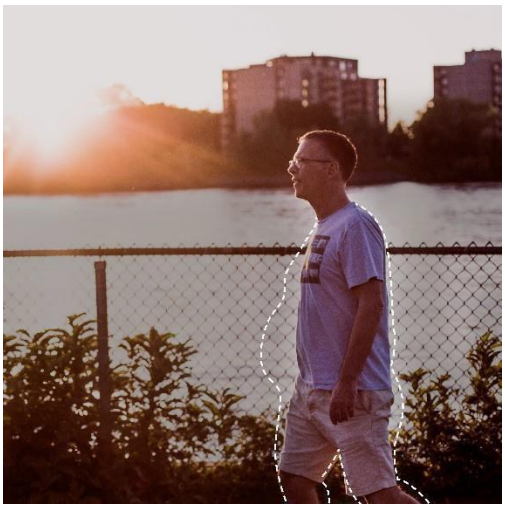
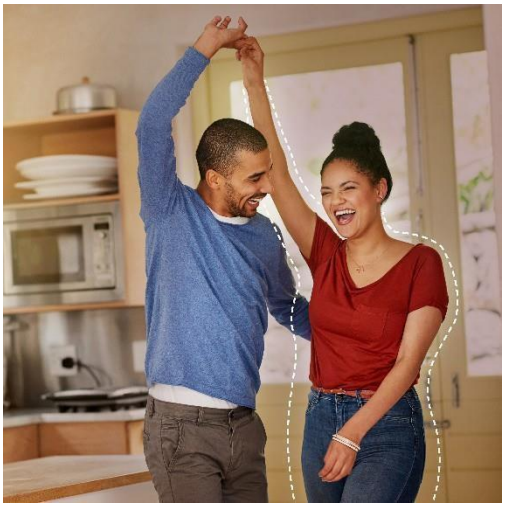
UNC BARIATRIC SURGERY

A Guide to Surgical Weight Loss





Everything TO GAIN.

UNC HEALTH℠
School of Medicine
Department of Surgery

ACS AMERICAN COLLEGE OF SURGEONS SURGICAL QUALITY PARTNER

ACS MBSAQIP Metabolic and Bariatric Accreditation

WELCOME

INITIAL EVALUATION

Date of Initial Evaluation _____

Height:_____ft._____in Weight:_____lbs.
BMI:_____Category: _____

Ideal Body Weight (IBW): _____
(This is not a goal weight, nor is it the weight you should expect to get to after surgery)

Pounds over IBW: _____
Anticipated weight loss based on averages:_____lbs.
(This is not a guaranteed weight loss; all results are personal and based on age, health, etc.)

Realistic Weight Goal: _____lbs.
(This is your goal weight, based on averages lost by other patients- researched)

Weight to lose **BEFORE** surgery:_____lbs.

BODY MEASUREMENTS:

Neck:_____Waist:_____Arm: _____

Chest:_____Hips:_____Thigh: _____

Blood pressure: _____
Pulse: _____

BARIATRIC SURGERY CHECKLIST

USE THIS CHECKLIST TO ENSURE YOU HAVE EVERYTHING FOR SURGERY.

Insurance

☐ CALL YOUR INSURANCE COMPANY AND VERIFY BARIATRIC SURGERY COVERAGE

- CPT 43644: ROUX-EN-Y GASTRIC BYPASS
- CPT 43775: SLEEVE GASTRECTOMY

IF YOUR INSURANCE CHANGES AFTER STARTING THE PROGRAM, PLEASE NOTIFY OUR STAFF AT 984-974-6519

If you have specific questions about coinsurance, deductibles or out-of-pocket expenses call your insurance carrier or the UNC Health financial counselor for upfront surgery cost questions at 984-974-5899

Appointments (in order)

☐ TEAM VISIT: DIETITIAN AND NP
1:1 INITIAL APPOINTMENT
DATE_____

☐ DIETITIAN
1:1 FOLLOW-UP APPOINTMENT
DATE_____

☐ ONE GROUP NUTRITION CLASS BEFORE SURGERY
DATE_____

☐ MEET WITH PSYCHOLOGIST (we will call you) NAME
PHONE_____
DATE _____
_____

☐ MEDICAL LETTER (page 9 of General Info section)
DATE _____

☐ DIETITIAN FOLLOW-UP AFTER PSYCH EVAL
DATE_____

☐ NP FINAL CLEARANCE VISIT (after all other necessary testing and clearances completed)
DATE_____

☐ SEE SURGEON
DATE_____

☐ LAB WORK
DATE_____

☐ EGD (ENDOSCOPY)
DATE_____

☐ ADDITIONAL TESTING

SLEEP STUDY: _____
DATE_____
(PAP therapy required in moderate to severe sleep apnea)

EKG: _____

CXR: _____

OTHER/CLEARANCES:

☐ CARDIAC _____
☐
_____

Support Group

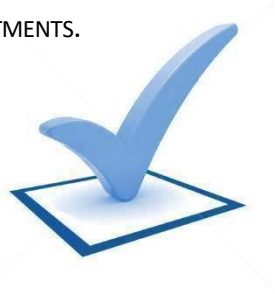
☐ ATTEND AT LEAST TWO SUPPORT GROUP MEETINGS
DATE_____
DATE_____

☐ JOIN OUR FACEBOOK PAGE
UNC WLS Support Group

AFTER BARIATRIC SURGERY CHECKLIST

USE THIS CHECKLIST TO MAKE SURE YOU MAKE ALL YOUR REQUIRED FOLLOW-UP APPOINTMENTS.

It is your responsibility to call and schedule these appointments.



Appointments

☐ 2-3 WK POST-OP WITH SURGEON
DATE_____

☐ 6WK POST-OP WITH DIETITIAN
DATE_____ WEIGHT _____lbs. % WT. LOSS _____

☐ 3MTH POST-OP WITH NP
DATE_____ WEIGHT _____lbs. % WT. LOSS _____

☐ 6MTH POST-OP WITH NP AND DIETITIAN
DATE_____ WEIGHT _____lbs. % WT. LOSS _____

☐ 1YR POST-OP with NP and RD
DATE_____ WEIGHT _____lbs. % WT. LOSS _____

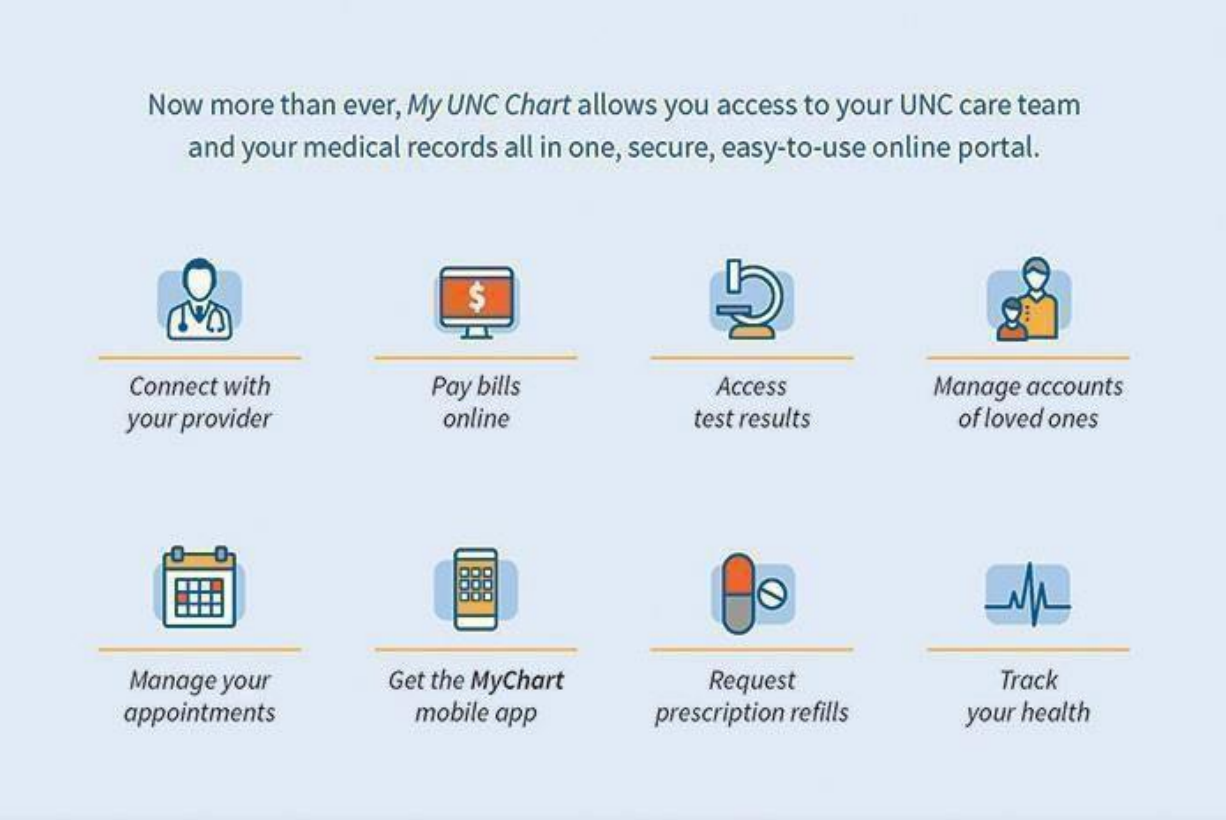
☐ 18MTH POST-OP with NP and RD
DATE_____ WEIGHT _____lbs. % WT. LOSS _____

☐ 2YR POST-OP WITH MED OBESITY MD or PA
(As return if established, as new if not.)
DATE_____ WEIGHT _____lbs. % WT. LOSS _____

☐ 3YR POST-OP WITH MED OBESITY MD or PA
DATE_____ WEIGHT _____lbs. % WT. LOSS _____

☐ 4YR POST-OP WITH MED OBESITY MD or PA
DATE_____ WEIGHT _____lbs. % WT. LOSS _____

☐ 5YR POST-OP WITH MED OBESITY MD or PA
DATE_____ WEIGHT _____lbs. % WT. LOSS



Remember to keep User ID and Password in a safe place. Do not share this information.

If you need help with MyChart, please call (888) 996-2767

SCHEDULING CONTACTS

Bariatric Nurse Practitioner:

Name	Location	Phone	Clinic Day/s
Tara Zychowicz	UNC Hillsborough	984-215-3501	Daily

Bariatric Nurse Coordinator:

Name	Location	Phone	Clinic Day/s
Lisa Prestia	UNC Memorial	919-843-1258	Daily

Registered Dietitians (RD): *Additional clinics not listed may be available*

Name	Location	Phone	Clinic Day/s
Susan Strom	UNC Hillsborough	984-215-3501	Mondays Wednesdays Thursdays Fridays
Yenssi Williams	UNC Hillsborough	984-215-3501	Daily

Group Nutrition Class: *Additional classes not listed may be available*

	Location	Phone	Clinic Day/s
Offered In Person	Hillsborough	984-215-3501	1st & 3rd Friday of the month
Class is 2pm-3pm; arrive by 1:45pm. Bring a pen and this informational binder with you.			

Bariatric Clinic Staff Nurse:

Name	Location	Phone
Alise Erental-Fernandes	Hillsborough	984-215-3501

Psychologists:

Name	Location	Phone	Clinic Day/s
Dr. Catherine Forneris	Hillsborough	984-215-3501	Mondays and Wednesdays
Centralized scheduling staff will call to set up a new patient appointment: 984-974-6519			

After having surgery, if you have a surgery related emergency, call 984-974-1000 and ask to page the on-call provider with SRZ.

BMI CHART

HEIGHT	WEIGHT (lbs.)																										
	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390
5'0"	25	27	29	31	33	35	37	39	41	43	45	47	49	51	53	55	57	59	61	62	64	66	68	70	72	74	76
5'1"	25	26	28	30	32	34	36	38	40	42	43	45	47	49	51	53	55	57	59	60	62	64	66	68	70	72	74
5'2"	24	26	27	29	31	33	35	37	38	40	42	44	46	48	49	51	53	55	57	59	60	62	64	66	68	70	71
5'3"	23	25	27	28	30	32	34	35	37	39	41	43	44	46	48	50	51	53	55	57	58	60	62	64	66	67	69
5'4"	22	24	26	27	29	31	33	34	36	38	39	41	43	45	46	48	50	51	53	55	57	58	60	62	64	65	67
5'5"	22	23	25	27	28	30	32	33	35	37	38	40	42	43	45	47	48	50	52	53	55	57	58	60	62	63	65
5'6"	21	23	24	26	27	29	31	32	34	36	37	39	40	42	44	45	47	48	50	52	53	55	56	58	60	61	63
5'7"	20	22	23	25	27	28	30	31	33	34	36	38	39	41	42	44	45	47	49	50	52	53	55	56	58	60	61
5'8"	20	21	23	24	26	27	29	30	32	33	35	36	38	40	41	43	44	46	47	49	50	52	53	55	56	58	59
5'9"	19	21	22	24	25	27	28	30	31	32	34	35	37	38	40	41	43	44	46	47	49	50	52	53	55	56	58
5'10"	19	20	22	23	24	26	27	29	30	32	33	34	36	37	39	40	42	43	44	46	47	49	50	52	53	55	56
5'11"	18	20	21	22	24	25	26	28	29	31	32	33	35	36	38	39	40	42	43	45	46	47	49	50	52	53	54
6'0"	18	19	20	22	23	24	26	27	28	30	31	33	34	35	37	38	39	41	42	43	45	46	47	49	50	52	53
6'1"	17	18	20	21	22	24	25	26	28	29	30	32	33	34	36	37	38	40	41	42	44	45	46	47	49	50	51
6'2"	17	18	19	21	22	23	24	26	27	28	30	31	32	33	35	36	37	39	40	41	42	44	45	46	48	49	50
6'3"	16	17	19	20	21	22	24	25	26	27	29	30	31	32	34	35	36	37	39	40	41	42	44	45	46	47	49
6'4"	16	17	18	19	21	22	23	24	26	27	28	29	30	32	33	34	35	37	38	39	40	41	43	44	45	46	47

BMI	
<19	Underweight
19-25	Healthy weight
26-29	Overweight
30-39	Obese
>40	Morbid Obesity

General Information

Our Program Accreditation

UNC Bariatric Surgery Program is a designated ***MBSAQIP Accredited Comprehensive Center*** by the American College of Surgeons and the ***Blue Cross Blue Shield Center of Distinction***. We have performed thousands of successful bariatric procedures, complemented by lifelong support, education, nutrition programs, and exercise guidance. Our multidisciplinary team works together to maximize your success.

Note: Weight loss results vary by individual; specific results are not guaranteed.

Understanding Obesity

Obesity is an excessive amount of body fat, often measured by **Body Mass Index (BMI)**:

- 18.5–24.9: Normal weight
- 25–29.9: Overweight
- 30–34.9: Class I Obesity
- 35–39.9: Class II Obesity
- 40+: Class III or clinically severe obesity

Causes of Obesity

- Genetics
- Processed foods and high-calorie diets
- Sedentary lifestyle
- Chronic sleep loss, stress, emotional distress
- Certain medications

Health Risks

Obesity increases the risk of:

- Type II diabetes, high blood pressure, cardiovascular disease
- Sleep apnea, osteoarthritis, infertility
- Certain cancers, liver disease, acid reflux, gastrointestinal issues
- Depression and anxiety

Severe obesity occurs when excess weight significantly increases the risk of serious health problems, physical disability, or death.

Bariatric Surgery: Candidacy

You may be a candidate if:

- BMI ≥ 35 with one or more obesity-related conditions (diabetes, sleep apnea, high blood pressure, high cholesterol, arthritis), or
- BMI > 40 regardless of other conditions

Additional requirements:

- Multiple documented weight loss attempts

- Age 18–72 (exceptions possible)
- Understanding risks and committed to lifelong follow-up, diet, exercise, and supplementation

Reasons You May Not Be a Candidate for Surgery

Bariatric surgery is not safe for everyone. You may **not be eligible** if you have certain medical, surgical, or personal conditions, including:

Medical or Surgical Conditions:

- Inflammatory diseases of the gastrointestinal tract (e.g., ulcers, severe esophagitis, Crohn's disease)
- Severe heart or lung disease that increases surgical risk
- Conditions that increase the risk of bleeding in the esophagus or stomach (e.g., esophageal or gastric varices, intestinal telangiectasia)
- Portal hypertension or cirrhosis
- Abnormalities in the esophagus, stomach, or intestines
- Chronic pancreatitis
- Previous intra-operative gastric injury, such as a perforation
- Current infection anywhere in the body

Pregnancy and Age:

- Pregnant or planning to become pregnant within the next 18 months
- Under 18 years old or over 72 years old

Substance Use and Psychiatric Concerns:

- Current or recent alcohol or drug addiction (must be substance-free for at least 12 months)
- Uncontrolled or untreated psychiatric disorders
- Recent suicide attempts (within 18 months) or multiple attempts within five years
- Active or recent THC/CBD use (must be THC/CBD-free for at least 3 months before surgery, confirmed by testing)
- Active or recent eating disorders (must be in full remission for 6 – 12 months depending on the nature and severity of the eating disorder)

Behavioral and Lifestyle Factors:

- Inability or unwillingness to follow dietary guidelines after surgery
- History of poor adherence to medical recommendations or missed appointments
- Smoking or vaping (must be nicotine-free for at least 3 months before surgery, confirmed by testing)
- Alcohol intake must be significantly reduced for 6 months prior to surgery (12 months if a history of alcohol use disorder)

Special Considerations:

- Patients with Lynch Syndrome: Gastric bypass is not recommended, but sleeve gastrectomy may be an option

Only your **Bariatric Surgery Team** can determine if surgery is right for you. Please let us know if you have any of the conditions listed above.

Meet The Team

SURGEONS:

Dr. Tim Farrell has been practicing surgery at UNC-Chapel Hill since 1999. He graduated from Princeton University, then UMDNJ-Robert Wood Johnson Medical School and then completed a general surgery residency at Dartmouth-Hitchcock Medical Center followed by a Minimally Invasive Surgery fellowship at Emory University Hospital. He serves as Director of Bariatric Surgery, Chief of Minimally Invasive Surgery and Director of the Advanced Minimally Invasive GI Surgery Fellowship at UNC. He is certified by the American Board of Surgery and is a fellow of the American College of Surgeons, the Society of American Gastrointestinal and Endoscopic Surgeons and the American Society for Metabolic and Bariatric Surgery. He holds leadership roles in several surgical societies.

Dr. Farrell has trained numerous bariatric surgeons who are now in practice across the U.S. and beyond. He is a father of seven and lives with his wife and children in Chapel Hill, NC.

Dr. Wayne Overby is a native of Eastern North Carolina. After serving in the U.S. Army, he completed his undergraduate and medical school degrees at East Carolina University and the Brody School of Medicine in Greenville, NC, followed by a General Surgery residency at the University of Washington in Seattle.

He returned to North Carolina and UNC in 2005 as a fellow in Minimally Invasive and Bariatric Surgery and has been a faculty member in the GI Surgery Division of the UNC Department of Surgery since 2007. He is a Fellow of the American College of Surgeons, serves as President of the Carolinas Chapter of the American Society for Metabolic and Bariatric Surgery, and is an active member of the Society of American Gastrointestinal and Endoscopic Surgeons and American Hernia Society.

Dr. Overby is board-certified in general surgery practicing exclusively at UNC Hospitals Hillsborough Campus, where he specializes in minimally invasive and robotic approaches to general surgery, Bariatric Surgery, and hernia surgery. Dr. Overby believes in a personalized and patient-centered approach to weight loss and bariatric surgery.

SURGEONS (CONTINUED):

Dr. Maggie Hodges grew up outside of Atlanta, GA, graduating from the University of Georgia before completing medical school and obtaining her master's in public health from Emory University. She then completed general surgery residency and a research fellowship in regenerative biology at the University of Colorado before completing her fellowship in Minimally Invasive Surgery and Foregut Surgery at Providence Portland Medical Center in Portland, OR.

Dr. Hodges is excited to return to the Southeast, joining the University of North Carolina at Chapel Hill in 2022. She is the Associate Program Director for the Advanced Minimally Invasive GI Surgery Fellowship at UNC and is active in the Society of American Gastrointestinal and Endoscopic Surgeons, as well as the American Society for Metabolic and Bariatric Surgery.

Dr. Hodges is board certified in general surgery, with a certificate of fellowship training in foregut surgery, and she is excited to increase the availability of minimally invasive and robotic bariatric surgery at UNC. Dr. Hodges is passionate about patient education, striving for excellence in patient care, and taking an individualized approach to every patient encounter

Dr. Samuel R. Torres Landa Fernandez is a board-certified general surgeon specializing in minimally invasive bariatric, and foregut surgery. He completed his medical degree at Universidad Autonoma de Queretaro in Mexico, followed by general surgery residency at Oregon Health and Science University in Portland, and advanced fellowship training at Emory University in Atlanta. He is an active member of the Society of American Gastrointestinal and Endoscopic Surgeons and the American Society for Metabolic and Bariatric Surgery.

Dr. Torres Landa is a certified bilingual medical provider which clinical practice focuses on minimally invasive laparoscopic and robotic approaches to gastrointestinal surgery including bariatric, foregut, and hernia surgery. He has a strong commitment to evidence-based, patient-centered care. He prioritizes safety, clear communication, and shared decision-making, and is dedicated to advancing the field through research, education, and quality improvement to ensure every patient receives the safest and most personalized care.

Outside of the operating room, Dr. Torres Landa enjoys playing with his son and daughter and going on long walks with his amazing wife.

MID-LEVEL PROVIDERS AND NURSE COORDINATOR:

Tara Zychowicz, FNP is a board-certified Family Nurse Practitioner specializing in bariatrics. She began her nursing career in 1992 and earned her advanced practice degree from Kennesaw State University in 2002, after attending the University of South Florida. She is accredited by the American Nurses Credentialing Center. Since 2006, Tara has focused on caring for patients undergoing weight loss surgery, managing both pre- and post-operative care. She joined UNC Health in 2010, where she is dedicated to providing compassionate, personalized care for patients living with obesity.

Natasha Rosser, PA completed her Physician Assistant Studies at George Washington University in 2010 and has a Master of Science in Health Sciences. After graduating, she worked in primary care until joining The UNC Multidisciplinary Weight Management Program in September 2019. Natasha
enjoys focusing on the whole patient and exploring the many factors influencing their health. She is passionate about assisting patients in achieving their health goals and improving their quality of life.

Lisa Prestia, RN, Bariatric Coordinator, has been a registered nurse since 1998 and has been doing Bariatrics since 2002. Lisa has 9 years of experience as a critical care nurse and 20+ years of bariatric nursing experience. Lisa will be assisting with coordinating your care and guiding you through the surgical process.

DIETITIANS:

Susan Strom, RD *is a Registered Dietitian licensed to practice in North Carolina.* Susan completed her undergraduate degree at SUNY Geneseo and went back to school after moving to North Carolina.
She completed her dietetic internship at Meredith College in 2008 and her Master of Science in Nutrition from Meredith as well. She worked in private practice before joining UNC at the Wake Brook Campus in Raleigh. Currently, Sue works in several outpatient clinics focusing on chronic disease management and bariatric surgery, and as an inpatient dietitian at UNC-Hillsborough. Helping patients achieve their goals and have positive outcomes is the best part of her job.

Yenssi Williams, RD is a Registered Dietitian board certified by the Commission on Dietetic Registration. Yenssi graduated from East Carolina University with a Bachelor of Science in Nutrition Science and a Bachelor of Arts in Hispanic Studies. She completed her Master of Public Health and dietetic internship at UNC-Chapel Hill. She has experience working with a range of populations- from older individuals in a skilled nursing facility to the birth-5-year age group at a Head Start organization. Yenssi enjoys learning all facets of the lives of individuals she assists while supporting their self-efficacy to encourage achievable and sustainable success

PSYCHOLOGIST:

Catherine A. Forneris, Ph.D., JD, is a licensed psychologist and a Professor in the Department of Psychiatry at the University of North Carolina School of Medicine at Chapel Hill. Her undergraduate degree is from Syracuse University, and she earned graduate degrees in Biomedical Science and Clinical Psychology from the University at Albany, State University of New York. In 2016, Dr. Forneris completed the part-time Evening Program at North Carolina Central University School of Law, where she received her JD, with honors, and became a member of the North Carolina State Bar.

Dr. Forneris is a published author, co-author, and presenter of numerous peer-reviewed scientific research and professional articles on trauma, PTSD, depression, health care utilization, and women's health. The primary focus of her current clinical work is cognitive behavioral therapy with adults, including those with personality disorders. She also conducts psychological evaluations for patients considering bariatric weight loss surgery.

Bariatric Surgery and Mental Health

A Message from Catherine A. Forneris, PhD, Clinical Psychologist

Bariatric surgery is a life-changing procedure that requires thoughtful preparation, adjustments to your daily routine, and long-term lifestyle changes. It is important to remember that **surgery is not a "cure-all"**—it is a tool to help you achieve healthier weight and improved health.

Psychological Evaluation

An important part of the bariatric process is the **Psychological Evaluation**, required by the UNC Bariatric Surgery Program. This evaluation ensures you are ready for the physical and emotional changes surgery brings.

During this visit, which usually lasts about one hour:

- Your health habits, weight history, and stress levels will be discussed
- Coping strategies and mental health concerns will be reviewed
- Recommendations for therapy, reading materials, or behavioral strategies may be provided

Sometimes, **more than one visit is necessary** to adequately assess and prepare you for surgery.

Research shows that **emotional and behavioral issues can affect your weight loss success**. Addressing these concerns can:

- Reduce the risk of post-surgery weight regain
- Help you manage emotional or binge eating
- Improve your ability to adjust to new eating habits and activity routines
- Support long-term mental well-being

Support Groups

We strongly encourage participation in **UNC Bariatric Surgery support groups**, available online via Facebook. These groups:

- Allow you to share experiences with patients who have undergone surgery
- Provide tips for staying consistent with your new health habits
- Help you adjust to lifestyle changes after surgery

Your mental health is **as important as your physical health** for long-term success. Following the recommendations from your Mental Health Visit, attending support groups, and engaging in counseling when needed can significantly improve outcomes after surgery.

UNC Health is committed to helping you achieve your best possible results.

— Catherine A. Forneris, PhD, Licensed Psychologist

Mental Health Letter Requirement

To prospective UNC Bariatric Surgery candidates:

If you are currently working with a mental health provider outside of the UNC Health system, we require that this provider submit a letter on your behalf. The mental health evaluation will not be complete until a letter is received from your treatment provider(s).

Mental Health Letter should include the following:

1. Letter should be on letterhead
2. Should have a signature from your provider not simply their typed name
3. Provider should provide information on your mental health diagnoses and your overall treatment history to date.
4. Provider should note how long they have been working with you, how often they see you, and if they plan to continue after surgery.
5. Provide should comment on your overall treatment progress and any concerns they might have about your current mental health status or about your treatment with them.

We ask for this letter as a source of additional information (just like other healthcare records) that helps us better understand your personal history. Mental health conditions like anxiety or depression do not stop you from being a candidate for Bariatric Surgery. We only want to ensure that any ongoing conditions do not negatively affect your surgery journey, and a letter from your mental health provider(s) helps us determine that. The letter may not be the only requirement to complete the mental health component, but it is required if you are working with provider(s) outside the UNC Health system. If any additional information or steps are necessary to complete the mental health component, your psychologist will inform you of those steps.

The letter of support can be sent through MyChart or faxed directly to Lisa Prestia, Registered Nurse, Bariatric Nurse Coordinator at 919-966-8440.

If there are any questions regarding the requested information, please contact the provider who conducted your mental health evaluation for bariatric surgery directly.

Thank you,

The Psychology Team
UNC Bariatric Surgery Program

SURGERIES

Gastric Bypass

Gastric Sleeve

How Your Digestive System Works

The digestive system breaks down the food you eat into nutrients your body can use.

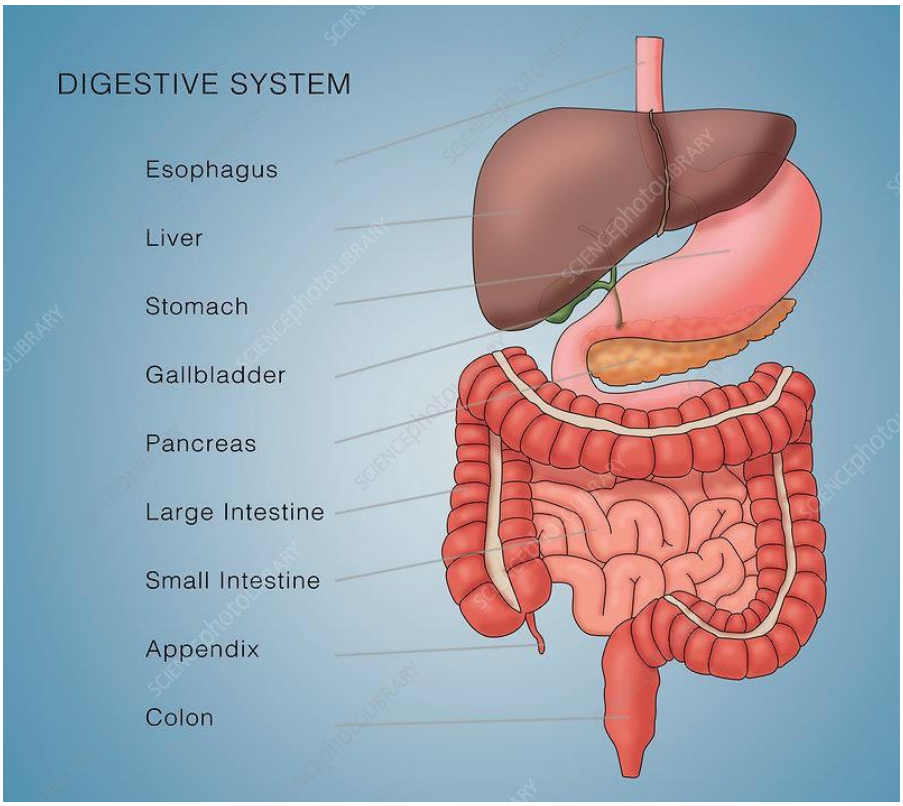
1. **Chewing and Swallowing**
    - Digestion begins in your mouth. Chewing breaks food into smaller pieces, and saliva starts the process of breaking down carbohydrates.

2. **The Stomach**
    - After swallowing, food enters the stomach, where strong muscles and stomach acid continue breaking it down.
    - The average stomach can hold about **3 pints (1 liter)** of food.

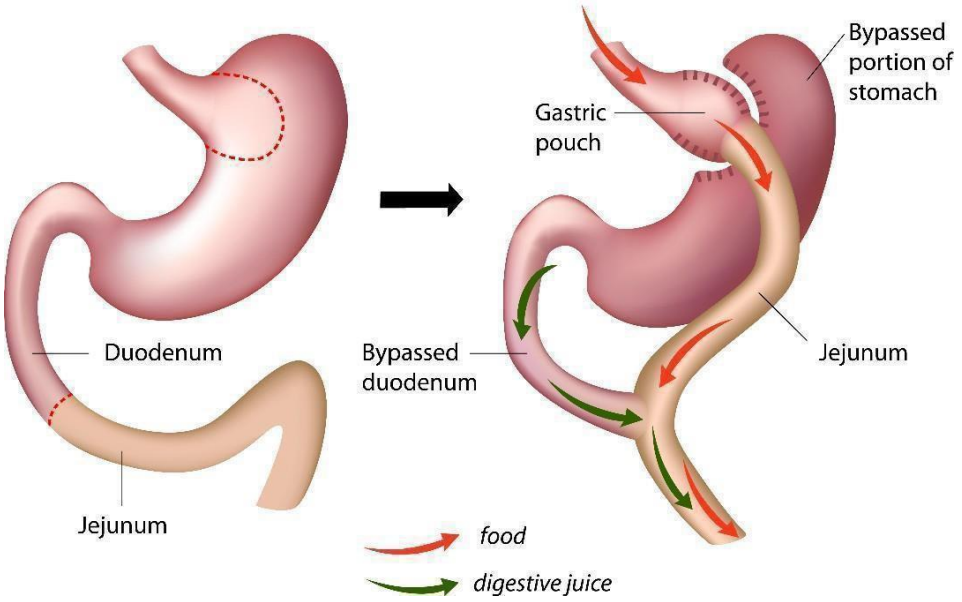
3. **Small Intestine**
    - Food moves from the stomach through the **pyloric valve** into the small intestine.
    - **Bile** (from the liver) and **pancreatic juice** help digest fats, proteins, and carbohydrates.
    - Most **calcium and iron** are absorbed in the **duodenum** (the first part of the small intestine).
    - The **jejunum and ileum** complete the absorption of calories and other nutrients.

4. **Large Intestine**
    - Any food particles that cannot be digested or absorbed move into the large intestine.
    - Water is absorbed, and the remaining waste is stored until it is eliminated from the body.

Understanding how your digestive system works can help you see how bariatric surgery affects digestion and nutrient absorption.



Roux-en-Y Gastric Bypass (RNY)



Roux-en-Y gastric bypass is a type of weight loss surgery that **changes the way food moves through your digestive system**. It helps you lose weight by:

- **Restricting how much you can eat at one time**
- **Reducing nutrient absorption**

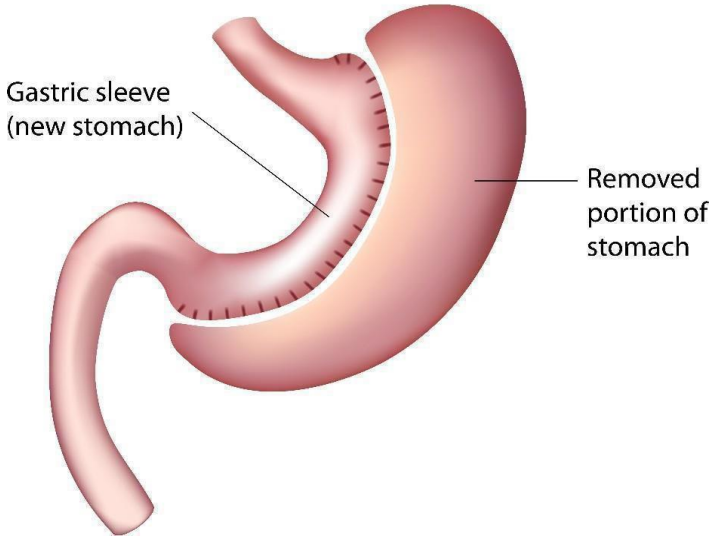
How the Surgery Works:

- A **small stomach pouch** is created using surgical staples. This pouch limits how much food you can eat at once.
- A portion of the **small intestine** is divided about 3–5 feet down from the stomach.
- One end of the small intestine is connected to the **new stomach pouch**, allowing food to bypass most of the stomach and the first part of the small intestine.
- The other end of the intestine is reconnected further down to continue the digestive process.
- The **incisions are closed** using absorbable sutures, and surgical glue is applied to the skin.

Expected Weight Loss:

- Weight loss results vary from person to person.
- Most patients lose up to **70% of their excess body weight** over time.
- Your care team will monitor your progress and provide guidance on diet, exercise, and lifestyle changes to help you achieve lasting results.

Vertical Sleeve Gastrectomy



Vertical sleeve gastrectomy helps patients lose weight primarily by **restricting the amount of food (and calories) you can eat**.

How the Surgery Works:

- A stapling device is used to remove 80% of the stomach permanently, leaving a narrow tube or "sleeve."
- The remaining smaller stomach:
  - Limits the amount of food you can eat at one time
  - Slows the speed of eating, creating a sense of fullness and satiety
- The surgery also affects hormones that control hunger, including ghrelin, which helps reduce appetite.

Expected Weight Loss:

- Weight loss results vary from person to person
- Most patients lose up to **50-70% of their excess body weight** over time.
- Your care team will monitor your progress and provide guidance on diet, exercise, and lifestyle changes to help you achieve lasting results.

Bariatric Surgery Options:

Gastric Bypass vs. Sleeve Gastrectomy

Features	Gastric Bypass (Roux-en-Y)	Vertical Sleeve Gastrectomy
How it works	• Small stomach pouch created • Small intestine rerouted	• ~80% of stomach removed • Narrow "sleeve" created
Weight loss mechanism	• Limits food intake • Reduces nutrient absorption	• Limits food intake • Slows stomach emptying • Reduces hunger hormones (ghrelin)
Expected weight loss	Up to 70% of excess body weight	Up to 60% of excess body weight
Effect on hormones	• Changes gut hormones • Alters hunger/fullness signals	• Changes gut hormones and gut bacteria • Alters hunger/fullness signals
Improvement in health conditions	• Diabetes • High blood pressure • High cholesterol • Sleep apnea • Joint pain • Certain cancers	• Diabetes • High blood pressure • High cholesterol • Sleep apnea • Infertility
Surgical changes	• Stomach pouch + intestine rerouting	• Stomach sleeve only; no intestine rerouting
Nutrient absorption	• Reduced absorption; requires lifelong vitamins	• Normal absorption; vitamins recommended
Follow-up	• Regular follow-ups and lab monitoring	• 1–3 year endoscopy to check sleeve • Regular lab monitoring
Advantages	• Strong long-term weight loss • Effective for severe obesity and metabolic conditions	• Less complex surgery • No intestinal rerouting • Fewer malabsorption complications
Considerations / Risks	• Nutrient deficiencies • Dumping syndrome • Gastric leaks	• Gastric leaks • Acid reflux • Vitamin deficiencies • Permanent stomach removal

Health Benefits

Weight loss can improve:

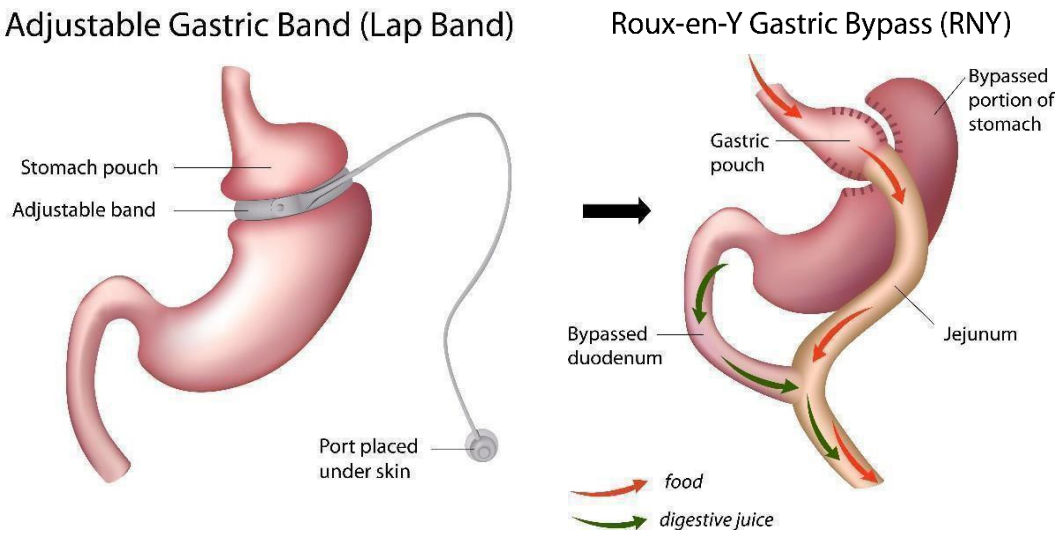
- Type II diabetes
- High blood pressure
- High cholesterol
- Sleep apnea
- Infertility

- Bariatric surgery also affects:
- Gut hormones
- Gut bacteria
- Brain signals related to hunger and fullness
- The rate at which the stomach empties

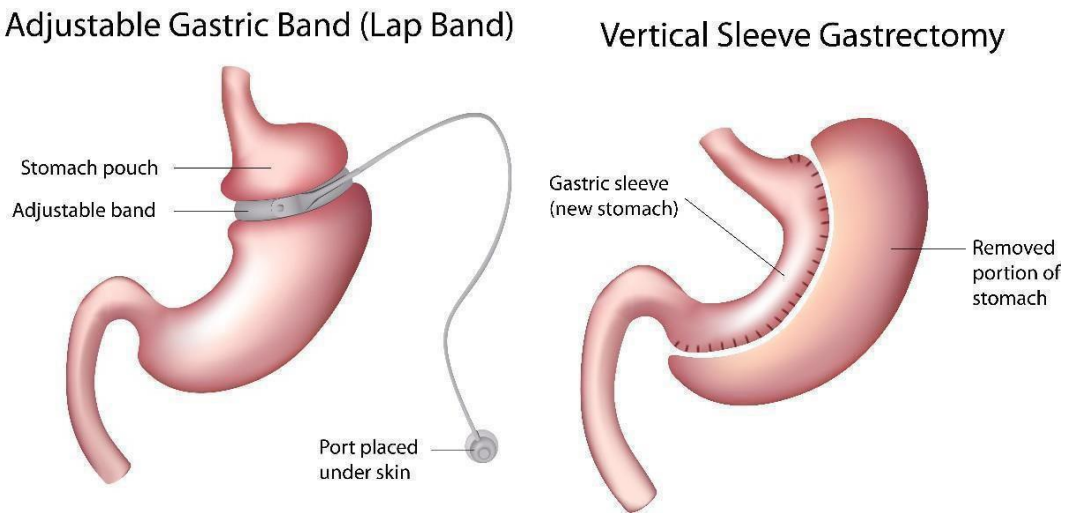
Revisional Operations

The transition from a gastric band (Lap Band) to a sleeve gastrectomy or a gastric bypass involves:

REMOVAL OF THE LAP BAND AND CREATION OF A GASTRIC BYPASS



REMOVAL OF THE LAP BAND AND CREATION OF VERTICAL SLEEVE GASTRECTOMY



Risks and complications

- Increased risk of bleeding
- Removal of scar tissue

Revisional Operations

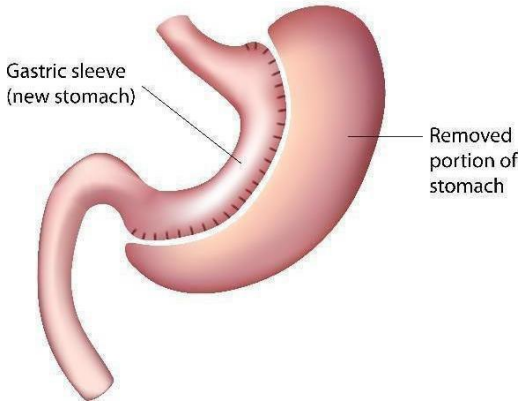
The transition from a vertical sleeve gastrectomy to a gastric bypass involves:

- Endoscopy
- pH test
- Upper GI

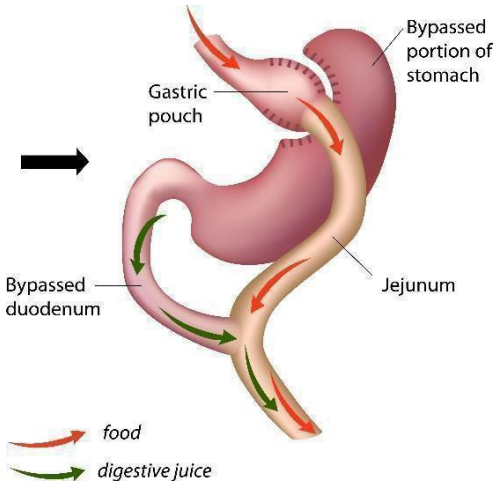
Reasons for revision may include acid reflux, poor initial weight loss, continued health problems related to weight, or high BMI.

REVISION OF THE SLEEVE TO GASTRIC BYPASS

SLEEVE GASTRECTOMY



GASTRIC BYPASS



Risks and complications

- Increased risk of bleeding
- Removal of scar tissue
- Increased length of time in the operating room

Prior compliance with diet and follow-up care may determine if your insurance approves or denies revisional surgery. Some insurances only cover 1 surgery per lifetime.

Before Surgery

Insurance Coverage

It is important to understand your health insurance policy and coverage for bariatric surgery.

Once all preoperative requirements are completed, our office will contact your insurance company for final approval. After approval, you will meet with your surgeon. If the surgeon determines that you are a candidate for surgery, a surgery date will be scheduled based on the surgeon's availability and operating room schedule.

Preoperative Clearances

If you have pre-existing medical conditions that require clearance, we will help coordinate referrals or request support letters from your specialists. All required clearances must be obtained before submitting your chart to your insurance company.

Type II Diabetes:

- If you have diabetes, your A1C must be 8.5% or lower before surgery.
- A lab test will be ordered within 4 weeks of surgery to confirm your blood sugar control.
- You may need to see an endocrinologist to help stabilize your diabetes before surgery.

Hypertension (High Blood Pressure):

- If you have heart disease, poorly controlled blood pressure, or an abnormal ECG, a **cardiology evaluation** will be required before surgery.

Laboratory Work & Testing

- **Blood work** is required **3–6 months before surgery**.
- Any abnormal results will be discussed via phone, MyChart, or at your next appointment.

Sleep Study (Polysomnogram)

If a sleep study is recommended by your surgical team or primary care provider, it must be completed.

- Mild sleep apnea: Discussed with the surgical team.
- Moderate sleep apnea:
  - An echocardiogram is required
  - 3 months of PAP therapy (CPAP or BiPAP) prior to surgery

Endoscopy

- An endoscopy is a procedure using a **flexible tube with a camera and light** to examine your esophagus, stomach, and small intestine.
- It is performed **under sedation** to ensure there are no abnormalities before surgery.
- During the procedure, a **biopsy is taken**, and testing for the bacteria **H. pylori** is done.
  - If positive, **2 weeks of antibiotics** are prescribed, followed by a **stool test in 4–6 weeks** to confirm treatment.

Supervised Diet Requirement

Some insurance companies require patients to complete a **3- or 6-month consecutive supervised diet and exercise program** before approving bariatric surgery.

This program can be completed with:

- Your primary care provider
- A Bariatric Medicine Provider
- The UNC Medical or Surgical Weight Loss Program

Nutrition Class

- **Required education:** You must attend a **nutrition class** before surgery. Classes are held twice a month at the UNC Hillsborough Campus.
- **Follow-up:** After the class, you will meet one-on-one with a **dietitian** to review your understanding of the bariatric eating plan.
- See Nutrition Section in your booklet

Psychological Considerations

- **Behavioral changes:** Bariatric surgery does not automatically change emotional eating, cravings, or binge eating. Lifestyle and behavior changes after surgery can be challenging.
- **Psychology consultation:**
    - A consultation with the UNC Health Program Psychologist is required before surgery.
    - If you are already under the care of a mental health professional, we will need documentation of your diagnosis and treatment history.
- **How psychologists help:**
    - Develop strategies for successful lifestyle and behavior changes
    - Address emotional eating, mood, or interpersonal concerns
    - Work alongside support groups to enhance long-term success
- **Medication considerations:**
    - Antidepressants may need to be adjusted or switched to a liquid form after surgery; this should be coordinated with your prescriber.
- **Recommendation:** Consider ongoing mental health counseling **before and after surgery** to support emotional well-being.

Preoperative Safety Guidelines

Smoking & Nicotine

- **Quit nicotine at least 3 months before surgery.** Includes smoking, vaping and chewing tobacco.
- Nicotine patches, gums, or vapors are **not acceptable**, as nicotine will still appear in urine or blood tests.
- Monthly **nicotine tests** may be required if initial tests are positive.
- Discuss **smoking cessation medications** with your primary care provider. We can provide a referral to the UNC Health Smoking Cessation Program if needed.
- **Substance-free requirement:** You must be free from all substances prior to surgery. A **urine**

toxicology screen is required, including CBD and THC (Delta 8, Delta 9, etc.).

Alcohol

- Alcohol increases the risk of **ulcers, gastritis, and addiction** after surgery.
- Limit alcohol **significantly for at least 6 months** before surgery.
- If there is a history of **alcohol use disorder**, patients must be **alcohol-free for 1 year** prior to surgery.

Blood Thinners & NSAIDs

- Stop **full-dose aspirin (325 mg)** 1 week before surgery.
- Stop all **NSAIDs** (ibuprofen, Advil, Motrin, Aleve, Naprosyn, Goody's, BC powder, etc.) prior to surgery to prevent bleeding and stomach irritation.
- **Baby aspirin (81 mg)** is generally allowed.
- You may take **Tylenol or acetaminophen-based products** for pain or fever.

Weight Loss Medications

- **Phentermine / Adipex**: Discuss with your provider before surgery.
- **GLP-1 medications** (Wegovy, Ozempic, Mounjaro, Zepbound): You must follow a **full liquid diet for 24 hours before surgery**.

Contraceptive Agents

- **Oral contraceptives ("the pill")** must be stopped **2 weeks before surgery** and **4 weeks after surgery**.
- Backup birth control is required. Options include:
    - Abstinence
    - Condoms with spermicide foam
- This is done to **reduce the risk of blood clots**

Piercings, Metal, and Artificial Nails

- **All piercings and metal** (including earrings, nose rings, nipple piercings, etc.) must be removed **on the day of surgery**.
- Silicone spacers may be used.
- **Artificial nails** are allowed.

Support Groups & Social Media

- Support groups are held **online via Zoom** for all patients at any stage of the process.
- Attendance is **strongly encouraged** for patients preparing for surgery and after surgery.
- Topics include:
    - Nutrition and cooking tips
    - Exercise and fitness
    - Plastic surgery and body image

- **Recommendation:** Attend **at least 2 support group sessions before surgery**.
- In-person groups are **currently on hold**, but we maintain an **active Facebook support forum** for ongoing connection.

  Facebook: UNC WLS Support Group (it is a closed group)
  Website: www.uncweightlosssurgery.com

Zoom App www.zoom.com

- Meeting ID: 348 693 8460
- Passcode: UNCWLS
  - The 1st Monday at 6 pm
  - The 3rd Thursday at 1 pm

Preoperative Diet

- **Weight loss goal:** Many patients are asked to lose **5–10% of their body weight** before surgery. This can be achieved through:
  - Reducing calories
  - Low-carbohydrate diets
  - Protein shakes or supplements
- A **personalized weight loss plan** will be set for you by your dietitian.
- **Liver Shrink Diet:** Two weeks before surgery, you will follow a diet of protein shakes and low-carbohydrate meals to help reduce liver size. Your dietitian will provide detailed instructions.
- **Helpful tips:**
  - Explore recipes for full liquid and pureed diets to prepare for post-op meals.
  - Avoid binging on foods you may limit after surgery you will still enjoy tasting them in the future.
- **Dental health:** Ensure any dental problems are addressed before surgery, as chewing is required in the post-op solid food phase.

After Surgery

AFTER SURGERY: While in the Hospital

Walk: Up and walking within 4 hours of surgery

Breathe: Use your spirometer

Drink: Sips of 1-3 ounces at a time. No sugary drinks or carbonation

AFTER SURGERY: What to Expect

Length of Stay

- Most patients stay **1 night in the hospital**.
- A family member or friend over the age of 18 may stay in the room with you.
- Your stay may be **longer** if you experience nausea, dehydration, pain, or other complications.

Time Off from Work and Daily Activities

- Most patients need **10–21 days off work**, depending on the type of job.
- If you do not work, take time off from activities that involve **extra effort, lifting, pulling, or straining**.

Resuming Physical Activity

- **Walking:** Begin as soon as possible after surgery. Walking helps:
  - Reduce gas buildup
  - Prevent pneumonia
  - Reduce the risk of blood clots
- **Hydration:** Drink plenty of fluids.
- **Pain guidance:** Allow your pain to guide your activity—do not push yourself too quickly.
- **Restrictions:** Avoid **heavy lifting for 6 weeks**.
- See the section on **Physical Activity** for more details.

Sleep Apnea

- Bring your **CPAP or BiPAP machine** to the hospital on the day of surgery.
- You will need to continue using it after surgery until a **repeat sleep study** confirms that your sleep apnea is resolved

Pain and Medication Management After Surgery

Pain Control

- Your pain will be managed in the hospital with **IV and/or oral medications**.
- Most patients are discharged with **manageable pain**, but you may not be completely pain-free at discharge.
- You will receive a **prescription for pain medication** to use as needed, usually for **3–7 days**.
- **Acetaminophen (Tylenol)** can also be used as directed. Dissolve packs or liquid forms are helpful in the first days.
- **Heating pads** may provide comfort for muscle soreness or gas-related discomfort.

Important: Walking is essential for recovery. Short, frequent walks:

- Relieve gas pain and pressure
- Improve circulation
- Support overall healing

Medications After Surgery

Pain Medications:

- Avoid **NSAIDs** such as Advil, Ibuprofen, Aleve, Naprosyn, Voltaren, Motrin, Aspirin 325 mg, BC powder, and Goody's. These can irritate the stomach and cause ulcers.

Taking Other Medications:

- **Liquid diet phase (first 10 days):** Crush medications and mix with a protein shake as a slurry.
- **Purée diet phase:** Crush medications and mix with Greek yogurt.
- **Solid food phase (typically 3–4 weeks after surgery):** Pills can usually be swallowed whole.
- A **pill crusher** can be purchased at most pharmacies or stores.

Steroids:

- Steroids should be **avoided after bariatric surgery** whenever possible.
- If you need steroids for medical reasons, **contact your bariatric surgery team**. Medication will be provided to help prevent ulcers.

GLP-1 / GIP Medications (e.g., Semaglutide, Tirzepatide):

- These medications should be **stopped for 3–6 months after surgery**.
- This allows your body to heal and helps the surgical team accurately assess your weight loss response.

Common Digestive Issues After Surgery

Constipation

Constipation is common after bariatric surgery. It may cause **infrequent, hard, or difficult bowel movements**. Causes include:

- Reduced food and fluid intake
- Pain medications
- Vitamins containing iron or calcium
- Anesthesia
- Reduced activity during recovery

Prevention Tips:

- Sip fluids throughout the day
- Take vitamins and supplements as directed
- Walk regularly, even short, frequent walks
- Add fiber gradually when recommended by your bariatric team (e.g., Benefiber)

Treatment:

- Increase fluids and activity
- Use a **stool softener** (docusate) if needed
- Use a **gentle laxative** (Miralax® or Milk of Magnesia) for short-term relief
- If necessary, a **suppository or gentle enema** may be used
- **Do not use laxatives, suppositories, or enemas regularly** unless instructed by your bariatric team

Nausea

Nausea may occur after surgery, especially if you eat too quickly, overeat, or do not tolerate certain foods.

Helpful Tips:

- Take **small sips and bites**
- Eat slowly and **stop when you feel full**
- Avoid **strong smells, greasy foods, and sugary foods**
- Take prescribed **anti-nausea medications** as directed (e.g., Zofran, Phenergan)
- Try **not to vomit** right after surgery while your body is healing

Gas and Bloating

Gas and bloating are common and may cause pressure or discomfort, especially during the first few weeks.

Relief Measures:

- Walk frequently
- Change positions often
- Use a **heating pad** for comfort
- Avoid **drinking through straws** and **carbonated beverages**

When to Call Your Bariatric Team

Call the office if you experience:

- No bowel movement for **more than 3–4 days**, abdominal pain, bloating, or persistent constipation
- Persistent or worsening nausea that **prevents you from drinking fluids**
- Severe or worsening gas or bloating associated with **significant pain**

AFTER SURGERY: Risks of Bariatric Surgery

Infection

- Skin infections may occur at your incision sites.
- You may have a reaction to the **surgical glue** used to close incisions.
- Keep your skin **clean and dry**.
- **Call your bariatric team** if you notice:
    - Red, hot, or swollen skin
    - Open or bleeding incisions
    - Fever

Blood Clots

- Blood clots can occur after surgery.
- **Stay active** and walk every hour while awake.
- **Call your bariatric team immediately** if you notice:
    - Severe back or leg pain
    - Swelling or color changes in your legs
- **Call 911 or go to the ER** if you have:
    - Shortness of breath
    - Sudden chest pain

Staple Line Leakage

- Rare but serious complication (~2% risk).
- **Symptoms may include:**
    - Rapid heart rate
    - Fever
    - Severe abdominal pain
- **Call 911 or go to the ER immediately** if this occurs.

Stricture or Stenosis

- Tightness at the surgical connection can occur due to **swelling or scar tissue**.
- **Call your bariatric team** if you:
    - Cannot tolerate liquids or food
    - Are vomiting frequently

Gallstones and Kidney Stones

- **Gallstones:** Risk increases with rapid weight loss.
- **Call your bariatric team** if you:
    - Are having nausea after eating
    - Have pain in your right side of the abdomen
- If you have a history of gallstones, let your team know.
    - **Ursodiol (Actigall)** may be prescribed for 6 months after surgery for patients with a

gallbladder.

- **Kidney stones:** Risk increases after gastric bypass.
    - **Stay well hydrated**
    - Use **calcium citrate** instead of calcium carbonate to help reduce risk

Ulcers

- Can occur due to surgery, smoking, NSAID use, or steroids.
- **Call your bariatric team** if you experience:
    - Heartburn
    - Stomach pain

Important:

Notify your bariatric team **immediately** if you experience any of the above symptoms. Prompt treatment is critical for your safety and recovery. 984-974-1000

AFTER SURGERY: Other Postoperative Considerations

Gastric Reflux (Heartburn)

- Reflux may occur after bariatric surgery, especially after **sleeve gastrectomy**.
- Take prescribed **acid-reducing medications** (Prilosec, Nexium, or other Proton Pump Inhibitors) **daily for the first 3–6 months**.
- These medications may be needed for a longer time depending on your symptoms.
- **Call your bariatric team** if you experience:
    - Severe reflux
    - Frothy mucus
    - Reflux that is not controlled with medication

Small Bowel Obstruction

- Contact your bariatric team **immediately** if you:
    - Are not passing gas
    - Have difficulty moving your bowels

Vitamin Deficiency

- A **daily vitamin regimen** is essential to prevent deficiencies after surgery.
- **Chewable or liquid vitamins** are recommended for the first 3 months; then you can switch to capsules.
- Do **not use gummy, tablet, grocery store brand, or children's multivitamins**.
- Notify your bariatric team if you **develop intolerance** to your vitamins.
- Vitamin levels are tested at **3, 6, 12, 18 months**, and then **annually**.
- **Long-term supplements** are a financial commitment, as they are not typically covered by insurance.

Skin Laxity (Loose Skin)

- Rapid weight loss can result in **loose or sagging skin**, which may be uncomfortable or affect confidence.
- **Lifting weights and stretching** may improve tone but will not fully correct sagging.
- Once weight loss stabilizes (usually **around 18 months** post-surgery), you may consider **skin removal surgery**.
    - A referral can be requested for **Plastic Surgery evaluation**.
    - These procedures **may not be covered by insurance**.
- To manage skin rashes:
    - Keep skin **dry**
    - Use a **cool hair dryer setting**
    - Apply **OTC antifungal creams or powders**
    - See a **dermatologist** if rashes persist

Hair Changes

- Hair thinning or increased hair shedding is **common in the first 9 months** after surgery.
- To support hair health, take your **approved bariatric vitamins and protein supplements** as recommended.
- Optional supplements include **collagen, biotin, keratin, or Nioxin**. Biotin is already included in most bariatric multivitamins.
- In most cases, **hair growth returns** once weight stabilizes.

Dehydration

Dehydration is a common concern after bariatric surgery. It can occur due to **reduced fluid intake or vomiting**.

Prevention Tips:

- Drink enough fluids to keep urine **light yellow or clear**.
- Choose **water and caffeine-free liquids**.
- Increase fluids during **hot weather** or with **exercise**.
- Avoid **alcohol and caffeine**.
- Do not take **diuretic medications** unless directed by your healthcare provider.

If you have kidney, heart, or liver disease, consult your provider before increasing fluids.

Tips for drinking when appetite is low:

- Take **small sips** of water, sugar-free popsicles, or low-sugar sports drinks.
- **Rest often** to help your body recover.

Symptoms of Dehydration – Call Your Healthcare Team if You Have:

- Dry, sticky mouth
- Dark yellow urine or very little urine
- Dry, sunken eyes
- Extreme fatigue
- Headaches
- Weakness or dizziness

Dumping Syndrome

Dumping syndrome can occur after **gastric bypass** or, less commonly, **sleeve gastrectomy**. It happens when food, especially **sugary foods or drinks**, moves too quickly into the small intestine.

Symptoms:

- **Early (immediately after eating):** cramps, nausea, diarrhea
- **Late (30–90 minutes later):** weakness, sweating, shakiness, fast heartbeat, fatigue

Tips to Prevent or Manage:

- Limit sugary and fatty foods
- Eat 5–6 small meals per day
- Include protein in every meal
- Drink fluids between meals, not during meals
- Work with your dietitian for meal planning
- Medications may be needed if symptoms persist

Reactive Hypoglycemia

Occurs when rapid gastric emptying causes **low blood sugar**.

Symptoms:

- Shakiness or tremors
- Sweating or cold, clammy skin
- Rapid heartbeat
- Weakness or fatigue
- Dizziness or lightheadedness
- Irritability or anxiety

Prevention:

- Eat small, frequent meals
- Include protein in every meal
- Carry a quick protein or sugar source if recommended
- Report frequent episodes to your bariatric team

AFTER SURGERY: Activities and Lifestyle

Bathing

- You can shower daily. Wash **incisions gently** with mild soap and water (e.g., Dial). Avoid perfumed soaps for the first 2 weeks.
- Pat incisions dry; a cool blow dryer may help.
- Tub baths should be avoided until after your **2-week follow-up**.
- Covering incisions is optional unless there is **drainage**.

Pregnancy, Fertility, Menstrual Changes, and Sexuality

- Hormonal changes may make **menstrual cycles more frequent** and ovulation more regular, even in women with PCOS.
- Fertility **increases** after surgery. Avoid pregnancy for at least **18 months**; use **birth control** and consult your gynecologist.
- If pregnancy occurs, see a **high-risk obstetrician** promptly.
- Sexual activity can resume **once you feel well**, typically 2 weeks post-surgery.
- Oral contraceptives should be **held for 4 weeks**; use **barrier methods** in the meantime.
- Testosterone may rise, increasing **sex drive**.
- Peri-menopausal women may notice **hot flashes**.

Weight Stalls and Plateaus

- Periods of slowed weight loss are **normal**.
- Your metabolism is adjusting to **hormonal changes and new calorie levels**.
- Patience and adherence to your lifestyle plan are key.

Dental Care

- Brush and floss **daily**; use **moisturizing mouthwash** instead of alcohol-based.
- See your dentist **twice a year**.
- Bariatric surgery may **increase risk of cavities** and dental problems.

Physical Activity

Being active is one of the best ways to **stay healthy, build strength, and support weight loss**.

Types of Activity

1. **Aerobic (Cardio)** – Activities that raise your heart rate and make you breathe harder, like brisk walking, biking, or swimming. Helps your **heart, lungs, and endurance**.
2. **Strength Training** – Activities that make your muscles work against resistance, such as push-ups, sit-ups, lifting weights, or resistance bands. Helps **tone and strengthen muscles**.
3. **Stretching** – Moves your joints and muscles through their full range of motion. Improves **flexibility, balance, posture, and reduces injury risk**.

Benefits of Physical Activity

- More energy and strength for daily activities
- Better focus, mood, and sleep
- Helps maintain healthy weight and muscle mass
- Lowers risk of serious health problems
- Keeps bones, muscles, and joints strong

Exercise Guidelines

- Aim for **30 minutes of activity most days** (walking is a great start)
- Include **strength exercises** 2–3 times per week
- Stretch before and after activity to **warm up and prevent injury**

Stretching Tips:

- Move slowly; avoid bouncing or sudden movements
- Hold each stretch **15–30 seconds**
- Breathe naturally; don't hold your breath
- Focus on muscles you will use during exercise

AFTER SURGERY: Caring for Yourself at Home

Controlling Discomfort

- Take **prescribed pain medication** as directed.
- Liquid acetaminophen (Tylenol) may be used as an alternative, **but do not combine with prescription pain meds**.
- **Support your abdomen** with a pillow when coughing or sneezing. Soreness around laparoscopic incisions is normal and may last **up to 4 weeks**.

Understanding Body Changes

- Feeling **tired** or having difficulty sleeping is normal as your body adjusts.
- Some **mood changes or low energy** may occur in the first few weeks. These usually improve after about **one month**.
- **Nausea or vomiting** can occur, commonly caused by:
    - Eating too quickly or too much
    - Drinking liquids during meals
    - Not chewing food thoroughly

Tips to Manage Eating

- Eat over **30 minutes**
- Avoid **fluids during meals**
- Chew food **thoroughly**
- Stick to **softer foods** temporarily if needed
- Follow your **diet advancement plan carefully**

Important: Even with decreased appetite, you must **eat regularly**. Skipping meals can harm your recovery.

AFTER SURGERY: Counseling and Support

Counseling

Adjusting after bariatric surgery can be challenging. Some patients experience **stress, anxiety, or depression**, which may affect daily life or relationships. Signs to watch for include:

- Persistent sadness, anxious or empty mood
- Loss of interest or pleasure in activities
- Irritability, restlessness, or excessive crying
- Changes in sleep or energy levels
- Difficulty concentrating, remembering, or making decisions
- Thoughts of death or suicide

If these symptoms occur, **professional counseling or therapy** can help. Effective treatments—including medication and psychotherapy—can improve your mood, coping skills, and overall adjustment.

Support Groups

Support groups offer a **safe space to share experiences** and learn from peers and guest speakers on topics related to bariatric surgery, nutrition, exercise, and emotional well-being.

Benefits of attending:

- Emotional support from others who understand your journey
- Practical advice on challenges after surgery
- Improved long-term success with weight loss and mental health

Regular participation in support groups is **strongly recommended**. See the “Before Surgery” section for current dates and times.

AFTER SURGERY: When to Call vs Going to Emergency Room

Your safety is our priority. Please use the guidance below to know when to contact our office and when to seek immediate emergency care.

Call Our Office If You Have:

- Please call 984-974-1000 and ask to page SRZ if you experience any of the following:
- Persistent nausea or vomiting that is not improving
- Difficulty tolerating liquids or concern for dehydration
- Increasing abdominal discomfort that is mild to moderate
- Reflux, heartburn, or swallowing difficulty
- Questions about medications, vitamins, or diet progression
- Redness, mild drainage, or increasing soreness at an incision site
- Low-grade fever (temperature below 101°F)
- Constipation or diarrhea that is not severe
- Any concerns that feel unusual or worrisome but are not urgent

If you are unsure whether your symptoms are serious, it is always appropriate to call our office for guidance.

Go to the Emergency Room Immediately If You Have:

- Call 911 or go to the nearest emergency room if you experience:
- Chest pain, shortness of breath, or difficulty breathing
- Severe or worsening abdominal pain
- Repeated vomiting or inability to keep any liquids down
- Signs of dehydration (very dark urine, dizziness, fainting)
- Fever 101°F or higher, rapid heart rate, weakness, or lightheadedness
- Black or bloody stools, or vomiting blood
- Sudden swelling, redness, or pain in one leg
- Signs of infection at an incision: spreading redness, pus, or severe pain
- Any symptom that feels sudden, severe, or life-threatening

Important Reminder *If you go to the emergency room, please inform the staff that you have recently undergone bariatric surgery, and ask them to contact our team if needed. After Hours: Ask to page SRZ*

Nutrition Information

NUTRITION INFORMATION:

Purpose: THIS PLAN AND THE LIFESTYLE CHANGES ARE FOR INDIVIDUALS WHO ARE PREPARING FOR OR HAVE HAD BARIATRIC SURGERY. BARIATRICS IS A SPECIALTY AREA IN MEDICINE THAT FOCUSES ON TREATING OBESITY.

Bariatric Nutrition Goals

- Follow a consistent meal pattern. Eat 3 small meals and 1-2 snacks per day
  - Do not skip meals and do not graze
  - Do not go for extended periods of time (more than 4hr) without eating
- Have protein with every meal and most snacks. Aim for 60-80 grams of protein daily.
  - Snacks should consist of healthy food choices do not snack foods
  - Think fruit and cheese vs chips and crackers
- Drink at least 64 oz of water daily
- Avoid all sugary drinks (Examples: all juices, soda, sweet tea, lemonade)
- Avoid carbonated drinks. (Examples: soda, seltzer, sparkling water)
- Practice mindful eating behavior:
  - Eat slowly, take small half-sized bites, and chew each bite 20-30 times
  - Stop eating when your stomach is satisfied and no longer hungry do not go to the point of being full
- Practice not drinking with meals, wait 30 minutes after the meal before drinking
- Start a chewable bariatric multivitamin (approved by one of the dietitians)
- Exercise – Aim for 30 minutes of activity outside of your normal routine most days of the week. Start small if you are sedentary or have limited mobility and increase as you can. Goal is 150-300 minutes of activity outside of your daily routine per week
- Keep a food journal. This will help to keep you consistent and will make tracking your protein intake easier

The Bariatric Nutrition Goals are lifestyle changes/habits patients need to practice before having bariatric surgery. These lifestyle changes/habits are what will lead to long-term success after bariatric surgery. Remember, bariatric surgery is a tool to help you lose weight. You need to put in the work by making the right food choices and getting regular exercise to be successful in the long term.

You must show progression and success with the nutrition goals prior to surgery.

We cannot approve you for surgery until you achieve these goals.

What Foods Contain Protein?

Anything that comes from an animal will count as protein.
There are some plant sources of protein as well.

Foods high in protein include:

- Chicken, turkey, beef, pork, venison, eggs – choose lean meats (avoid ribs and wings), fish, shellfish, and seafood
- Dairy products like cheese, Greek yogurt, cottage cheese, low-fat milk
- Nuts and seeds (1/4 cup daily limit) or peanut butter (2 Tbsp daily limit)
- Beans like pintos, refried beans, black beans, field peas, chickpeas, back-eyed peas, navy beans, soybeans (edamame), tofu
- Protein shakes can step in as a quick and easy meal replacement or snack when there is no time to grab something to eat. Protein shakes should have 20-30g of protein, less than 10g of sugar, and less than 5g of fat. Protein shakes count as a meal or a snack. Do not drink them with meals

For snacks, pair protein food with a fruit or non-starchy vegetable. Some good snack options would be cheese with fruit, peanut butter on apple slices, hummus and cucumbers, low fat Greek yogurt and fruit, a deli roll up (slice of deli meat and slice of cheese) or a protein shake. Non-starchy vegetables are any vegetables that are not corn, peas, potatoes, or winter squash. Stick with things like cucumbers, green beans, zucchini, Brussel sprouts, asparagus, and greens. If in doubt, ask one of the team's dietitians!

Avoid highly processed deli meats. It is meat that is ground up and molded together like bologna, salami, pepperoni, Spam, liverwurst, chicken loaf, olive loaf, Vienna sausages, treat meat, etc. It is best to avoid prepackaged deli meat and go to the deli counter to have it sliced for you. If you have high blood pressure or heart failure, it is best to limit these types of meats due to the high sodium content.

Bariatric Nutrition Goals: Why do we need to follow them?

The bariatric nutrition plan is a protein-focused lifestyle with limited carbohydrates to help you get ready for the space limitations following bariatric surgery. Carbohydrates are limited because they take up space and may prevent you from achieving your protein goal. If you sit down to a meal and start with the carbohydrates first, you will get full and not have room for the protein. Patients practice following the nutrition plan before surgery to:

- Start losing weight
- Practice the bariatric eating style of several small meals a day and learn which foods and drinks to enjoy and which ones to avoid
- “Test drive” the bariatric lifestyle to give you a chance to experience the required eating habits to follow surgery and whether this is something you can adopt long-term as a new lifestyle, and
- Demonstrate that you can follow the diet and make appropriate food choices. We want to know that you can follow the bariatric lifestyle before having surgery

After surgery, your stomach is going to be significantly smaller and the most important thing to put in that small stomach is protein-rich foods. Aim to have protein at every meal and most snacks. Most patients need 60-80g of protein each day to heal from surgery and to maintain muscle mass long term. Your protein requirement may be more likely to determine your gender and height. Since your stomach will be much smaller than the stomach you used to have, you will only be able to consume a small amount of food at any one time. This means you will have to eat several small meals per day. Aim to have some protein every 3-4 hours to reach your daily goal of 60-80g.

Drinking during a meal will take up space in your new stomach and will prevent you from achieving your protein goal. After eating your small meal, give your stomach about a half hour to start emptying out before you drink. Waiting to drink after meals will also help prevent nausea and reflux.

Patients who have had Bariatric Surgery report that instead of feeling "full" after eating, they can tell they should stop eating when they feel pressure in the chest at the top of the stomach. Patients have learned that when they feel that pressure, one more bite will overfill their stomach and make them uncomfortable or nauseous. If you overfill your stomach, you will throw up.

How to Track Protein Intake?

Most patients will need 60-80g of protein each day to support their muscle mass and lose weight safely. Your dietitian will let you know if you need a higher amount, based on your gender/height. During rapid weight loss after surgery, eating 60-80g of protein will help protect your muscle mass and keep you in your best health. Most everything in your body that is not fat, or bone is made of protein! Eating enough protein along with your multivitamin may also help prevent hair loss.

Tracking your protein intake will help you gauge whether you are getting 60-80g of protein daily. No need to look up any fruit, vegetables, or carbs/starchy foods since these contain little to no protein. You can use a notebook to keep track or alternatively you may try an app like My Fitness Pal or Baritastic to help track protein intake.

- one ounce of cooked meat/fish/poultry contains 7g of protein,
- a large egg has 6g of protein, an extra-large egg has 7g,
- 2 Tbsp peanut butter or 1/4 cup of nuts has 7g of protein,
- 1/2 cup of pinto beans has 7g of protein,
- 1 ounce of cheese has 7-8g of protein (about the size of a pair of dice, 1/4 cup shredded cheese or one deli slice of cheese)
- If you do not have a food scale, you can estimate the amount of protein in meat by comparing it to the size of a deck of playing cards; the size and thickness of a deck of cards represents about 3 ounces of meat, or (7g x 3oz) 21g of protein

It is important to meet your protein goal and not consistently exceed it as this may slow weight loss.

Practice Mindfulness

Practicing mindful eating will help avoid overfilling your new stomach after surgery.

Mindfulness is:

- **Eating slower**, put your fork down in between bites and try to take 20-30 minutes to eat your small meal
- **Take smaller bites**, or about a half forkful at a time. Some patients use child sized utensils to help them downsize their bite
- **Chew** each little bite 20-30 times, until it becomes liquid mush. A benefit of chewing your food well is that you will not need to drink during meals. Patients also state they eat less because they get tired of chewing
- **Stop eating when you are satisfied.** You are looking to feel satisfied and not hungry vs going to the point of feeling full. It takes your stomach about 15-20 minutes to tell your brain that it has food in it. If you eat slowly and stop when your stomach is no longer hungry, in 20 minutes you will feel satisfied

Hydration: Drink plenty of fluids

Drinking plenty of fluids will help you stay hydrated. We recommend patients drink at least 64 oz of water every day unless your doctor has placed you on a fluid restriction for medical reasons. Try to drink mostly water, but you may also add sugar-free flavor packets to water. Beverages like POWERADE Zero, Gatorade Zero, sugar-free Natures Twist, and others are allowed if they are non-carbonated and sugar-free.

Staying well hydrated will also help prevent constipation. The body needs water to run metabolism, but when people do not drink enough, the body will use your large intestine as a reservoir and pull water from your stool causing constipation.

Eating a high protein diet with little fiber and taking pain medications after surgery may also contribute to developing constipation. Many patients will work to avoid constipation by taking a daily stool softener and/or powdered fiber like MiraLAX or Benefiber after surgery. Using a fiber-enriched protein shake is another option to increase dietary fiber.

Sometimes people think they are hungry but are thirsty. Practice sipping on water throughout the day to stay hydrated except during meals and 30 minutes after eating. Please do not use straws - they will cause you to drink too much, too fast!

Avoid all caffeine for 2 weeks after surgery. You can begin drinking caffeinated coffee again 3 weeks after surgery. Caution with cow milk. Many people become lactose intolerant, suitable alternatives include fat-free lactose-free ultra-filtered milk (e.g., Fairlife), sugar-free almond milk, or sugar-free oat milk.

Sugar-free ice pops/popsicles and Jell-o are allowed at any time after surgery. Aim for less than 2g of sugar per serving in the fruit ice pops.

Adopt a Regular Exercise Routine

There is an enormous difference between physical activity and exercise. Physical activity are the things we do every day to increase activity (taking the steps vs the elevator, parking farther away, playing with your children). Exercise is that time you designate an activity outside your daily routine. This would include going for a walk, working out at the gym, or participating in exercise videos. You want to increase your heart rate. A good measure would be the "talk test." If you can carry on a lengthy conversation, the exercise needs to be more intense. If you cannot talk at all, it is too intense. Aim for somewhere in the middle where you could have a short conversation with someone, but nothing lengthy.

Continuous, non-interrupted aerobic exercise like walking, biking, swimming, using a treadmill and/or elliptical will help create a calorie deficit that will lead to weight loss. Strength training with weights or resistance bands will help strengthen and build muscle, which will also help create a calorie deficit. The goal is 150-300 minutes of moderate level activity that is outside of your daily routine per week.

Exercise is necessary to maximize your weight loss and overall general health. Patients who lose the most weight after bariatric surgery are exercising regularly (most days of the week) and following an overall healthy diet.

Reading Nutrition Food Labels

Learning to read nutrition food labels will help you easily decide whether the protein shake, or bag of trail mix you are contemplating buying in the grocery store fits within your goals. **Choose food and drinks having less than 10g of sugar and 5 or less grams of fat.**

The information on a Nutrition Facts label represents the amount in 1 serving. If you eat more or less than the serving size, you will have to adjust accordingly. For example:

1 cup of this product = 160 calories.
2 cups of this product = 320 calories.
1/2 cup of this product = 80 calories.

The same is true for all values listed on the label.

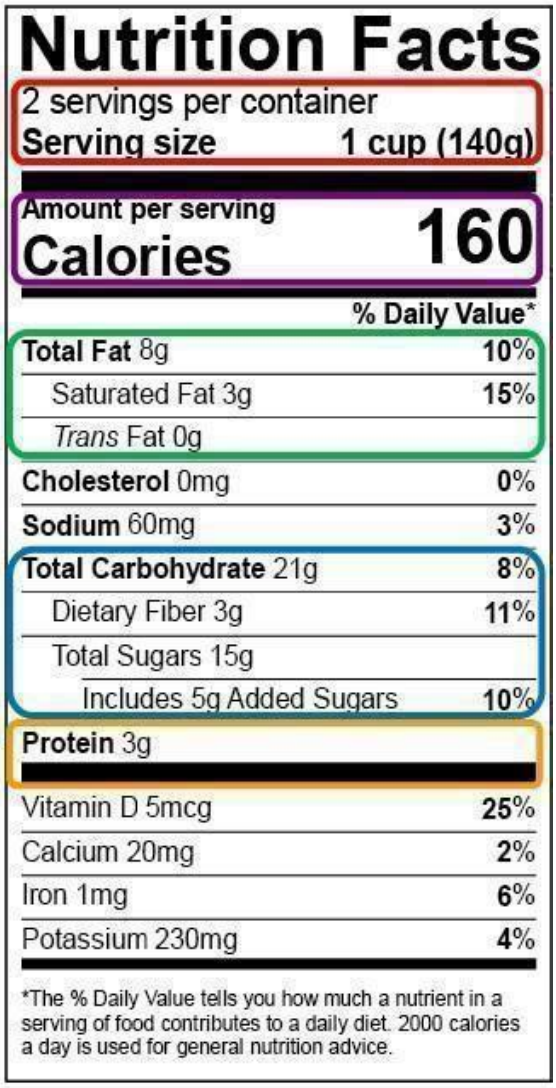
Calories per serving can help you determine how an item may fit into your plan. Generally, most patients need 800-1200 calories/day depending on activity level.

Fat is very high in calories and should be limited to 30-40g of Total Fat per day. Saturated and Trans Fats should be limited as much as possible due to their negative effects on heart health.

Total Carbohydrate: Limit to 15-30g per meal
Total Fiber: 25-30g/day
Total Sugars: less than 5g per serving
Sugar Alcohols (not pictured in this example)

- They have less calories than sugar, but too many can cause diarrhea. Use Caution!

Focusing on **protein** intake is a must! The general recommendation is 60-80g/day. If you eat 6 times per day, that is at least 10g of protein at each meal/snack. You may need more, which your Registered Dietitian can help you figure out.



Protein Shakes and Supplements

For the first few months after surgery, most patients need at least one protein drink per day to help reach their 60-80g protein target each day. You will also need a protein shake for the pre op diet and immediately post-op to meet your protein goals. Tips for picking a good option:

- Choose a protein shake that provides at least 20g of protein and under 200 calories
- If you are lactose intolerant, look for a protein powder with whey protein isolate as the only protein source or choose a plant-based option
- Flavored, unflavored, and even clear liquid protein shake options are available
- Ready-made protein shakes will be more expensive than making them yourself
- To make your own protein shakes, combine your choice of protein powder (whey or plant based) with either water, low-fat/fat free dairy milk, or unsweetened almond milk.
- Do not add additional fruits like bananas and berries. Keep it basic.

As a general guideline, choose a protein supplement with:

- **at least 20g of protein,**
- **less than 10g of carbohydrates**
- **5g of fat or less**

Premade Shake Options:

- **Premier Protein Shakes** – 30g protein, 160 calories
- **Ensure Max/Boost Max** – 30g protein, (150-160) calories (must be **MAX**)
- **Fairlife Shakes (Core Power, Nutrition Plan, Elite)** – 26-42g protein, 150-230 calories
- **Shamrock Farms Rockin' Protein** – 30g protein, 190 calories
- **Nurri** – 30g protein, 150 kcals
- **GNC Total Lean shake** – 25g protein, 170 calories, 3g fiber
- **Walmart Equate Protein Shake** – 30g protein, 170 calories
- **Quest Protein shake** – 30g protein, 160 calories
- **Oikos Pro** – 23g protein, 120 calories
- **Chobani Protein drinks –** 15-30g protein, 120-230 calories

Protein Powder Options:

- **Body Fortress Super Advanced Whey Powder** – 30g protein, 180 calories
- **GenePro Whey Powder** – 11g protein, 44 calories/1 scoop (unflavored)
- **Optimum Nutrition Gold Standard Whey** – 24g protein, 120 calories/1 scoop
- **GNC 100% Whey Protein Powder** – 24g protein, 150 calories/1 scoop
- **Pure Protein Natural Whey Powder** – 25g protein, 160 calories/1 scoop
- **Isopure Low Carb Protein Powder** – 25g protein, 110 calories/1 scoop
- **Walmart Equate Whey Protein Powder** – 30g protein, 180 calories/1 scoop
- **Clean Simple Eats** – 20g protein, 110 calories/scoop
- **Orgain Organic** (plant-based powder) – 21g protein, 150 calories/2 scoops
- **Owyn** (plant based powder) **–** 20g protein, 140 calories/2 scoops
- **Isopure Infusions** – 20g protein, 90 calories/1 scoop
- **Seeq Clear Protein Powder** – 22g protein, 100 calories/1 scoop

Bariatric Multivitamins and Supplements

Bariatric surgery increases your risk for vitamin deficiencies due to a significant decrease in food intake, limited consumption of fruits and vegetables, and potential malabsorption pending surgical procedure. **You will need to take a bariatric multivitamin for the rest of your life.** It is extremely important that you take a correctly formulated bariatric multivitamin to avoid developing nutrient deficiencies. There are many different bariatric multivitamins out there on the market. We follow the American Society for Metabolic and Bariatric Surgery (ASMBS) guidelines to ensure you receive adequate vitamin and mineral supplementation after undergoing bariatric surgery. Not all vitamins labeled "bariatric" follow the ASMBS criteria. Please choose a vitamin from the options we have provided or contact one of the team dietitians for help with choosing a correctly formulated vitamin.

While you are healing, vitamins should be chewable or liquid. We recommend liquid or chewable vitamins for 6 months after gastric bypass and 3 months after gastric sleeve. After that you can switch over to a capsule. Gummy multivitamins and children's vitamins are not recommended.

Below is a list of multivitamins that meet the ASMBS guidelines. It is worth looking at getting samples from a variety of companies. Vitamins may be purchased from the company website or Amazon.

Name of Multivitamin	Amount per Day	Additional Supplements	Where to Purchase
Bariatric Advantage Ultra Solo	1	Calcium	bariatricadvantage.com
Celebrate ONE 45	1	Calcium	www.celebratevitamins.com
Bariatric Fusion Multivitamin	1	Calcium	www.bariatricfusion.com
Bariatric Pal Multivitamin ONE	1	Calcium	www.store.bariatricpal.com
Procare Bariatric Multivitamin 45	1	Calcium	www.procarenow.com
Barimelts Multivitamin with iron	2	Calcium + iron	www.barimelts.com
Bariatric Fusion Multivitamin Complete	4		www.bariatricfusion.com
Celebrate Essential Multi 3 in 1 *	2	Iron	www.celebratevitamins.com
Celebrate Essential Multi 4 in 1 **	2	Iron	www.celebratevitamins.com

* Drink mix- will need 2 scoops

** Drink mix with 25g protein- will need 2 scoops

If you want to take a multivitamin not on the list, ask one of the team's dietitians if it meets ASMBS guidelines before buying it.

Some of the multivitamins on the chart are 1-a-day, 2-a-day, or 4-a-day. The 4-a-day multivitamins deliver complete nutrition without the need for additional supplementation. The 1-a-day and 2-a-day multi will require a chewable calcium supplement and/or iron.

Tips for choosing a bariatric multivitamin:

1. To narrow down your search, start with the second column in the chart named "Daily Amount." Ask yourself what plan you would be most consistent with.
2. Again, it is worth ordering samples from the different bariatric vitamin companies to find one that tastes good to you before ordering an entire month's supply.
3. Begin taking the bariatric multivitamin 2 weeks prior to surgery when you start the preop diet.

Calcium Supplements

If you choose a 1-a-day or a 2-a-day bariatric multivitamin, you will have to supplement it with calcium.

- You will need 1200-1500 mg daily
- Calcium citrate is preferred. If your calcium supplement contains calcium carbonate, take it with a meal
- Calcium is best absorbed when spread throughout the day
- Do not take iron and calcium at the same time. Separate by 2 hours

Type	Daily Amount
Bariatric Advantage Calcium Chewy Bite	2-3 per day
Celebrate – Calcium plus 500, Chewy Bite	2-3 per day
Bariatric Fusion Soft Chews	2-3 per day
Bariatric Pal Soft Chews	2-3 per day
Viactiv chews (calcium carbonate)	2 per day
Wellesse Liquid Calcium	2 Tbsp.

Iron Supplements

- Check your multivitamin. Some multivitamins already contain your daily dose of iron.
- After bariatric surgery, women will need 45 mg and men need 18 mg of iron daily.
- Failure to take the required iron may lead to anemia and require an iron infusion.
- Do not take iron and calcium at the same time. Separate by 2 hours.
- If you need additional iron, some options include:
    - Bariatric Advantage Chewable
    - Celebrate Vitamins Chewable
    - Wellesse Liquid Iron

American Society for Metabolic and Bariatric Surgery (ASMBS) Guidelines for nutrition supplementation following Bariatric Surgery:

Type	Amount
Multivitamin NO GUMMIES	200% DRI for most nutrients Should also contain: • Thiamin – at least 12 mg • Folate – 400-800 mcg • Zinc – 8-22 mg • Copper – 2 mg • Magnesium • Selenium
Calcium	1,200-1,500 mg per day
Vitamin A	5,000-10,000 IU per day
Vitamin D	3,000 IU per day
Iron	Males: 18 mg per day Females: 45-60 mg per day
Vitamin B12	350-1,000 mcg per day (sublingual)

Nutrition Resources

- The Emotional First + Aid Kit: A Practical Guide to Life after Bariatric Surgery by Cynthia L. Alexander, PsyD
- 50 Ways to Soothe Yourself without Food by Susan Albers, PsyD
- http://www.obesityaction.org Your Weight Matters Magazine and other resources on obesity
- www.bariatricfoodie.com
- Obesityhelp.com

Contact the UNC Bariatric Dietitians via MyChart

Nutrition Education Class

BARIATRIC NUTRITION EDUCATION CLASS

Purpose: THE BARIATRIC NUTRITION CLASS IS A REQUIRED ELEMENT OF THE PROGRAM. THE CLASS COVERS THE PRE-SURGERY DIET BEFORE BARIATRIC SURGERY AND THE 5-STAGE DIET PROGRESSION AFTER SURGERY WHILE YOUR STOMACH IS HEALING.

Pre-Surgery Diet ("Liver Shrink Diet")

You will follow a 14-day pre-surgical diet. The surgeons require patients to follow this liver shrink diet so that they can easily get behind your liver to operate on your stomach with laparoscopic instruments. The diet is high in protein and very low in carbs. If you are diabetic, watch your blood glucose levels closely - check your blood sugar 4 times a day. You may need to reduce insulin dosage.

1. **Choose a protein supplement:** Choose one that follows the rules**.** If you are making your own shakes, keep it basic – protein powder and liquid only.

   Recommended guidelines for protein shake:

Calories	Protein	Carbohydrates	Fat
Less than 200 calories	20-30g	Less than 10g	5g or less

2. **Drink 2-3 protein shakes every day**

3. **Eat only 1 small meal consisting of:**
   - 4-6 oz. protein: poultry, fish, lean pork, lean beef, shrimp, tofu,3 eggs
   - 1 cup of non-starchy vegetables
     Non-starchy vegetables are any vegetables you enjoy except starchy ones like potatoes, corn, and sweet green peas.
   - The timing of the meal is not important. It is your choice whether it is breakfast, lunch, or dinner.

   Examples of non-starchy vegetables:
   Asparagus, Broccoli, Brussel Sprouts, Cabbage, Cauliflower, Celery, Cucumbers, Eggplant, Greens, Green Beans, Lettuce, Kale, Mushrooms, Okra, Onions, Peppers, Radishes, Spinach. Squash, Zucchini

4. **Avoid all high carbohydrate foods like:**
   Fruit, Bread, Pasta, Rice, Potatoes, Corn, Peas, Cereal, Grits, Oatmeal, Sweet potatoes Optional: Sugar free Jell-O or ice pops, but **not** pudding.

5. **Stay well hydrated.** Aim for 64oz of fluid daily.
   - Choose water or sugar-free, non-carbonated beverages.
   - Water, Crystal Light, sugar free beverages (flavored waters, Gatorade Zero, PowerAde Zero, etc.), low sodium broth, decaf coffee, hot tea, unsweetened tea
   - Do not add sugar, agave, or honey to your beverages. Artificial sweeteners like stevia, Splenda, and Equal are okay.

6. **Begin taking your BARIATRIC chewable multivitamin** when you begin the Pre-surgery diet.

Diet Progression Stages After Surgery

This diet is a progression of food textures the stomach can tolerate after surgery. As your stomach heals, it will slowly be able to tolerate a wider range of food textures.

Stage 1: Clear Liquids- while in the hospital

- Once your doctor says it is okay, you will be given small amounts of sugar-free/non-carbonated beverages. You will start by sipping 1 ounce per hour and slowly increase it to 3 ounces per hour by the end of the day
- Clear liquids include water, broth, sugar-free Jell-O, sugar-free popsicles, caffeine-free unsweetened teas, and sugar-free drink mixes (Crystal Light)
- To prevent nausea and vomiting, take small sips, and do not gulp. **Drink slowly!**

Stage 2: Protein Shakes – for 10 days after discharge from the hospital

- Once you can tolerate 3 ounces of clear liquids an hour, you will start to drink protein shakes**.** You will go home on protein shakes. You should also drink plenty of clear liquids to stay hydrated. Drink 3-4 oz of fluid (combination of shakes and liquids) every hour while you are awake
- ***TRACK YOUR PROTEIN INTAKE!***
- Protein shakes are your best choice during this phase and are the easiest way to meet your protein goal
- Do not drink juice or other sugar sweetened beverages (soda, sweet tea, Kool-Aid, regular Gatorade/POWERADE). Beverages should have less than 5 calories per serving
- **Do not add sugar, honey or agave** to foods and beverages. It is okay to add sugar substitutes such as Splenda (sucralose), Stevia, or Equal (aspartame)

Your goal is to drink 32-36 oz of water plus enough protein shakes to get 60-80g of protein for women and 80-100g for men. Please stick to this plan for 10 days once you are home.

DAILY GOALS:
PROTEIN: 60-80g/day
FLUID: 32-36oz/day

Stage 3: Pureed Foods: (1-2 weeks)

- **START ON DAY 11**
- **Pureed (blenderized) foods** should have no lumps or bumps. Nothing you should have to chew. You should be able to put pureed foods in your mouth and swallow them
- Eat 5-6 small meals per day. Plan to eat every 3 hours
- Meal size will be no bigger than ¼ cup
- TRACK YOUR PROTEIN AND FLUID!

- Do not skip meals. You may not be hungry. Eat by the clock
- Eat slowly and take small bites. Stop eating before you feel full. If you keep eating, you may have pain, heartburn, or vomiting
- **Do not eat and drink at the same time.** Wait 30 minutes after eating your small meal to begin drinking small amounts of liquids

High-Protein Pureed Food Options: Use a blender/food processor for eggs, soups, stews, and beans.

- Light or Greek style yogurt with no fruit chunks (there is more protein in Greek yogurt)
- Small curd cottage cheese or low-fat ricotta cheese
- Pureed eggs
- Pureed soft tofu
- Refried beans (low fat or nonfat), pureed beans, or pureed bean soup
- Pureed meats or fish (poultry, tuna fish) – baby food meat is best
- Pureed soups and stews (should be protein based, add protein powder if needed)
- Pureed vegetables plus unflavored protein powder

DAILY GOALS:
PROTEIN: 60-80g/day
FLUID: 64oz/day

Foods to Avoid:

- Applesauce and baby food fruit
- High carbohydrate foods like mashed potatoes, grits, and oatmeal
    - These foods are low in protein.

Other tips:

- Include a **protein** shake to help you reach your protein goal
- **Add protein** by stirring protein powder into pureed food choices
- **Add moisture** to dry foods with small amounts of gravy, broth, or milk

Sample Meal Plan for Stage 3 - Pureed

Breakfast	Snack	Lunch	Snack	Dinner	Snack
¼ cup pureed eggs	¼ cup cottage cheese	¼ cup pureed chicken salad	¼ cup pureed beans with melted cheese	¼ cup Greek yogurt	¼ cup pureed tuna salad

Stage 4: Soft and Moist Foods: (1-2 weeks)

- You can now start eating **soft-solid, moist foods**. Foods should be soft enough to cut with a fork
- Take small bites. Chew food well. Eating slowly will help you to know when to stop, so you do not overfill your stomach. A meal should last about 20 minutes
- Keeping a food journal can help you to track your protein and tolerance of foods
- Eat 5-6 times per day on a set schedule. Meals will be small (¼ - ½) cup
- Eat protein-rich foods first. Vegetables second. Fruit and carbohydrates last
- Protein shakes can help you meet your protein goal

DAILY GOALS:
PROTEIN: 60-80g/day
FLUID: 32-36oz/day

Good soft-solid protein options are:

Food	Serving Size	Protein per Serving
Beans (black, pinto, navy, etc.) & Lentils	½ cup	6-9 g
Cheese, most types (except cream cheese)	1 oz.	7g
Cottage & Ricotta Cheese	½ cup	14g
Deli meats (chicken, turkey, ham, roast beef)	1 oz.	7g
Edamame (soybeans), shelled	½ cup	14g
Eggs	1	6g
Fish & Shellfish (shrimp, crab), cooked	1 oz.	7g
Meats – ground beef, turkey, chicken	1 oz.	7g
Peanut butter (smooth)	1 Tbsp.	4g
Tofu	¼ cup	5
Greek Yogurt	1 container (5.3 oz.)	10-15g

oz. = ounce; cooked ounces for meat, fish, and poultry are a weight

Foods to Avoid:

- Starchy foods such as bread, cereal, crackers, potatoes,pasta, rice, chips, grits, and snack foods. Some of these foods are poorly tolerated and some are easy to overeat
- Be careful with raw fruits and vegetables, nuts, and tough meats like steak and pork as they may get stuck
- Foods high in sugar and fat may cause dumping syndrome. Be mindful of your food choices

Sample Meal Plan for Stage 4 – soft and moist foods

Breakfast	Snack	Lunch	Snack	Dinner	Snack
1 egg with cheese	½ cup cottage cheese	½ cup chicken salad	½ cup Greek yogurt	1-2 oz. fish with ¼ cup broccoli	1 oz. cheese

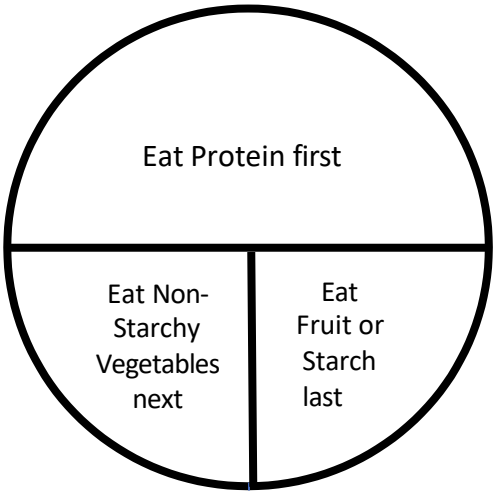
Stage 5: Regular-textured Foods

This will start about 6-8 weeks after surgery. Slowly add fresh fruit and vegetables, nuts and tougher meats like beef and pork, as tolerated. These important guidelines will help you continue to lose weight and stay healthy.

General Guidance

- Eat 5-6 times per day – every 3 hours
- You may need to set a timer or alarm clock to help remind you when to eat
- Eat slowly! It should take you about 20 minutes to finish a meal
- Be sure to take small bites and chew well
- Eat protein first, followed by a non-starchy vegetable
- Use small bowls and plates to help with portion control
- Listen to your stomach and stop eating when you are satisfied vs full
- Read food labels
- Keeping a food journal will help you track your protein intake, as well as identify any food that bothers you or causes problems

The Bariatric Plate



Hydration

- Aim to drink **64 oz** of sugar free, non-carbonated, caffeine free fluids daily
- Do not drink while eating and wait 30 minutes after the meal before drinking

Protein

Following Bariatric Surgery, it is important to eat enough protein. You should aim to eat a **minimum of 60-80 g** of protein per day. Be careful that you do not regularly exceed the upper protein limit because excessive amounts of protein can slow weight loss.

Protein is best absorbed when spread evenly throughout the day. If you are eating 5-6 small meals per day, aim for at least 10-12g of protein at each meal/snack. Do not eat or drink more than 30g of protein in a single sitting.

Sample Meal Plan

Breakfast	Snack	Lunch	Snack	Dinner	Snack
1 egg with cheese	½ cup cottage cheese with ¼ cup fruit	½ cup chicken salad with cucumber slices	½ cup Greek yogurt with ¼ cup almond	2-3 oz. fish with a small tossed salad	1 oz. cheese

Weight loss plateaus

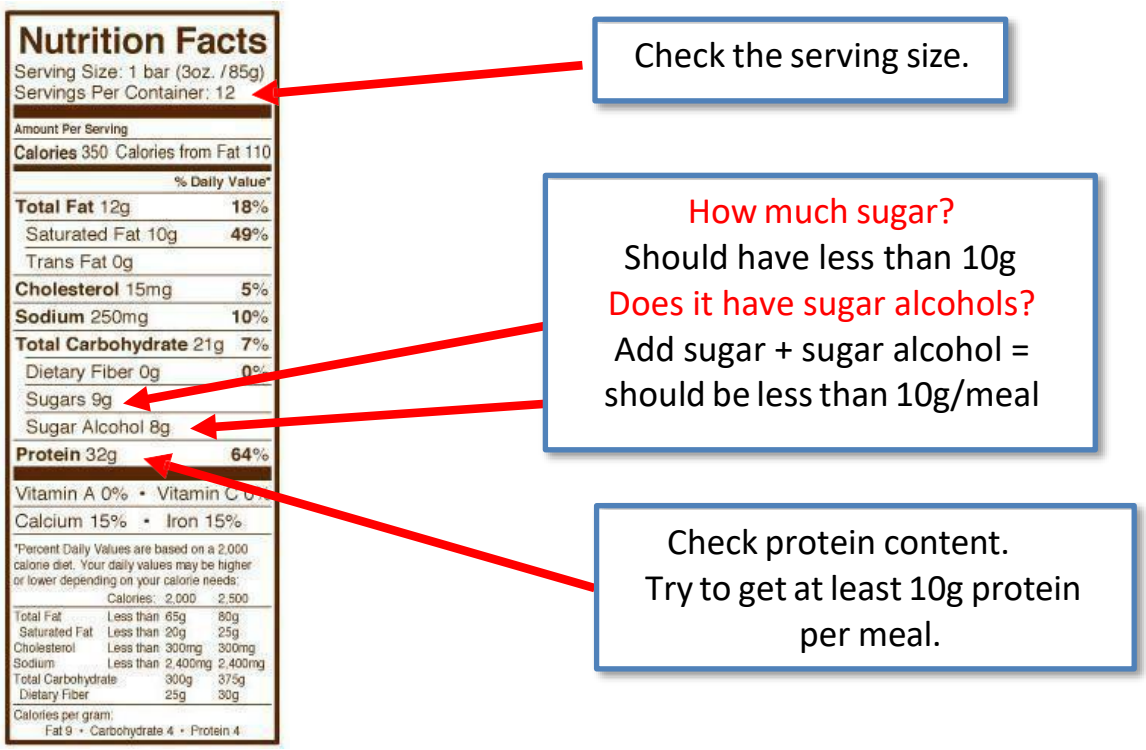
If weight loss begins to stall after a few or more months after surgery, check to make sure you are not eating excessive amounts of protein. You have already lost a significant amount of weight, and your body is not working as hard to move around with activities of daily life. To restart your weight loss progress, you will have to increase exercise to help your body burn more calories.

Foods to Limit or Avoid

- Foods high in sugar and/or sugar alcohols can trigger Dumping Syndrome
- Some starchy foods can swell up in the stomach andcause pain and discomfort
- Crunchy snack foods like crackers, popcorn, and chips are typically easy to eat and potentially overeat. Overeating will slow your weight loss progress or lead to weight regain
- Liquid calories like juice, sweet tea, coffee drinks are high in sugar and are a "sneaky" way
  to drink far too many carbs and calories. Sweetened drinks can also cause Dumping Syndrome

Reading Food Labels to Avoid Dumping Syndrome

Read food and drink labels to limit sugar and sugar alcohols that may trigger Dumping Syndrome.



Next Steps Leading to Bariatric Surgery

The next steps after completing the Bariatric Nutrition Class are:

- An appointment with the program psychologist for evaluation. This will be scheduled by the team.
- A follow-up with the dietitian (RD) to assess readiness for surgery. This will also be scheduled by the team. The RDs (Registered Dietitians) are looking at whether patients have accomplished the goals set at the initial visit and have been able to maintain compliance with those goals. Once determined you have been successful with the goal and understand the nutrition class material, the dietitian can grant RD clearance for surgery
- A follow-up with Tara Zychowicz, NP, to assess the completion of medical requirements, labs, and tests. The patient will need to schedule this appointment once they know the timeline for the previous steps (medical testing, nutrition class, psych eval, RD follow-up after class)
- After insurance approves the surgery, the patient will meet with their surgeon to book a date for surgery
- Remember to start the Pre-surgery diet and start taking your bariatric multivitamin 2 weeks before surgery

Keys for Weight Loss Success:

1. **A lifelong commitment**
   Bariatric surgery gives patients the physical tools to assist with weight loss, but patients must be committed to making the mental and emotional changes necessary after Bariatric Surgery to increase potential successful weight loss. This commitment will also help with long-term weight maintenance.

   Patients undergoing Bariatric Surgery must be committed to taking vitamins and supplements, healthy eating, office follow-ups, exercise, and support group attendance for life. Your emotional and physical well-being depends on this commitment. Learn from your surgery team what is expected of you and make a lifelong commitment to maintain your well-being.

   Lack of exercise, poorly balanced meals, constant grazing, eating processed carbohydrates, and drinking carbonated beverages are common causes of regaining weight after surgery. You will need to manage your food intake and exercise for the rest of your life.

2. **Personal responsibility**
   Patients who commit to eating healthy foods, taking the required supplements, having routine blood work drawn, and incorporating an exercise program into their lifestyles have increased potential for the best long-term results.

3. **Balanced nutrition**
   Adhering to healthy nutrition after weight loss is essential for long-term success and weight maintenance. Incorporating all the food groups according to the American Dietetic Association guidelines is a place to begin for good health.

4. **Support groups**
   Support groups are an integral part of the healing process, physically and emotionally. All patients are encouraged to incorporate a support group into their monthly schedule.

5. **Exercise**
   In a reduced caloric state, the body's natural tendency is to use muscle for immediate energy needs. Therefore, it is essential to incorporate a fitness program after surgery. Exercising at least 5 days/week concerns lean muscle mass, burns fat, and increases your potential for long-term success.

6. **Vitamins, minerals, and protein supplements**
   Because Bariatric Surgery changes the digestive process, lifelong nutritional supplements are essential.

   Vitamin deficiencies are often predictable and preventable. Take your vitamins and supplements and commit to seeing your surgical team on a regular basis for lab work and follow-up.

Bariatric Surgery Commitment:

(A copy of this document will be retained in the patient's medical record.)

I, _____, do hereby commit to taking the following steps to increase my chance of weight loss success:

1. I will remain focused on maintaining a healthy lifestyle, which includes regular exercise and activity.
2. I will adhere to the nutrition guidelines and portion sizes outlined by my surgery team.
3. I will be diligent in recording and tracking my eating habits, exercise, and weight loss.
4. I will attend my follow-up appointments and be open and honest with my surgical team.
5. I will remember that successful weight loss is an ongoing effort and commitment, and that I recognize that while there may be tough times and challenges, I can overcome them with the support of my physician, my family, and my friends.

I understand that failure to comply with the recommendations may prevent me from having revisional bariatric surgery, unless medically necessary.

_____	_____	_____
Signature	MRN	Date

_____

Witness