this stretch of up the back of your lower leg, from your heel up to your knee.
6. Repeat with the left leg back and right leg forward to stretch the other calf muscle.



Hamstring

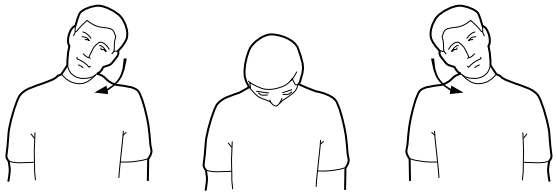
1. Stand facing a wall or an exercise bar.
2. Bring your right foot forward.
3. Bend both knees.
4. Place the heel of your right foot on the floor with your toes raised up to the ceiling. This knee should be only slightly bent.
5. Put your weight back by sticking your behind out.
6. You should feel this stretch from the back of your knee up the back of your upper leg to your gluteus maximus (your behind).
7. Make sure that your hips are facing the wall. One hip should not be in front of or behind the other hip.
8. Repeat with the left leg forward to stretch the left hamstring.



Anterior deltoid (front of shoulder) and pectoralis major (chest):

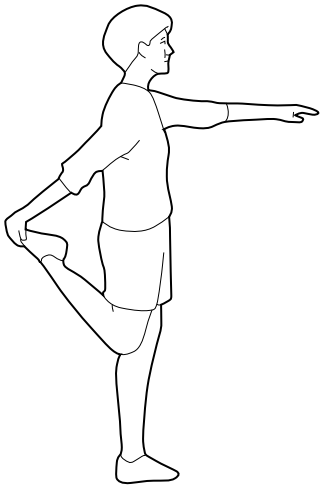
1. Stand facing a mirror.
2. Stand straight with your chest and head up.
3. Roll your shoulders back, opening up your chest.
4. Extend your arms back beyond your body.
5. If you can, clasp your fingers together behind your back and raise your arms up in the air behind your back.
6. Do not lean forward. Stay in a straight position.
7. You should feel this stretch in the front of your shoulder (anterior deltoid) and the front of your chest (pectoralis major).

Neck



1. Stand facing a mirror.
2. Press your chin into your chest. You should feel a stretch up the back of the neck.
3. Return to looking straight ahead.
4. Press your right ear to the right shoulder. Do not raise your shoulder up to the ear.
5. Return to looking straight ahead.
6. Press your left ear to the left shoulder. Do not raise your shoulder up to the ear.
7. Return to looking straight ahead.
8. Turn your head to the right as far as you can for a good stretch.
9. Return to looking straight ahead.
10. Turn your head to the left as far as you can for a good stretch.
11. Return to looking straight ahead.

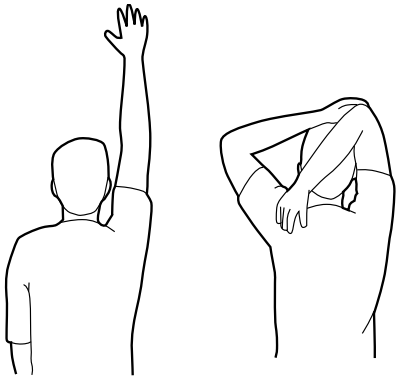
Quadriceps



1. Stand facing a wall or an exercise bar.
2. Raise your right heel up in back, toward your behind.
3. If possible, grab your right ankle with your right hand, or grab slightly above your ankle, and hold your leg up to your behind.
4. Make sure that your right leg is beside your left leg and not in front of it.
5. Make sure that your hips are facing the wall and the low back is not arched.
6. You should feel this stretch from your knee all the way up the front of your upper leg (thigh).
7. Repeat with the left leg to stretch your left quadriceps, grabbing your left leg with your left hand.

Upper body stretches (standing):

Side stretch and triceps stretch



1. Stand facing a mirror.
2. Raise your right arm into the air and reach for the ceiling.
3. You should feel a good stretch all through your side.
4. Drop your hand behind your head reaching across the body toward the opposite shoulder blade.
5. Reach up with your other hand and gently pull your elbow toward your back.
6. If you cannot reach to pull your elbow back from behind your head, gently push your elbow back by placing your hand on the front of your arm and push back.
7. You should feel this stretch in the back of your upper arm (triceps).
8. Repeat with your left arm for a stretch in the left side and left triceps.

Exercise Prescription

Exercise Prescription is a personalized exercise plan that, when followed, can help you meet your personal weight loss goals. This plan includes cardiorespiratory conditioning, muscle strength and endurance and flexibility.

Cardiorespiratory conditioning

This includes activities such as your personalized walking program, circuit training, cycling, aerobic dance or swimming.

- Frequency: 5-7 days a week
- Intensity: 75% of your Maximum Heart Rate
- Duration: 30-45 minutes of activity

Muscle strength and endurance

This activity involves training your muscles to become stronger. To begin your program, your exercise physiologist will prescribe the appropriate TheraBand to help you safely and appropriately train your muscles.

- Frequency: minimum of 3 days a week
- Intensity: moderate intensity
- Duration: 1 set of 8-12 repetitions
- Mode/Type of Activity: TheraBand, Nautilus, free weights

Flexibility

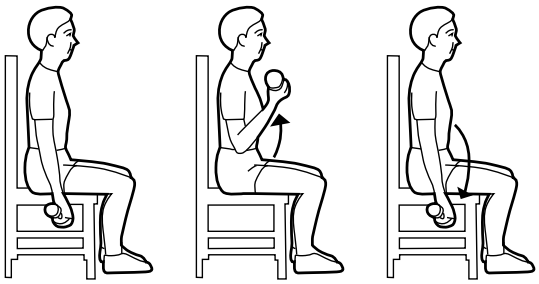
Flexibility, or stretching, is an important component in your exercise prescription. Stretching will help you work out the tight muscles and improve your range of motion.

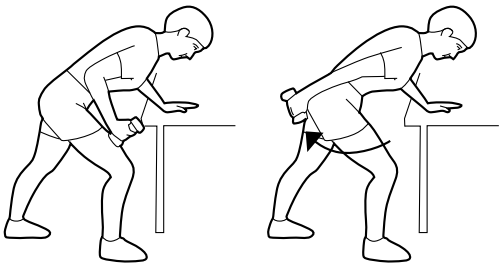
- Frequency: minimum of 2-3 days a week
- Intensity: stretch to a position of mild discomfort
- Duration: hold the stretch 15-30 seconds for each stretch
- Repetitions: 2-6 times for each stretch

Free Weight Exercise

Elbow flexion (seated or standing)

Hold the weight in your hands, palm down, while either in a standing or seated position. Bend your elbow, raising hand to shoulder, turning palm up. Keep your shoulder still.



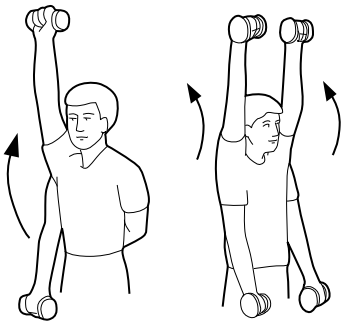


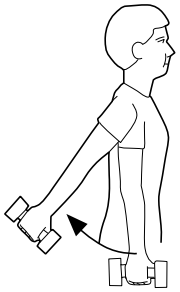
Elbow extension

Stand with your feet apart with the weight in one hand and your opposite hand on a table to stabilize your body. Tighten your abdominals, keeping back straight. Bend forward at hips with arms at side and elbow bent. Straighten elbow while keeping shoulders straight.

Shoulder flexion

Stand holding the weight in your hands. Raise your arm overhead, then return to the starting position down by your thigh, keeping palms down. Shown using 1 arm or both arms at the same time.





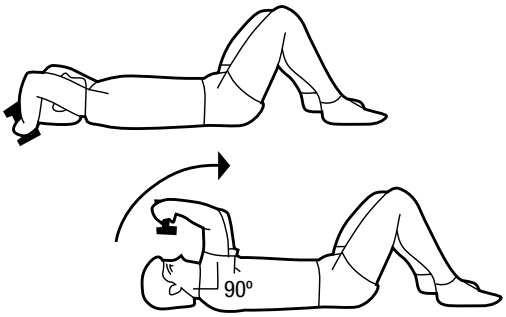
Shoulder extension

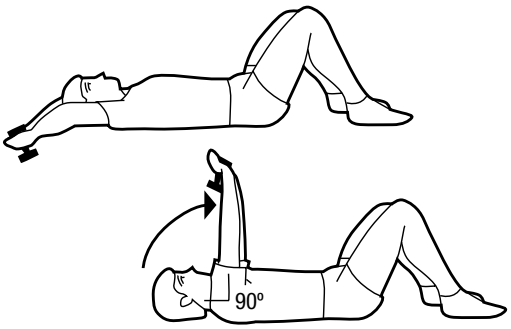
Standing, hold the weight in your hands next to your thigh. Raise arm backward. Remember, this movement is like a pendulum on a clock, **not a lot of motion**.

Free Weight Exercise (continued)

Shoulder extension

Lie on your back, knees bent, head near edge of mat. Raise arms overhead to floor, elbows bent. Lower arms to shoulder height (90 degrees). **Keep back flat.**



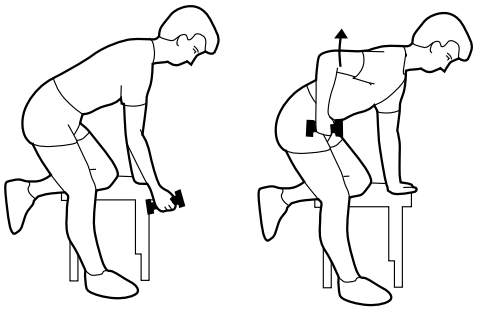


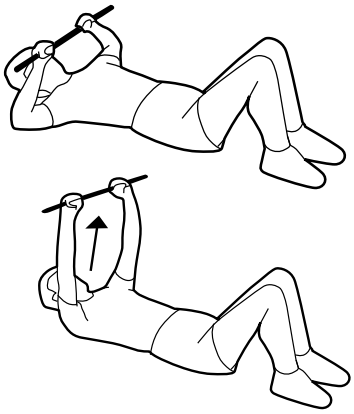
Shoulder extension

Lie on back, knees bent, head near edge of mat. Raise arms overhead to floor, elbows straight. Lower arms to shoulder height, then straighten. **Keep back flat.**

Shoulder extension

Standing, tighten your abdominals, keeping your back straight. Put one knee on chair while holding weight in opposite arm. Raise arm, elbow bent.





Shoulder adduction

Lie on back, bend your knees. Hold weights in both hands with elbows bent at shoulder height. Raise/straighten your elbows and raise the weights.

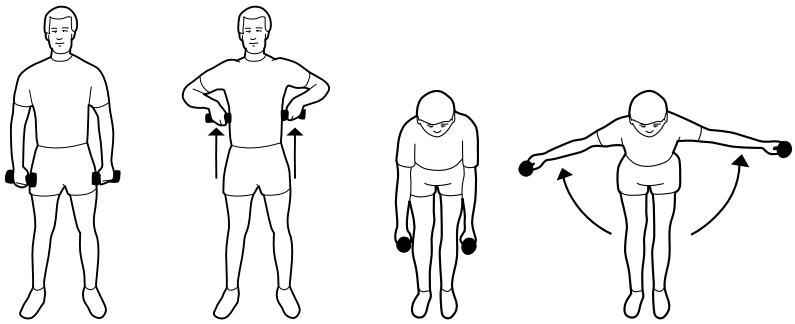
Lie on back, tighten your abdominals and bend your knees. Hold weights out to your side at shoulder height with elbows bent. Raise your arms, moving your hands together.

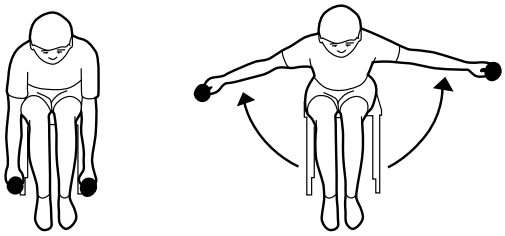
Free Weight Exercise (continued)

Shoulder abduction

Hold weights in hand and raise hands along your trunk to the mid-chest region. Keep elbows below shoulder height.

Tighten abdominals, keeping back straight. Bend forward at hips. Raise hands to shoulder height, **palms down**.



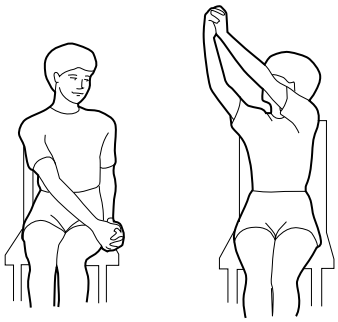


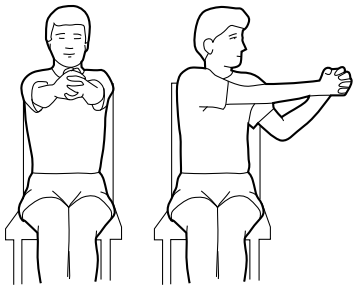
Shoulder abduction (seated)

Tighten abdominals, keeping back straight. Bend forward at hips. Raise hands to shoulder height, **palms down**.

Trunk rotation (diagonal)

In a seated or standing position, clasp hands (or weight) over left thigh and raise your arms over the right shoulder, looking at motion the entire time. Repeat with opposite side.



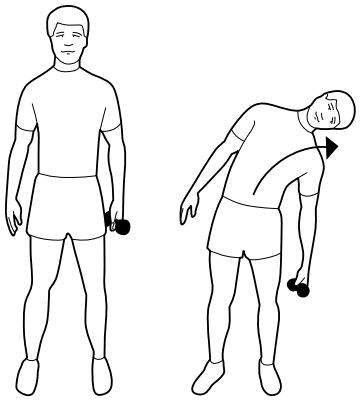


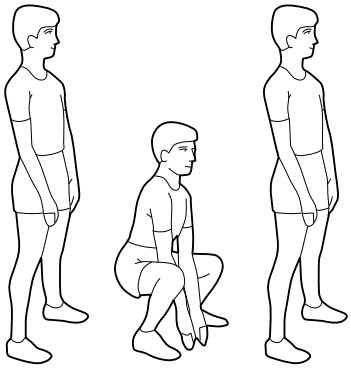
Trunk rotation (side-to-side)

In a seated or standing position, put your arms straight out in front of you and clasp hands (or weight) level with elbows. Using your abdominal muscles (stomach) move your arms from side to side.

Trunk lateral flexion

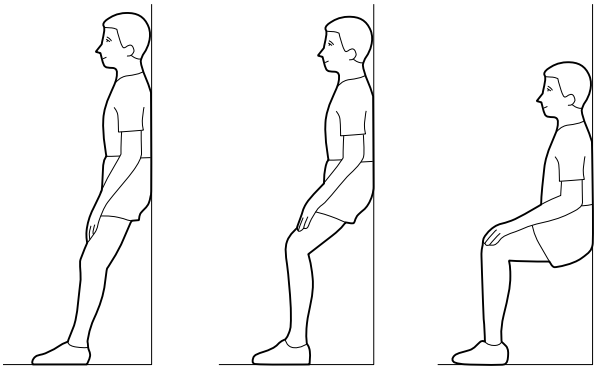
While standing, tighten the abdominals, keeping your back straight. Hold the weight in your hand and lean to the side with the weight, keeping feet still. **Do not twist trunk**.





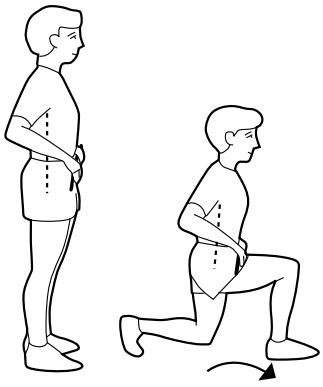
Quadriceps (legs)

Stand holding the weight in your hands, then lower your body, keeping your feet flat. Squat down as far as you can, then stand up using your legs.



Quadricep-wall slide (legs)

Standing with your back against the wall, feet shoulder-width apart, slowly slide down the wall, keeping your knees tight together (squeeze a towel or ball). Hold the position, then, using your legs, slide upward to a standing position.

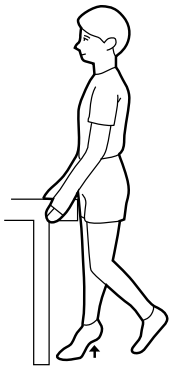


Hamstrings (back of legs)

Stand, tighten your abdominals and buttock, keeping your back straight/neutral. Hold weight in both hands down to your sides, step forward and kneel down as far as you can, then stand upward using your legs. Keep the weight level. Repeat with opposite leg.

Toe raises-standing (calf)

Standing on one foot while holding the weight in the same side hand, raise the leg slowly by shifting the weight onto your toes. Hold briefly then lower.



Exercises for Weight Management with Seated Modifications

Incorporating a mix of strength, flexibility, balance, and aerobic exercises can support your weight management goals while improving overall mobility and wellness. The following movements are beneficial for a wide range of fitness levels, with seated modifications available for added support:

Clamshells

Strengthens hip abductors and gluteal muscles, enhancing pelvic stability.

Clamshells (Seated Modification)

While seated, place a resistance band or a tied scarf around your thighs just above the knees. Keeping your feet flat on the floor, gently press your knees outward against the band, then return to the starting position.

Sets and Reps: 2-3 Sets of 8-12 Reps

Equipment Alternative: Use a scarf or resistance band.

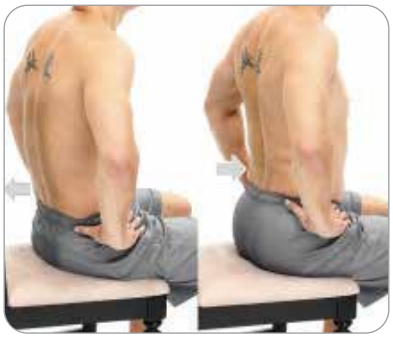
Pelvic Tilts

Engages core muscles to improve lower back flexibility and strength.

Pelvic Tilts (Seated Modification)

Sit upright in a chair with feet flat on the floor. Gently arch your lower back to tilt your pelvis forward, then flatten your back to tilt your pelvis backward. Repeat.

Sets and Reps: 2-3 Sets of 8-12 Reps



Bird Dog

Enhances core stability and balance by engaging abdominal and back muscles.

Begin in a quadruped position on all fours. Raise your right arm and extend your left leg simultaneously. Alternate for recommended reps and sets.

Bird Dog (Seated Modification)

Sit upright in a chair. Raise your right arm and left knee simultaneously, then lower them and repeat with the opposite side.

Sets and Reps: 2-3 Sets of 8-12 Reps

Dead Bug

Enhances core stability by engaging abdominal muscles.

Lying flat on your back with hips flexed (knees facing the ceiling), raise your right arm overhead and extend your left foot toward the ground, holding the foot and arm about 6' above the floor. Alternate for recommended reps and sets.

Dead Bug (Seated Modification)

Sit upright in a chair. Raise your right arm and left knee simultaneously, then lower them and repeat with the opposite side.

Sets and Reps: 2-3 Sets of 8-12 Reps

Standing Wall Push-Ups

Develops upper body strength, focusing on chest, shoulders and arms.

Wall Push-Ups (Seated Modification)

Seated in a sturdy chair facing a wall, place your hands on the wall at shoulder height and width. Perform push-ups against the wall.

Sets and Reps: 2-3 Sets of 8-12 Reps

Seated Shoulder Press

Improves shoulder and upper back strength; can be performed seated for accessibility.

Sets and Reps: 2-3 Sets of 8-12 Reps

Equipment Alternative: Use soup cans or filled water bottles as weights.


Chair Squats

Strengthens quadriceps, hamstrings and gluteal muscles, aiding functional mobility.

Sets and Reps: 2-3 Sets of 8-12 Reps


Calf Raises

Enhances lower leg strength and stability, supporting balance.


Calf Raises (Seated Modification)

Sit upright with feet flat on the floor. Raise your heels to stand on your toes, then lower them back down.

Sets and Reps: 2-3 Sets of 8-12 Reps


Single-Leg Stance

Improves balance and core stability; start near a support for safety.

Single-Leg Stance (Modification)

Stand upright and use a chair/table to assist in balancing.

Sets and Reps: Repeat for 10-20 seconds, 5-10 times. Discontinue if balance deteriorates.

Yoga Poses

Promotes flexibility, relaxation, and stress reduction; suitable for all fitness levels.

Yoga Poses (Seated Modification)

Perform gentle yoga stretches while seated, such as seated forward bends or gentle twists.

Sets and Reps: Repeat 8-10 times each side, holding for 20-30 seconds

---

Marching in Place

Boosts cardiovascular fitness and warms up muscles; can be modified to individual pace.

Marching in Place (Seated Modification)

Sit upright and march your legs up and down alternately.

Sets and Reps: Continuous march for 30 seconds to 1 minute, 3-5 times

Resistance Band Rows

Strengthens upper back and arm muscles; adjustable resistance for varying fitness levels.

Resistance Band Rows (Seated Modification)

Sit upright, loop a resistance band around your wrists, and pull the ends towards your waist, squeezing shoulder blades together.

Sets and Reps: 2-3 Sets of 8-12 Reps

Equipment Alternative: Use a scarf or belt as a substitute for a resistance band.

Leg Extensions

Targets quadriceps to improve knee stability and leg strength; can be done seated.

Sets and Reps: 2-3 Sets of 8-12 Reps

Equipment Alternative: Use ankle weights.

Side Leg Raises

Strengthens hip abductors and outer thighs, aiding in balance and mobility.

Sets and Reps: 2-3 Sets of 8-12 Reps

Arm Curls with Light Weights

Enhances bicep strength; start with manageable weights to ensure proper form.

Sets and Reps: 2-3 Sets of 8-12 Reps

Equipment Alternative: Use soup cans or filled water bottles as weights.

Summa Health™

summahealth.org/sportsmedicine

SPO-25-76147/GW/08-25

Summa Health™

Sports Medicine

Wellness At the "Y"

Supporting Weight Management

The YMCA provides a comprehensive approach to wellness with programs that support fitness, recovery and healthy living. From youth sports to rehabilitation support, the YMCA empowers individuals to strengthen their spirit, mind, and body through expert guidance, inclusive programs, and a supportive community helping people of all ages achieve and maintain lifelong health.

Summa Health Sports Medicine and Weight Management Institute parnter with the YMCA to support members on their weight management journey. At select Akron Area YMCAs, wellness directors – licensed athletic trainers provided by the Summa Health Orthopedic Institute – offer expert guidance on fitness routines, equipment use and group classes. Their support helps individuals build healthy habits, stay motivated and achieve long-term wellness in a welcoming, encouraging environment.

Wear Appropriate Clothing and Footwear

Selecting the right attire enhances comfort and safety during exercise. Opt for clothing that allows for evaporative cooling and shoes designed for your specific activity – like running shoes for jogging or cross-training shoes for gym workouts – to provide proper support and reduce injury risk.

Consult with Your Healthcare Provider

Before starting any new exercise program, especially if you have existing health conditions, it's important to get clearance from your healthcare provider. This ensures that your chosen activities are safe and tailored to your individual health needs.

Embrace the ABCs of Exercise: Activity, Buddy System, Consistency

- **Activity You Enjoy**: Engaging in enjoyable physical activities increases the likelihood of adherence and makes exercise a rewarding part of your routine.
- **Buddy System**: Working out with a partner enhances motivation, accountability and consistency. Teaming up for physical exercise helps participants stay motivated and maintain consistency.
- **Consistency**: Regular physical activity, such as 30 minutes of moderate-intensity exercise five times per week, is recommended by the American College of Sports Medicine to achieve substantial health benefits.

To learn more, contact our YMCA wellness directors directly:

Brian Connell, AT
Athletic Trainer –
Summa Health Sports Medicine
Health & Wellness Director
Kohl Family YMCA
330.434.9622 ext. 1221

Ali Ziegler, AT
Athletic Trainer –
Summa Health Sports Medicine
Health & Wellness Director
Lake Anna YMCA
330.745.9622 ext. 1724

Gary Lake, AT
Athletic Trainer –
Summa Health Sports Medicine
Health & Wellness Director
Wadsworth YMCA
330.334.9622

You can also discuss a referral for physical therapy if you feel that would be benefical.

summahealth.org/sportsmedicine
330.835.5533

Summa Health™

SPO-25-76844/RH/06-25

Summa Health™

Support

Section 11

Patient Resources

The schedule for our surgery support group can be found on the Summa Health Weight Management website. We have in-person and virtual support group sessions for patients before and after surgery. A variety of topics are covered at these sessions, and they allow for opportunities for you to ask questions and network with other patients. Please go to the website to see the schedule and sign up for our support groups.

Importance of Support Groups After Bariatric Surgery

- **Motivation and Accountability:** Support groups provide a space to share progress, setbacks and goals, creating an atmosphere of encouragement and accountability. Regular check-ins reinforce accountability, helping patients stick to dietary guidelines and exercise routines.
- **Emotional Support and Coping Strategies:** These groups offer a safe space to discuss feelings, frustrations and successes, providing comfort and reducing feelings of isolation. Stress management strategies are often discussed, which are critical for avoiding emotional eating and other setbacks.
- **Education and Practical Tips:** Support groups often provide valuable educational resources and practical advice on nutrition, exercise, and overall health management, which are essential for the long-term success of bariatric surgery.

Support groups are a vital part of the bariatric surgery journey, offering both practical tips and emotional reassurance from others going through the same struggles. They help patients learn how to live with their new bodies and maintain their weight loss for the long run.

For a list of upcoming support group dates, please scan the QR code below or visit **summahealth.org/weightlosssupportgroup**

Summa Health™

Weight Management Institute

Weight Management Psychological Services

Short-term therapy and consultation for mental health concerns related to weight managment

Are you struggling to start or maintain your weight loss goals?

Do you need help establishing healthy eating or exercise habits?

Psychologists in the Weight Management Institute are available to support you with a range of behavioral issues as you work toward health and/or weight loss goals. These may include:

- Setting realistic nutrition and exercise goals
- Addressing emotional eating, mindless eating or binge eating
- Body image concerns
- Managing stress
- Addressing interpersonal barriers

You can attend up to eight solution-focused therapy sessions with the psychologist who will help you set specific behavioral goals and harness your strengths to achieve them.

If additional or longer-term mental health services are warranted at your consultation or at the end of your treatment, you will be provided with appropriate referrals.

Location: Psychologists are available in Akron, North Canton and Wadsworth. Telehealth may be available if deemed appropriate by the psychologist.

For more information and to schedule an appointment, call **330.375.4680**.

We appreciate the effort you have given during your Bariatric journey. Thank you!

330.375.6590

Summa Health™

WMI-26-83736/KG/7-26