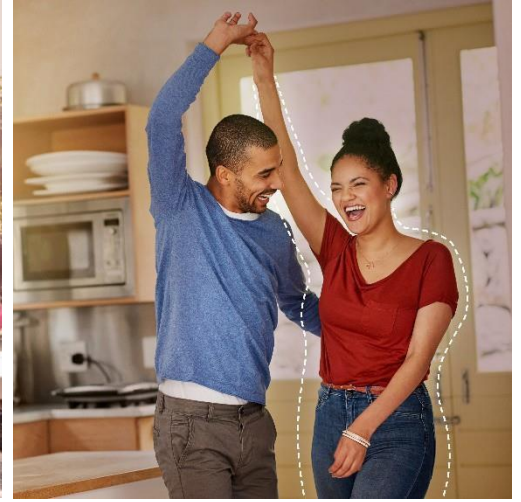
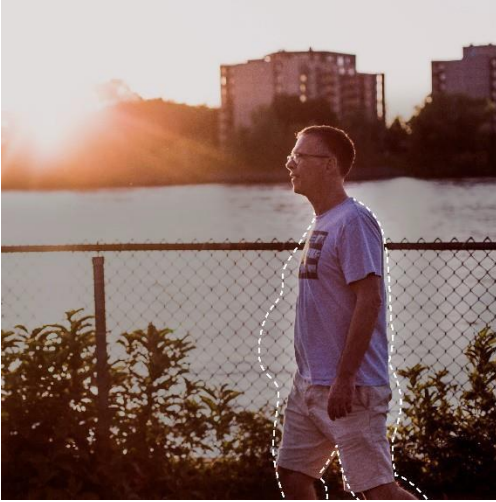


UNC BARIATRIC SURGERY

A Guide to Surgical Weight Loss



Everything

TO GAIN.



SCHOOL OF MEDICINE
Surgery

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- Favorite person from history?
- Make of your first car?

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Important COVID-19 Updates:

Nutrition Class will vary based on availability and maybe scheduled as a 1:1 visit, in person group visit, or virtual group visit

NP visits are being conducted in person and via telehealth using the Doximity app

Psychology visits are being conducted via telehealth using UNC MyChart or Phone

Labs should be drawn at a UNC Health facility

In person support groups are on hold indefinitely

Groups are conducted via Zoom:

ID: 348 693 8360

Pass code: 054 840

Meeting held at 6pm on 1st Monday of each month, unless a holiday

SCHEDULING CONTACTS

Bariatric Nurse Practitioner:

Name	Location	Phone	Clinic Day/s
Tara Zychowicz	UNC Memorial Hillsborough	984-974-0150 984-215-3500	Tuesdays Mondays Wednesdays Thursdays Fridays

Dietitians:

Name	Location	Phone	Clinic Day/s
Susan Strom	Hillsborough	984-215-3500	Mondays Wednesdays Thursdays Fridays
Peggy Wroblewski	UNC Memorial Hillsborough Eastowne	984-215-3500 984-974-2950 984-215-3500	Tuesdays and Wednesdays Thursdays Fridays

Group Nutrition Class:

Name	Location	Phone	Clinic Day/s
Nutrition Class	Hillsborough	984-215-3500	1 st & 3 rd Friday of the month

Class is 2pm-3pm; arrive by 1:45pm. Bring a pen and this informational binder with you.

Psychologists:

Name	Location	Phone	Clinic Day/s
Dr Peat	Vilcom	984-974-5217	Mondays and Thursdays
Dr Forneris	Hillsborough	984-215-3500	Mondays and Wednesdays

To schedule your initial evaluation, please call the centralized number at 984-974-6519

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: _____

(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: _____

Body Fat Percentage: _____

Blood pressure: _____

Pulse: _____

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

BARIATRIC SURGERY CHECKLIST

USE THIS CHECK LIST TO MAKE SURE YOU HAVE EVERYTHING IN ORDER FOR SURGERY.



Insurance

- CALL YOUR INSURANCE COMPANY AND VERIFY BARIATRIC SURGERY COVERAGE
 - CPT 43644: ROUX-EN Y GASTRIC BYPASS
 - CPT 43755: SLEEVE GASTRECTOMY

Appointments

Supervised Diet (if applicable)

- NOT REQUIRED
- 3 MONTHS
- 6 MONTHS
- 12 MONTHS

Visit 1: _____

Visit 2: _____

Visit 3: _____

Visit 4: _____

Visit 5: _____

Visit 6: _____

Visit 7: _____

- TEAM VISIT: DIETITIAN AND NP
1:1 INITIAL APPOINTMENT
DATE _____

- ONE GROUP NUTRITION CLASS BEFORE SURGERY
DATE _____

- MEET WITH PSYCHOLOGIST
NAME _____
PHONE _____
DATE _____

- DIETITIAN AND NP
1:1 FOLLOW UP APPOINTMENT
DATE _____
DATE _____

- LAB WORK
DATE _____

- EGD (ENDOSCOPY) **984-974-5050** TO SCHEDULE
DATE _____

- ADDITIONAL TESTING, AS NEEDED

SLEEP STUDY:
DATE _____

EKG:
DATE _____

CXR:
DATE _____

OTHER/CLEARANCES:

Support Group

- ATTEND AT LEAST TWO SUPPORT GROUP MEETINGS
DATE _____
DATE _____

- JOIN OUR FACEBOOK PAGE

[UNC WLS Support Group \(it is a closed group\)](#)

AFTER BARIATRIC SURGERY CHECKLIST

USE THIS CHECK LIST TO MAKE SURE YOU MAKE ALL OF YOUR REQUIRED FOLLOW UP APPOINTMENTS.
It is your responsibility to call and schedule these appointments.



Appointments

2-3 WK POSTOP WITH SURGEON
DATE _____

6WK POSTOP WITH DIETITIAN
DATE _____

3MTH POSTOP WITH NP
DATE _____

6MTH POSTOP WITH NP AND DIETITIAN
DATE _____

1YR POSTOP WITH SURGEON OR NP AND DIETITIAN
DATE _____

18MTH POSTOP WITH NP OR DIETITIAN
DATE _____

2YR POSTOP WITH MED OBESITY MD OR PA
(AS RETURN IF ESTABLISHED; AS NEW IF NOT ESTABLISHED)
DATE _____

3YR POSTOP WITH MED OBESITY MD OR PA
DATE _____

4YR POSTOP WITH MED OBESITY MD OR PA
DATE _____

5YR POSTOP WITH MED OBESITY MD OR PA
DATE _____

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NUTRITION BEFORE SURGERY

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General Information

GETTING STARTED

Welcome!

Obesity affects every aspect of your life, both the physical and emotional. If you struggle to lose weight with diet and exercise, weight-loss surgery may work for you. To make a lasting change, rely on the support of our expert team in Chapel Hill at UNC Health Care.

The comprehensive bariatric weight-loss program with UNC Weight Loss Surgery is centered around education and support. This finely tuned program is designed to give you all the information you need to take the next step:

- Information seminar
- Provider consultation
- Nutritional counseling
- Psychological consultation
- Sleep study
- Support groups

Studies have shown that weight-loss surgery can lead to better health, which in turn leads to a higher quality of life and increased lifespan. So, please let us tell you about the options for Weight Loss Surgery and the benefits of UNC's highly personalized approach.

Our Program Accreditation

Our program is designated a *Center of Excellence by the American College of Surgeons* as well as carrying the *Blue Cross Blue Shield Center of Distinction*. We have performed hundreds of successful bariatric procedures that have been complemented with a full range of personalized lifestyle and lifelong support programs, from ongoing education to customized exercise and nutrition programs designed by some of the leaders in bariatric medicine. Our multidisciplinary team works together to ensure you have the greatest chance of success in changing your life through bariatric surgery and weight management.

Team Approach

Our program is built on providing you with the support you need to find a healthier life. To accomplish this goal, we assembled a diverse team of experts:

- Board-certified Bariatric Surgeons
- Licensed Psychologist
- Registered Dietitians

Additionally, our friendly staff is here to help you navigate our program and the insurance coverage process if you have questions.

Weight loss results may vary depending on the individual. There is no guarantee of specific results.

TEAM VISIT

Welcome to your first visit with the Bariatric Surgery team.

Today will include...

- A video describing bariatric operations and the process at UNC
- A first appointment with our Dietitian
- A first appointment with our Nurse Practitioner
- Lab work (you do not need to be fasting)
- Drug and nicotine screen

We will then organize future visits, where you will complete:

- An Endoscopy
- A required Group Nutrition Class
- An evaluation by our Psychologist

Additional monthly visits with either your primary care doctor or our providers, to complete any supervised diet IF it is required by your insurance company

*Completing these appointments does not guarantee approval for bariatric surgery.
In addition, you will need:*

- Clearance from each provider mentioned above
- A final appointment with the NP and the RD in the clinic before we submit your case for insurance approval
- An appointment with the Surgeon and Anesthesiology team for final approval and operative planning
- We look forward to helping you through this process!

Thank you,

The UNC Bariatric Surgery Team

GETTING TO KNOW OUR 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 minimally invasive and robotic approaches to general surgery, weight loss surgery and hernia surgery. Dr. Overby believes in a personalized and patient-centered approach to weight loss and bariatric surgery.



Dr. Randal Zhou graduated from the University of Illinois with a BS in Integrative Biology in 2010. He received his medical degree from Rush Medical College in 2014. He remained at Rush for his general surgery residency training, which he completed in 2019. He then matriculated to Yale-New Haven Hospital for a fellowship in Minimally Invasive and Bariatric Surgery.

Dr. Zhou joins our department in the Division of GI Surgery as a bariatrics and hernia surgeon, with particular experience in robotic surgery. Dr. Zhou comes to UNC with experience in clinical outcomes research. He has presented his work at national and regional conferences and has published in specialty journals.

Dr. Zhou is an active member in both Society of American Gastrointestinal and Endoscopic Surgeons (SAGES), and American Society for Metabolic and Bariatric Surgery (ASMBS). Dr. Zhou is also the Associate Program Director of the Minimal Invasive Fellowship Program at UNC. He looks forward to utilizing his minimally invasive techniques to deliver high quality patient-centered care.

MID-LEVEL PROVIDER AND NURSE COORDINATOR:



Tara Zychowicz, FNP is a board-certified Family Nurse Practitioner, with a specialty in Bariatrics. She attended University of South Florida, and then Kennesaw State University, GA in 2002. She is accredited by the American Nurses Credentialing Center. She has worked with numerous clients who have undergone weight loss operations and managed their pre & postoperative care.



Lisa Prestia, RN, Bariatric Coordinator, has been a registered nurse since 1998 and doing Bariatrics since 2002. Lisa has more than 15 years of bariatric nursing experience. Lisa will be assisting with coordinating your care and guide you through the surgical process. Please direct questions regarding your application to her. 919-843- 1258. Email: Lisa_Prestia@med.unc.edu.

DIETITIANS:



Susan Strom RD is a Registered Dietitian licensed to practice in the state of 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.



Peggy Wroblewski, PhD, RDN, LDN, is a Registered Dietitian with extensive experience in the field of weight management. She worked as a weight management counselor early in her career and later conducted obesity research weight loss groups while working as the Bionutrition Managing Research Dietitian at Johns Hopkins Bayview Medical Center. Dr. Wroblewski went on to work with a wide variety of weight loss clientele when she was the Program Manager at the Johns Hopkins Weight Management Center. Subsequently, she collaborated on childhood and adolescent obesity prevention research at the University of Maryland in Baltimore for more than a decade before

moving back to North Carolina.

Dr. Wroblewski has earned undergraduate degrees in Community Nutrition and in Dietetics at Oregon State University, and an MPH in Nutrition at the University of North Carolina at Chapel Hill. She completed a dietetics internship at Pitt Memorial Regional Hospital in Greenville, North Carolina, and in 2010, was awarded a PhD in Public Health from the University of Maryland in College Park.

Dr. Wroblewski is happy to be back home in North Carolina and working in the UNC Multidisciplinary Weight Management Program. She finds counseling patients to be very rewarding work and enjoys helping clients achieve weight loss success through a customized, personal approach to weight loss.

PSYCHOLOGISTS:



Christine M. Peat, PhD, Clinical Psychologist, is an Assistant Professor of Psychiatry at the University of North Carolina at Chapel Hill (UNC) and the Director of the National Center of Excellence for Eating Disorders. Dr. Peat completed her bachelor's degree in psychology at the University of Arizona and obtained both her master's and doctoral degree in clinical psychology at the University of North Dakota. After completing her clinical internship in behavioral medicine at the West Virginia University School of Medicine in 2011, Dr. Peat moved to UNC to complete her post-doctoral fellowship in eating disorders. Her clinical work focuses on the evaluation and treatment of bariatric patients and patients with eating disorders. Her research also focuses in these areas with a particular emphasis on binge eating disorder and obesity.

Catherine A. Forneris, Ph.D., JD, ABPP, is a Professor in the Department of Psychiatry at the University of North Carolina (UNC) at Chapel Hill. She is a graduate of the University at Albany, State University of New York and North Carolina Central University. She has worked with our bariatric team for several years. The primary focus of her current clinical work is as the director of the Dialectical Behavior Therapy program at UNC-Chapel Hill. She is also a medical co-director of the UNC Hospitals Beacon Child and Family program which provides a variety of services to patients of all ages and their families who are victims of interpersonal violence. Dr. Forneris has been a co-investigator on several research projects funded by the National Institute of Mental Health, many of which focus on mood disorders. She has co-authored several research articles and been the lead author on several paper presentations on trauma, PTSD, health care utilization, and women's health. She has served as a co-investigator on systematic reviews for the Agency for Healthcare Research and Quality on effective treatments for PTSD and Major Depression, as well as effective interventions to prevent PTSD and Seasonal Affective Disorder. She is a board member of the North Carolina Psychological Association and chairs their Continuing Education committee.



ABOUT OBESITY

Learning about obesity may help you understand the many challenges you have faced. We look forward to helping you overcome these challenges. We are committed to helping you achieve your goals.

Obesity is an excess amount of body fat. It is often defined by the body mass index (BMI), which is a measure of a person's height and weight. The index is used by healthcare professionals to define obesity, since studies find that BMI correlates to the amount of fat a person has. This is true for most people, but not all. BMI measurements for athletes, pregnant women and the elderly do not follow these guidelines. A BMI of 18.5 to 24.9 is considered normal size; 25 to 29.9 is overweight; 30 to 34.9 is Class I or moderate obesity; 35 to 39.9 is Class II or serious obesity; and a BMI of 40 or higher is Class III or clinically severe obesity (sometimes also known as morbid obesity).

Obesity is caused by a number of factors. These include:

- Genetics
- Processed foods
- Excessive calorie intake
- Sedentary lifestyle
- Chronic sleep loss
- Stress and emotional distress
- Certain medications

Obesity reduces your longevity, primarily because of additional health problems that can occur because of it. These include type II diabetes, high blood pressure, heart and vascular disease, sleep apnea, non-alcoholic fatty liver disease, osteoarthritis, acid reflux disease, gastritis and other gastrointestinal disorders, asthma and other respiratory conditions, a weakened immune system, back problems, infertility, certain cancers, urinary stress incontinence, depression, anxiety and more.

Obesity becomes "morbid" when it reaches the point where it significantly increases the risk of one or more obesity-related health conditions to occur, which can lead to physical disability or even death.

Individuals who have severe or morbid obesity are generally resistant to long-term weight loss using conventional means, such as a diet, behavior modification, exercise or pharmaceuticals. According to world-renowned obesity experts, the only long-term treatment for severe obesity is bariatric surgery.

REALISTIC WEIGHT GOALS

Most people who undergo bariatric surgery will lose about 30% of their body weight, or 50% of their excess body weight.

CANDIDACY

It is always safest to lose weight by making lifestyle changes such as developing healthy eating habits and getting regular physical activity. For those who have tried but cannot lose the excess weight that is causing health problems, weight-loss surgery—also called bariatric surgery—may be appropriate. We can provide surgical weight loss for qualified patients up to 450 pounds.

YOU MAY BE A CANDIDATE FOR BARIATRIC SURGERY IF:

- Body Mass Index (BMI) greater or equal to 35 kg/m², with one or more significant obesity-related conditions such as high blood pressure, diabetes, sleep apnea, high cholesterol, and arthritis, OR
- BMI greater than 40 kg/m², regardless of other medical conditions
- History of multiple failed weight-loss attempts by dieting, exercise, and medical therapies, as documented by your physician
- 18 to 65 years of age (with some exceptions)
- Understanding the procedure and implications, and accepting the operative risks
- Having realistic expectations and motivation
- Committing to lifelong maintenance programs for diet, vitamin supplementation, exercise, and follow-up with your healthcare team

These criteria are based on the National Institutes of Health Consensus Development Conference, March 25-27, 1991, Gastrointestinal Surgery for Severe Obesity, published in the American Journal of Clinical Nutrition 1992:55:615s-9s.

OTHER OPTIONS FOR WEIGHT LOSS ASSISTANCE MAY INCLUDE:

- Medical loss plan with a Bariatric Physician or Dietitian

REASONS TO DECLINE SURGERY

- You have an inflammatory disease or condition of the gastrointestinal tract, such as ulcers, severe esophagitis, or Crohn's disease
- You have severe heart or lung disease that makes you a poor candidate for any surgery
- You have some other disease that makes you a poor candidate for any surgery.
- You have a problem that could cause bleeding in the esophagus or stomach. That might include esophageal or gastric varices (a dilated vein). It might also be a congenital or acquired intestinal telangiectasia (dilation of a small blood vessel)
- You have portal hypertension
- You have cirrhosis
- Your esophagus, stomach, or intestine is not normal (congenital or acquired). For instance, you might have a narrowed opening
- You have/experienced an intra-operative gastric injury, such as a gastric perforation.
- You have chronic pancreatitis
- You are pregnant or want to become pregnant in the next 12 months
- You are currently addicted to alcohol or drugs
- You are under 18 years of age
- You are over 72 years of age
- You have an infection anywhere in your body or one that could contaminate the surgical area
- You are on chronic, long-term steroid treatment. **there are exceptions
- You cannot or do not want to follow the dietary rules that come with this procedure.
- You or someone in your family has an autoimmune connective tissue disease. That might be a disease such as systemic lupus erythematosus or scleroderma. The same is true if you have symptoms of one of these diseases.

Additional Contraindications to surgery may include:

- Limited past diet attempts
- History of poor adherence with medical regimens or pattern of missed appointments
- Active substance abuse or psychosis. You must be substance free for 12 months
- Uncontrolled / untreated psychiatric disorder
- Suicide attempt within last 18 months
- Multiple suicide attempts within last five years
- Current smoking, vaping, chew, or JUULing. You must be nicotine (and marijuana) free for 3 months

Only your Bariatric Surgery Team can determine if Bariatric surgery is right for you, please inform us if you have any of the above conditions.

WEIGHT LOSS SURGERY AND MENTAL HEALTH

A message from Christine M. Peat, PhD, Clinical Psychologist:

Weight loss surgery is a life-changing procedure that requires a lot of thought, changes to your daily routine, and adjustment to a new lifestyle. It is important to remember that weight loss surgery is not a “cure-all.” Instead, it is a tool to help you achieve a healthier weight.

An important part of weight loss surgery is the Mental Health Visit. This visit is required by the UNC Weight Loss Surgery Program because weight loss surgery affects your physical body and your emotional/mental life. Usually, the Mental Health Visit will last 1 hour, and you will discuss your health habits, weight history, stress levels, coping patterns, and mental health. Sometimes, more than 1 visit is needed. The information from this visit will help you get ready for surgery and help you make the changes needed to keep you successful after (for example, changes to your eating habits and physical activity levels).

Mental Health Visits may sometimes involve getting talk therapy, reading self-help books, or discussing medicines to help decrease issues like binge eating, stress, depression, and/or anxiety. Following the recommendations from your Mental Health Visit is important because we know that emotional and behavioral issues can reduce your ability to lose weight and increase your chance of regaining weight after surgery. We also encourage you to attend the support groups the UNC Weight Loss Surgery Program offers both in-person and online through Facebook. This lets you hear from others who have already had the surgery, helps you be consistent with your new health habits, and helps you adjust to all of the new changes in your life.

In summary, we want to help you achieve the best outcomes possible after surgery! If you have any questions or concerns, please do not hesitate to discuss them during your Mental Health Visit.

Sincerely,

Christine M. Peat, PhD
Licensed Psychologist

BARIATRIC SURGERY PROCEDURES

Procedures

- Roux-en-Y Gastric Bypass
- Vertical Sleeve Gastrectomy
- Gastric Band Removal
- Revision

Benefits and Results

Bariatric surgery can lead to massive weight loss. Long term, you can expect to lose 35 to 65% of your excess weight and often much more. Along with increasing your lifespan and quality of life, you'll find that your chances of serious complications such as diabetes, heart disease, vascular disease, lipid abnormalities, blood pressure, sleep apnea and other sleep disorders, asthma, fatty liver disease, osteoarthritis, back pain, intracranial hypertension, urinary stress incontinence, GERD and other GI disorders, the risk for cancer, fertility, depression and anxiety are greatly reduced because of your surgery and corresponding weight loss.

These different methods work to help patients lose excess weight and transform their health by resolving or improving associated medical conditions. While weight-loss surgery has many benefits, it also carries certain risks. It is important to have realistic expectations regarding the surgery.

Bariatric surgery is elective; therefore, the education provided by our team is an important part of the process. You must be willing to understand the surgery, the risks and the benefits of the surgery, the expected weight loss, and the post-surgical eating requirements.

Deciding to accept risk for the purpose of improving one's health is a big decision that requires face-to-face discussions between patients and health care providers. Although the risks of untreated obesity generally are greater than the risks of surgery, patients need to have full information about the possibility of complications before making a final decision to go ahead. Therefore, every weight-loss surgery candidate will have a minimum of two individual appointments with a surgeon and nurse practitioner to gather the information about risks and benefits for the available procedures, so the best personal choices can be made.

Note: Surgery staples are non-magnetic titanium, and MRI safe, and will not set off airport security.

Risks

- Bleeding
- Infection
- Gallstones
- Leak
- Pneumonia
- Excessive weight loss
- Nutritional deficiencies
- Weight Regain
- Blood clot
- Heart Attack
- Obstruction/Stenosis
- Death

Gastric Bypass (Roux-en-Y)

Roux-en-Y gastric bypass surgery is the gold standard operation for weight loss. It uses a combination of restriction and malabsorption. This procedure involves **dividing the top portion of the stomach to form a small pouch that holds about 1-2 ounces**. The remainder of the stomach is separated from the pouch and does not receive food. A portion of the small intestine (duodenum) is bypassed and connected to the pouch (jejunum).

The bypass allows food to skip a portion of the small intestine (duodenum) and the small opening created a feeling of fullness. In addition, after gastric bypass, most patients will no longer tolerate sweet foods and beverages because of a reaction called dumping syndrome.

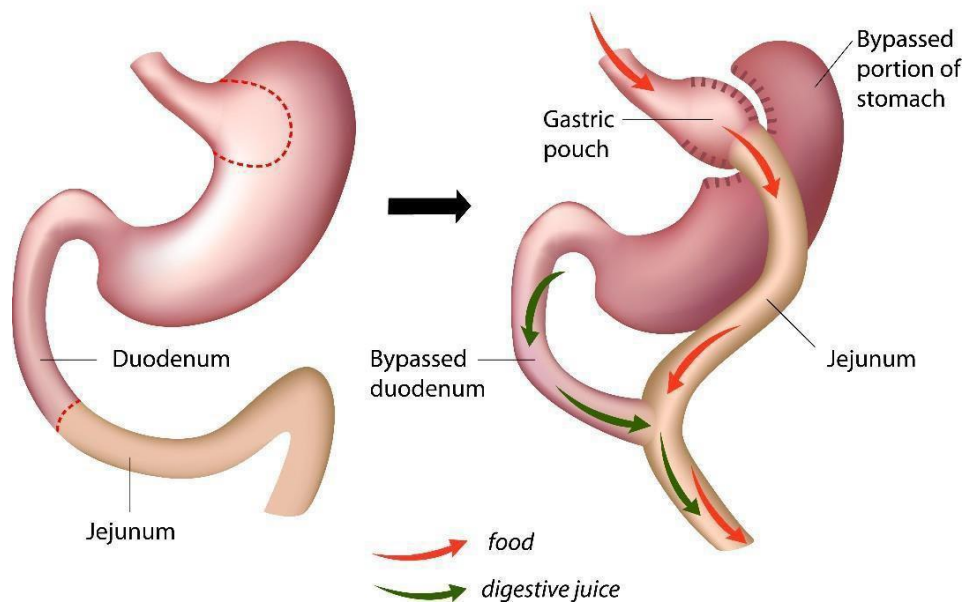
It can improve diabetes, gastric reflux, blood pressure, cholesterol, sleep apnea, and infertility.

Bariatric surgery changes gut hormones, gut bacteria, signals to the brain, and the rate of gastric emptying.

OUTCOMES- HOW MUCH WEIGHT LOSS TO EXPECT

The amount of weight loss is variable, and can be as much as 73% of the excess body weight

Roux-en-Y Gastric Bypass (RNY)



SPECIFIC PROCEDURE RISKS:

May include: ulcers, internal hernia, obstruction, **dumping syndrome** or stricture.

Vertical Sleeve Gastrectomy

The vertical sleeve gastrectomy generates weight loss by restricting the amount of food (and therefore calories) that can be eaten. It is a **permanent removal** of 80% or more of the stomach creating a slender tube, or “sleeve.” This not only reduces caloric intake, but slows the intake of food, creating a sense of fullness and satiety. It has been shown to alter hunger hormone production (Ghrelin).

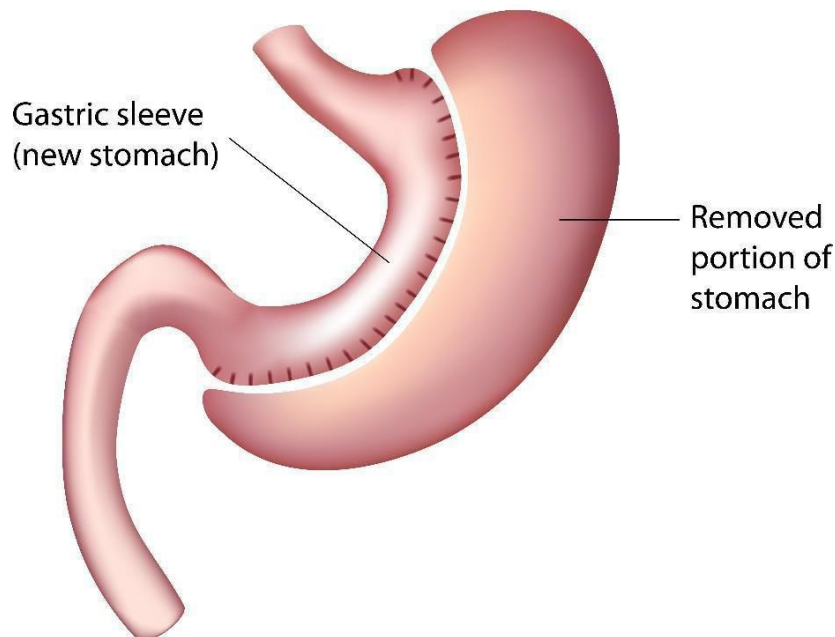
It can improve diabetes, blood pressure, cholesterol, sleep apnea, and infertility.

Bariatric surgery changes gut hormones, gut bacteria, signals to the brain, and rate of gastric emptying.

OUTCOMES- HOW MUCH WEIGHT LOSS TO EXPECT

The amount of weight loss is variable, and can be as much as 60% of the excess body weight

Vertical Sleeve Gastrectomy



SPECIFIC PROCEDURE RISKS:

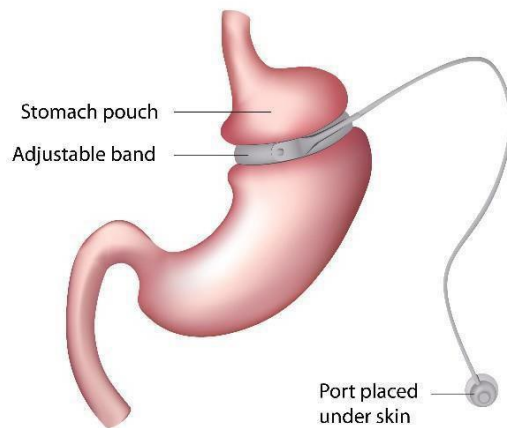
May include **reflux**, esophageal spasm, esophageal dilation (stretching) which can lead to dysmotility, or enlarged pouch (and subsequently weight regain).

Revisional Operations

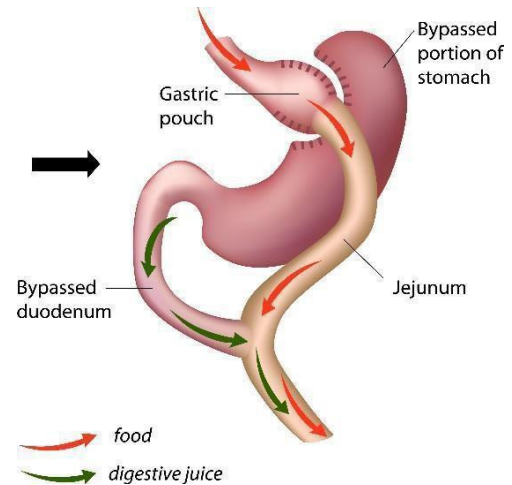
The transition from a gastric band (Lap Band) to a sleeve gastrectomy or a gastric bypass involves:

REMOVAL OF THE LAP BAND AND CREATION OF A GASTRIC BYPASS

Adjustable Gastric Band (Lap Band)

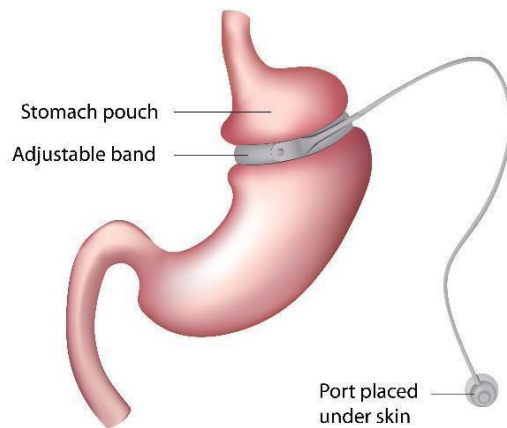


Roux-en-Y Gastric Bypass (RNY)

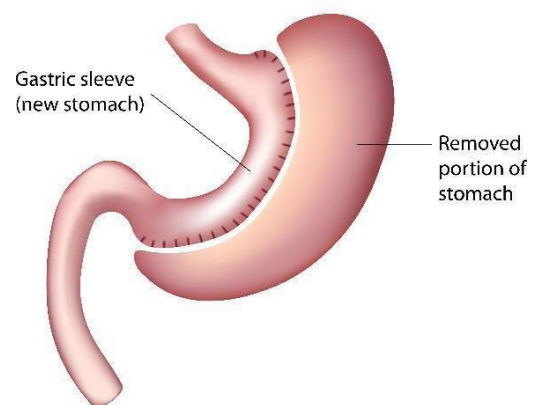


REMOVAL OF THE LAP BAND AND CREATION OF VERTICAL SLEEVE GASTRECTOMY

Adjustable Gastric Band (Lap Band)



Vertical Sleeve Gastrectomy



Risks and complications

- Increased risk of bleeding
- Removal of scar tissue

May need to be performed in a 2 step or staged approach: Removal of lap band and then a few weeks later second bariatric procedure

Before Surgery

BEFORE SURGERY: REQUIREMENTS AND INFORMATION

Insurance Approval

It is very important that you know your policy and coverage.

Once all your preoperative requirements are met the office will contact your health insurance policy for their approval. After that you will meet with the surgeon. If he or she decides you are a candidate for the surgery, then a surgery date will be set depending upon your surgeon's availability and operating time availability.

Preoperative Clearances

If you have any pre-existing conditions that require a clearance, we will work with you on referrals or requesting letters of support from your specialists.

After all clearances have been obtained, your pre-surgical packet (including all necessary evaluations, tests, and lab results) can be submitted to the pre-approval department, and then sent on to your insurance company for approval.

Supervised Diet Requirement

Many insurance companies require a 3- or 6-month consecutive supervised diet and exercise counseling program prior to covering bariatric surgery.

This can be done with your primary care provider, the UNC Medical Weight Loss Program, or Tara Zychowicz, FNP along with the Bariatric Dietitians.

Preoperative Diet

A 5-10% weight loss is required prior to your operation. This can be done by cutting calories, a low carbohydrate diet, or even protein shakes. A personalized weight loss goal will be set for you. Try some new recipes for healthy cooking, begin reading food labels.

Avoid binging on foods you think you will never eat again after surgery. You may never eat them in the quantity you do now, but you will be able to taste them again.

Make sure any dental problems you have are evaluated prior to surgery, it requires a lot of chewing in the postoperative solid food eating phase.

Have a "diet practice day" before surgery:

- Liquids only
- Pureed food only

Phentermine use must be discontinued 7 days prior to surgery (if applicable).

Nutrition Class

A nutrition education class is required before surgery.

A follow up with our dietitian is required after the class with the RD to review your knowledge of the bariatric eating plan.

Two weeks before surgery you will be placed on a Liver Shrink Diet that will consist of protein shakes/supplements, and a low carbohydrate meal. See pre-op handout from **dietitian.**

Psychological Consideration

Bariatric surgeries do not change emotional eating, cravings, or binge eating that may be present before surgery and after. Additionally, the behavioral and lifestyle changes involved in bariatric surgery are extensive and can be challenging.

We require a visit with our Program Psychologist before bariatric surgery. This will be scheduled after the Nutrition Education Visit.

If you already see a mental health care provider, we also require a letter of support from that provider.

The psychologist can help you develop strategies to make the lifestyle and behavioral changes easier. She can also help you address any underlying eating, mood, or interpersonal problems you might experience after surgery. In addition, our support group can help supplement the work you might do with the psychologist and increase your chances of long-term success after surgery.

If you take antidepressant medications, they may need to be titrated or changed to a liquid form after surgery; this is to be done with your prescriber.

Consider mental health counseling before and immediately after surgery to help work on any emotional issues/concerns.

Smoking & Nicotine

If you are a smoker, **you must quit smoking at least 3 months before surgery.** If the first test is positive, we will check your urine or blood for nicotine (including marijuana) every month for 3 months before you are cleared for surgery.

Nicotine patches, gums, or vapors are not acceptable alternatives as the nicotine will still show up in your urine or blood stream. You can discuss medications for smoking cessation with your Primary Care Provider.

You must be substance free for 12 months. A toxicology screen will be taken.

Alcohol

If alcohol is problematic before surgery, there is an increased risk of ulcers, gastritis, and a risk of alcohol addiction after surgery. It is advised that alcohol be significantly limited before surgery.

Blood Thinners

Stop full dose aspirin (325 mg) 1 week before surgery or any NSAIDS, or blood thinners.

Baby aspirin (81 mg) may be taken.

NSAIDS (non-steroidal anti-inflammatory drugs)

You must avoid ibuprofen, Advil, Motrin, Aleve, Goody's, BC powder, Naprosyn, etc. prior to surgery to prevent bleeding, stomach and esophagus inflammation (gastritis).

You may take Tylenol or acetaminophen-based products for pain, or fever.

Laboratory Work and Testing

- Blood work/Lab testing is necessary
- An Endoscopy is required
- A Sleep study, Ultrasound, EKG, or X-ray, may be recommended
- We will call, MyChart message you, or discuss at our next appointment any abnormal results that need attention
- A letter of support from your primary care doctor is required
- Clearance from any specialists you see may be required, such as a psychiatrist, or Cardiologist

Support Group

Support groups are open to individuals at any step in the process. For those who have undergone bariatric surgery, attendance is strongly encouraged. We cover a variety of topics, from nutrition and cooking to exercise and plastic surgery, with frequent guests from these disciplines.

We strongly recommend you attend at least 2 support group sessions prior to surgery and often after surgery.

Meetings are held via Zoom, (and when able in person):

- Hillsborough - **When:** 1st Monday of the month at 6pm
Where: Hillsborough Medical Office Building, 1st Floor
Lobby, 460 Waterstone Drive, Hillsborough
- Chapel Hill - **When:** 3rd Wednesday of the month at 6pm
Where: Aesthetic Center, 151 Old Univ. Station Rd, Chapel Hill

We post updates on the Facebook Page and our website

Website: www.uncweightlosssurgery.com

Facebook: [UNC WLS Support Group \(it is a closed group\)](#)

After Surgery

AFTER SURGERY: WHAT TO EXPECT

Length of Stay

Patients who have undergone Sleeve Gastrectomy or Gastric Bypass typically spend one to three nights in hospital. It may be longer if nausea, dehydration, pain, or other conditions arise.

Time Off from Work

Most people take 7-21 days off from work (on average), depending on the type of job. If you do not work, take off time from your activities of daily living that require extra effort, lifting, pulling, or straining.

Resuming Physical Exercise

We recommend walking as soon as possible after surgery, Day 1, to help move the gases, and prevent pneumonia, and risk of blood clots. No heavy lifting x 2 weeks.

- Allow pain to be your guide.
- Avoid swimming, hot tubs, or baths until incisions are healed, clean and dry. (Showers are fine).
- See Section on Physical Activity.

Sleep Apnea

Please bring your CPAP to the hospital.

- You may or may not be advised to wear your CPAP for 7 days, depending on what your surgeon recommends
- Do not discontinue use of CPAP without your primary care provider's approval.
- A repeat sleep study is required after prior to discontinuing use of CPAP therapy: this will determine if apnea has resolved.

Follow the dietary recommendations closely. See "Nutrition After Surgery" tab in binder.

The most common postoperative issues are covered in more detail on the following pages: Pain, constipation, nausea, dehydration and food intolerances, dumping syndrome, reflux, hair loss, skin sagging or laxity.

AFTER SURGERY: CARING FOR YOURSELF AT HOME

After being discharged home, take a few simple measures to allow yourself to optimize your recovery

Controlling Your Discomfort

- Take your prescribed pain medication as directed if you need it.
- As a less potent alternative, you may take liquid acetaminophen (Tylenol) instead of your prescribed pain medication. Do not take them together due to risk of acetaminophen toxicity.
- Splint your abdomen with a pillow when coughing or sneezing. With laparoscopic gastric bypass, patients often notice increased soreness or pain at the larger abdominal incisions. This is typical and expected, especially with more movement. It can take up to 4 weeks to go away.

Understanding Body Changes

It is common to feel tired after surgery. Your body is adjusting to the physiologic changes and weight loss. Ironically, you may find it difficult to sleep, which is also normal. Do not sleep or nap too much during the day. You may even feel depressed for a few weeks and question your decisions to choose surgery. If you experience these feelings, you will find that after about a month's time, you will start to feel better.

Some patients may experience nausea and/or vomiting. The most common causes of Vomiting following bariatric surgery are:

- Eating too fast
- Eating too much
- Drinking while eating
- Eating foods without chewing them thoroughly

Carefully follow the diet advancement plan as outlined in the "Nutrition" section. If vomiting occurs, try the following strategies to better accommodate your eating style:

- Eat your meals over a 30-minute period.
- Avoid fluids during your meal.
- Chew your food thoroughly.
- Eat softer foods for a few days following the episode.

If your issues persist, please call our office. While a decreased appetite is the desired effect of the operation, you must be careful not to forget to eat. You may need to encourage yourself to eat. It is extremely important that you follow the dietary plan as directed (starving is bad).

Pain

Pain is subjective, meaning everyone experiences pain differently; we will provide you with prescription pain medication for as needed use, the majority of the pain will last about 3-7 days and then gradually improve. Pain medication is tailored to fit your needs and we will provide you with adequate pain relief so that you can get up and move around and do the things you need to do. Tylenol use after surgery is recommended, and avoid NSAIDS (Advil, ibuprofen, Motrin, Aleve, meloxicam, BC powder, and Goody's).

Constipation

Constipation means that you have a hard time passing stools (bowel movements). People pass stools from 3 times a day to once every 3 days. What is normal for you may be different. Constipation may occur with pain in the rectum and cramping. The pain may get worse when you try to pass stools. Sometimes there are small amounts of bright red blood on toilet paper or the surface of stools. This is because of enlarged veins near the rectum (hemorrhoids).

A few changes in your diet and lifestyle may help you avoid ongoing constipation. Your provider may also prescribe medicine to help loosen your stool.

Pain medicines can cause constipation.

Tips to prevent and treat constipation:

- Start a stool softener 1-2 weeks before surgery. (Colace/Docusate Sodium).
- Drink plenty of water.
- You may use over the counter medications to help with constipation, including: Milk of Magnesia, Mira Lax, Dulcolax, Fleets enema, suppository. Read and follow all instructions on the label. Do not use laxatives on a long-term basis.
- Take a fiber supplement, such as powder form of Citrucel, Benefiber. Read and follow all instructions on the label.
- Get at least 30 minutes of exercise on most days of the week. Walking is a good choice right after surgery.
- Schedule time each day for a bowel movement. A daily routine may help. Take your time having your bowel movement.
- Support your feet with a small step stool when you sit on the toilet. This helps flex your hips and places your pelvis in a squatting position.

Nausea

After you have had surgery, you may feel sick to your stomach (nauseated) or you may vomit. Sometimes anesthesia can make you feel sick. It is a common side effect and often doesn't last long. Pain also can make you feel sick or vomit. After the anesthesia wears off, you may feel pain from the incision (cut). That pain could then upset your stomach. Taking pain medicine can also make you feel sick to your stomach.

Whatever the cause, you may get medicine that can help.

We typically prescribe medications (such as Zofran, Phenergan, or Scopolamine) to take after surgery to prevent or treat the nausea.

It is important to try not to vomit right after surgery while healing is taking place.

RISKS OF SURGERY

Infection

Skin infections may occur, as well as a reaction to the surgical glue used to close the incisions. Keep skin clean and dry.

Notify the Bariatric surgery team if you are having drainage from the incisions, or fever.

Blood clots

Blood clots may occur after surgery, be sure to remain as active as possible, and get up and walk every hour while awake. Notify the Bariatric surgery team right away if you are experiencing any severe leg pains, shortness of breath, or changes in color in your legs.

Leakage

Staple line leak is rare but is considered a surgical emergency. Symptoms may include a rapid heart rate, fever, and severe pain.

Notify the Bariatric surgery team right away if you are experiencing any of these symptoms.

Food Intolerances

Chew your food 30 times per bite.

Notify the Bariatric surgery team right away if you are unable to keep down fluids or protein shakes.

Stricture/Stenosis

Tightness of the surgical connections may occur due to swelling or scar tissue formation. Notify the Bariatric surgery team if you are unable to tolerate liquids or food, or if you are vomiting frequently.

Stones

The risk of gallstones increases with rapid weight loss. If you have a history of gallstones let us know. The use of ursodiol (Actigall) is prescribed for 6 months after surgery in patients who still have their gallbladder.

Kidney stones may also increase or occur with bariatric surgery.

Ulcers

Ulcers can be caused by surgery alone, or when there is a history of smoking or NSAID use. Notify the Bariatric surgery team right away if you are experiencing any heartburn, or pain in the stomach.

Gastric Reflux

Reflux may occur after bariatric surgery; the risk is often higher after sleeve gastrectomy. Be sure to take the medication provided by the daily for the first 3-6 months. surgeon (Prilosec or Nexium, also known as Proton Pump Inhibitors). These may need to be taken longer if necessary.

If reflux becomes severe, or medications are not helping let a member of the healthcare team know right away.

Small Bowel Obstruction

If you are not passing gas or are having difficulty moving your bowels contact a member of the bariatric team right away.

Gout flare ups

Vitamin Deficiencies

Vitamins must be taken after surgery to prevent deficiencies; there is a financial commitment to supplements long term.

We recommend chewable or liquid supplements the first 6 months, and then vitamins can be switched to a capsule. **No gummy, tablet, grocery store brand or children's multivitamins** are recommended. Notify the bariatric team if you develop intolerance to your vitamins.

Please see dietitian information in the nutrition and vitamin supplement tabs of the binder for further details.

Skin Laxity

Weight gain stretches the epidermis and losing weight may cause skin sagging. It can be uncomfortable or embarrassing. Lifting weight and stretching may help.

Once weight loss has stabilized, *typically around 18 months after bariatric surgery*, you can consider the option of skin removal surgeries, and request a referral to the Plastic Surgery office for an evaluation.

Skin removal surgeries **may not be** covered by health insurance.

If rashes are occurring frequently do your best to keep the areas as dry as possible, use a cool setting on the hair dryer and apply over the counter (OTC) antifungal creams or powders. You may need to see a dermatologist for treatment.

Hair Loss

Thinning hair and losing more strands of hair is common the first 9 months.

Remember to take your vitamins and protein supplements as recommended. Biotin has been found to be helpful for some patients. Zinc supplements may be helpful if you are deficient. Hair will grow back in most cases when weight stabilizes. The use of OTC Nioxin shampoos may also be helpful.

Dehydration

To prevent dehydration, drink plenty of fluids, enough so that your urine is light yellow or clear like water. Choose water and other caffeine-free clear liquids until you feel better. If you have kidney, heart, or liver disease and have to limit fluids, talk with your provider before you increase the amount of fluids you drink.

If you do not feel like eating or drinking, try taking small sips of water, low sugar sports drinks, sugar free popsicles or other rehydration drinks.

Get plenty of rest.

To prevent dehydration

- Add more fluids to your diet and daily routine unless your provider has told you not to. During hot weather, drink more fluids. Drink even more fluids if you exercise a lot.
- Stay away from drinks with alcohol or caffeine.
- Do not take diuretic type medications after surgery, unless directed by your health care provider or surgeon.
- Watch for the symptoms of dehydration. These include:
 - A dry, sticky mouth.
 - Dark yellow urine, and not much of it.
 - Dry and sunken eyes.
 - Feeling very tired.
 - Headaches.
 - Weak and woozy.

Dumping Syndrome

Dumping syndrome (also known as rapid gastric emptying) means some of the foods you eat may empty, or "dump," into your small intestine very quickly.

Dumping syndrome sometimes happens after you have had a part of your stomach removed or bypassed, as well as the pylorus being bypassed after weight-loss surgery. You will probably feel full quickly after eating because your stomach has less room for food.

Dumping syndrome can make you feel faint, tired, flushed, shaky, nauseous, sick to your stomach, cause your heart rate to increase and may give you diarrhea. It can also make it hard for your body to get enough nutrition. Dumping syndrome can happen within a half hour or 2 to 3 hours after eating.

You may be able to prevent dumping syndrome by being careful about what you eat, so sugars and fats must be limited. If your dumping syndrome is severe or does not get better with a change in your diet, your provider may have you try some medicines. Follow your provider's directions carefully.

- **Avoid high-sugar foods** such as cakes, cookies, soda pop, dried fruit, pastries, fruit juices, ice cream and dairy. People with gastric bypass can become lactose intolerant. If you crave something sweet, try foods with artificial sweeteners instead.
- **Avoid greasy, or fatty, foods.**
- Eat 5-6 times a day (such as 3 small meals and 2-3 snacks). This may help keep you from feeling too full after eating. It may also help you avoid diarrhea.
- Talk with the dietitian to help you plan menus that pack good nutrition into several small meals.
- Eat foods that contain protein. Protein is found in red meats, poultry, fish, eggs, and cheese.
- Drink fluids between, not during, meals. Do not drink liquids within a half hour before eating and up to an hour after eating. Fluids fill up your stomach quickly. They also move food even more quickly into the small intestine.

Reactive Hypoglycemia

Low blood sugars may occur after bariatric surgery due to rapid gastric emptying. It is important to eat small frequent protein rich meals long term.

Symptoms of reactive hypoglycemia are:

- Hunger
- Pale Skin
- Weakness
- Shakiness
- Sweating
- Lightheadedness
- Anxiety
- Confusion

AFTER SURGERY: ACTIVITIES AND LIFESTYLE

Bathing

You will be able to take daily showers as you did prior to surgery. Wash over your incisions gently using soap and water. Try to avoid perfumed soaps from the specialty bath store (on your incisions) for the first two weeks following surgery. We recommend Dial soap. When you are finished with your shower, pat the areas dry. Using a cool blow dryer can also help. You do not have to keep your incisions covered, although you may want to if you note any drainage. Please avoid taking tub baths until after your 2-week follow-up visit.

Pregnancy, Fertility, Menstrual Changes, and Sexuality

Women of childbearing age may experience more frequent menstrual cycles due to a change in hormones and ovulation. Menses may resume after surgery and be irregular. Ovulation may improve. Hot flashes may increase in peri-menopausal women.

Women of childbearing age become more fertile after bariatric surgery.

Pregnancy too soon after bariatric surgery can increase the risk of miscarriage, birth defects, and growth delays.

We mandate the use of formal birth control before and for at least 18 months after surgery.

Please see Gynecologist for contraception options.

If pregnancy occurs, it is recommended that you see a high-risk Obstetrician as soon as possible; we can help expedite a referral if needed.

Sex drive changes after surgery, it may increase.
Testosterone levels may rise after surgery as well.

You are cleared to have sexual intercourse after surgery as soon as you feel well enough, typically 2 weeks.

Resume Birth Control Pills immediately after surgery.

Weight Stalls and Plateaus

It is common for your body to have periods of weight stalls even after surgery. You and your body have gone through a lot; the metabolism needs time to catch up and adjust to hormonal changes and new calorie levels. There will be periods in your weight loss where the metabolism has to re-regulate itself to new habits and weight.

Driving/Traveling

A general rule is not to drive for 7-10 days following surgery. There are many reasons for this. However, your surgeon may let you return to driving at 1 week if you:

- Are not taking narcotic pain medication
- Can stomp your foot on the ground without pain (mimic pressing the brake hard)

This decision will vary from surgeon to surgeon.

Physical Activity

Physical activity is any kind of activity that gets your body moving.

The types of physical activity that can help you get fit and stay healthy include:

- **Aerobic or "cardio" activities** that make your heartbeat faster and make you breathe harder, such as brisk walking, riding a bike, or running. Aerobic activities strengthen your heart and lungs and build up your endurance.
- **Strength training activities** that make your muscles work against, or "resist," something, such as lifting weights or doing push-ups. These activities help tone and strengthen your muscles.
- **Stretches** that allow you to move your joints and muscles through their full range of motion. Stretching helps you be more flexible and avoid injury.

Being active is one of the best things you can do to get fit and stay healthy. It helps you to:

- Feel stronger and have more energy to do all the things you like to do
- Focus better at school or work and perform better in sports
- Feel, think, and sleep better
- Reach and stay at a healthy weight
- Lose fat and build lean muscle
- Lower your risk for serious health problems
- Keep your bones, muscles, and joints strong

Try to get at least 30 minutes of exercise on most days of the week. Walking is a good first choice.

Strengthen your muscles during the week. You do not have to lift heavy weights or grow big, bulky muscles to get stronger. Doing a few simple activities that make your muscles work against, or "resist," something can help you get stronger.

For example, you can:

- Do push-ups or sit-ups, which use your own body weight as resistance
- Lift weights or dumbbells or use stretch bands at home or in a gym or community center

Stretch your muscles often. Stretching will help you as you become more active. It can help you stay flexible, loosen tight muscles, and avoid injury. It can also help improve your balance and posture and can be a great way to relax.

Be sure to stretch the muscles you will be using when you work out. It is best to warm your muscles slightly before you stretch them. Walk or do some other light aerobic activity for a few minutes, and then start stretching.

When you stretch your muscles:

- Do it slowly. Stretching is not about going fast or making sudden movements.
- Do not push or bounce during a stretch.
- Hold each stretch for at least 15 to 30 seconds if you can. You should feel a stretching the muscle, but not pain.
- Breathe out as you do the stretch. Then breathe in as you hold the stretch. Do not hold your breath.

Return to Work

Returning to work will vary with each patient depending on the type of procedure, the approach that was used (laparoscopic vs. open), as well as the type of work you do (sedentary vs. physical). For example, it is not unusual for a person who works as a telephone operator at a desk all day to return to work in 1-2 weeks.

On the other hand, a person who works in landscaping lifting plants/trees may need to be out 4 weeks. There are also those patients that are somewhere in between the two extremes. There are some cases in which you can go back sooner doing light duty until your surgeon clears you to go back with no restrictions. Your surgeon can give you a better idea once the two of you have decided which procedure is best for you.

Alcohol Intake, Smoking, Vaping, Chewing Tobacco, Substance Use

It is recommended that you abstain from alcohol intake for a minimum of 6 months after surgery. Alcohol, even in small amounts, may cause you to get drunk more quickly, increasing your risk for injury. Alcohol is high in calories and sugar and may cause low blood sugar, overeating, risky behaviors, or even cause blackouts.

It is recommended that you abstain from all nicotine products after surgery to reduce risk of gastric ulcers, irritation, and (gastritis) long term.

There is also a small risk of transference of addiction.

AFTER SURGERY: DEALING WITH EMOTIONS

Food for Thought

Bariatric surgery has both physical and psychological effects. All patients need to consider this before and after surgery. Some of the feelings that you may experience include depression, frustration, anxiety, anger, disappointment, loss, helplessness, euphoria, excitement, joy and others. Short-term, the immediate sense of loss of food is often a cause for distress. Along with the rapid reduction in estrogen levels, you may experience symptoms of depression, not unlike the “baby blues”. Long-term, you may experience changes in body image and further awareness of the social implications of obesity.

Bariatric surgery is not a fix for your everyday problems with your spouse, friends, family members, employment, or social life. This surgery will allow you to gain control over one aspect in your life - your weight. Although you have elected to have weight loss surgery to resolve your obesity, weight loss also changes the lifestyle you knew so well. Even with its problems and tensions, obesity was comfortable, simply because it was known. Now, that life is gone. When the reality of the new situation confronts you, it is natural to begin a longing for your old way of life. This expresses itself in several stages. These stages include denial, anger, bargaining, depression, and finally, acceptance.

Different people go through these stages differently. It is natural for some patients to experience denial before they have surgery because they focus on the positive. They seem to understand the risks and complications but often do not recall hearing about the emotional and physical stress that follows. After surgery is performed, some patients try to bargain for extra space in their stomach pouches. They overeat, experience the painful consequences, and may become angry for getting into this situation. This anger may also surface when other discomforts or complications develop throughout the recovery period.

These feelings are difficult to accept or express openly, and depression may follow. Feelings of sadness and crying episodes can be common occurrences.

These emotional responses to surgery are understandable. They cannot be eliminated but must be experienced and worked through. Adapting to changes can take many months. The final stage of acceptance will occur when you feel at peace with the changes brought about by surgery. In the past, one of the best methods for you to cope with life stress may have been for you to eat. This method will no longer be useful, especially while your new stomach pouch is at its smallest. One of the keys to success of this surgery is to learn to replace those comforts with healthy activities. Replacement methods for coping will need to be learned, but this will take time. Try not to sabotage yourself. The experience of such rapid bodily change will likely be accompanied by many emotional ups and downs depending on your age and sex.

There are many things that you can do to help yourself through the recovery and adjustment period. One of the most important aspects is the recognition and understanding of the experience of loss. Expect to have ups and downs as the weeks go by. If you are feeling teary

and depressed, have a good cry. Do not suppress your emotions. They will surface again anyway. Going for a walk or adding other physical activities will help you manage this changing phase of your life. Your adjustment and acceptance will also be eased by the realization that bariatric surgery, with resultant weight loss, will not solve your personal or relationship problems by itself. You cannot expect a perfect body or a perfect life after the weight loss. In fact, many new problems will develop because of the many new opportunities. These will need to be recognized and attended to. Try to be as positive as possible. As new challenges pop up, recognize them, and develop a problem-solving approach.

Body Image

Keep in mind that as your body undergoes changes in weight and size, it is likely you may not see your body as others may see it. It takes time for your mind to catch up with what your body is doing. It is similar to the phantom limb phenomenon where a person who has lost a limb continues to experience pain or feeling from the missing part, and in fact, feels they still have a limb. As you lose weight, you may be surprised when you see your new reflection in a store window or mirror. You may not feel like this person is you! It is normal to feel like you are still the same size as you were before, but there are some definite ways to help you work at this.

Here are some examples:

- Take a picture of yourself every few weeks during your weight loss and compare the changes.
- Try on clothes in a smaller size. You will be surprised how quickly you will be changing sizes.
- Have someone point out a person in a public place who is about the same size as you. This helps you have a new frame for reference.
- Take measurements of yourself every few weeks and record the results.
- Save an outfit from your pre-op size and try it on every few weeks or whenever you need a lift.
- Accept compliments graciously. Do not minimize or qualify your weight loss. You have worked hard for the outcome you have been complimented for. Simply say, "thank you."

Counseling

Occasionally, personal adjustment or relationship problems will persist after surgery. These should be addressed in professional counseling. Our experience has shown us that in the period of stress, mild to severe depression is common. You and your support person should look for the signs of depression: persistent sadness, anxious or empty mood, loss of interest or pleasure in activities (including sex), restlessness, irritability or excessive crying, feelings of guilt, worthlessness, helplessness, hopelessness, changes in sleep patterns, decreased energy, fatigue, “feeling slowed down”, thoughts of death and suicide, difficulty concentrating, remembering, or making decisions, persistent physical symptoms that do not respond to usual treatment. Effective drug and psychological treatments are available. With treatment, patients can improve and return to normal quickly.

Support Groups

Group meetings provide peer support, let you share your experiences and provide periodic guest speakers to expand your knowledge on obesity surgery-related topics. They are great for problem-solving. These support groups are a wonderful opportunity to make new friends and be with people who share what you are experiencing.

It can be reassuring to hear other’s viewpoints on common concerns and to get additional information from the group leader or guest speaker. Research has shown that patients who attend support groups regularly are more successful with their weight loss and mental adjustment than people who do not, especially long term.

See “Before Surgery” tab, page 3 for support group dates and times.

Stress Reducers

- Listen to music.
- Breathe deeply. Inhale through your nose and exhale through your mouth slowly and imagine that you are inhaling calmness and exhaling stress.
- Laugh often. Watch a comedy on video, listen to a tape or read the Sunday funnies.
- Speak up for yourself. People who feel they have some control over some aspects of their life are less subject to stress.
- Let go. Learn the difference between what you can control and what you cannot. Stop worrying about things that are beyond your control. Use that energy to make changes you can.
- Manage your time. To avoid feeling rushed, plan out how much time you will need to accomplish tasks, to get ready to go places, to travel, to eat, etcetera.
- Practice meditation. Spend at least 15 minutes a day relaxing your mind, sit comfortably, breathe calmly and just clear your mind.
- Treat yourself with compassion. Give yourself permission to make mistakes, to play without feeling guilty, to change your mind, and to set aside time only for you.

AFTER SURGERY: LONG TERM SUCCESS

There are several things you can do to help to continue your weight loss success and maintain your weight loss long term:

- **Maintain a consistent meal pattern with adequate protein intake.** Protein is crucial to maintaining muscle mass and to heal from surgery. It will also leave you feeling satisfied longer reducing the risk of mindless snacking. Generally, patients should consume 60-80g of protein per day. You may need more based on your body size and gender.
- **Maintain adequate fluid intake.** The goal is to consume at least 64oz of fluid from non-carbonated, unsweetened beverages. If you are very physically active or live/work in a hot environment, your needs will be higher. Avoid: juices, soda, sweet tea, lemonade, Kool-Aid, etc.
- **Avoid drinking with meals and for 30 minutes after meals.** This will help with maintaining protein intake and satiety.
- **Meals should consist mostly of lean protein and non-starchy vegetables** with a small amount of fruit and/or whole grains. Aim to consume protein foods and non-starchy vegetables first followed by fruit and whole grains.
- **Be mindful when you are eating and stop when you feel satisfied.** Do not push past your body's feeling of fullness and overeat. Continued overeating will lead to weight regain and stretching of the pouch.
- **Maintain a consistent exercise regimen** to continue to facilitate weight loss and maintain weight loss. The general recommendation for healthy adults is 150 minutes of moderate level physical activity per week. That is 30 minutes 5 times per week. You will need more for weight loss. Moderate exercise is physical activity that raises your heart rate. For example, your breathing quickens, but you are not out of breath. You can carry on a short conversation, but not a lengthy one.
- **Take your vitamin supplements daily** to prevent nutrient deficiencies. The effects of some nutrient deficiencies are permanent even if the deficiency is corrected.
- **Attend regular support groups regularly.** It is well documented that those who attend regular support groups have greater weight loss

FOLLOW-UP CARE IS A KEY PART OF YOUR TREATMENT AND SAFETY

We cannot overstate the importance of making and attending all your follow-up appointments AND to call your provider if you are having problems. It is also a good idea to know your test results and keep a list of medications you take.

- It is up to you to schedule your follow up appointments, but you will receive reminders via mail/MyChart to make your appointments.
- It is also a good idea to know your test results and keep a list of the medicines and vitamins you take.

WHEN TO CALL:

We recommend you call *for any concerns* after your surgery. Use your intuition. Always call if you are experiencing bleeding, rapid heart rate, shortness of breath, fever, vomiting, uncontrolled pain, inability to keep fluids down or advance the diet, nausea, and difficulty with urination and/or pain in legs.

If you notice any problems or new symptoms, **get medical treatment right away.**

We have multiple locations. You may need to be seen at a different clinic than the one you initially met us at.

- ***GI Surgery Chapel Hill 984-974-0150.***
- ***Hillsborough Clinic 984-215-3500***
- ***Centralized Phone Number for ALL Locations: 984-974-6519***

After Hours Emergency Phone Number

- ***984-974-1000 Ask to page the on-call provider with SRZ.***

Nutrition Before Surgery

NUTRITION: BEFORE SURGERY

Purpose: THIS DIET IS FOR INDIVIDUALS WHO ARE PREPARING FOR OR HAVE HAD WEIGHT LOSS SURGERY.

Pre-Surgery Dietary Goals

- Follow a consistent meal pattern. Eat 3 small meals and 2 snacks.
 - Do not skip meals and do not graze.
 - Do not go long periods of time (more than 4hr) without eating.
- Have protein with every meal. Aim for 60-80g daily.
- Drink 64oz of water daily.
- Avoid all sugary drinks (Examples: juice, soda, sweet tea)
- Avoid carbonated beverages. (Examples: soda, seltzer, sparkling water)
- Practice not drinking with meals, wait 30 minutes after the meal before drinking.
- Start a chewable multivitamin.
- Exercise – Aim for 30 minutes, most days of the week.
- Keep a food journal.

Prior to transitioning to surgery, it is important to show compliance to the pre-surgery goals.

We can not approve you for surgery until these goals are met.

NUTRITION: BEFORE SURGERY (continued)

Pre-Surgery Diet (aka liver shrink diet)

You will follow a 14-day pre-surgical diet prior to your surgery date.

This will result in weight loss and reduce liver size. The diet provides a good source of protein rich nutrition as well as hydration.

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 is high in protein with a low amount of carbohydrate and fat.

Recommended guidelines per protein shake:

<u>Calories</u>	<u>Protein</u>	<u>Carbohydrates</u>	<u>Fat</u>
Less than 200 calories	More than 20g	Less than 10g	5g or less

- 2. Drink 3 protein shakes every day** (see After Surgery Nutrition, page 5 for protein supplement options.)

- 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 vegetables: any type (must be non-starchy)

Examples:

Asparagus, Broccoli, Brussel Sprouts, Cabbage,
Cauliflower, Celery, Cucumbers, Eggplant, Greens, Green
Beans, Lettuce, Kale, Mushrooms, Okra, Onions,
Peppers, Radishes, Spinach. Squash, Zucchini

- c. Avoid all high carbohydrate foods**

Examples:

Fruit, Bread, Pasta, Rice, Potatoes, Corn, Peas, Cereal, Grits, Oatmeal

- 4. Optional:** Sugar free Jell-O or ice pops, but **not** pudding.

- Sugar free flavored creamer to coffee or half and half

- 5. Stay well hydrated.** Aim for 64oz of fluid daily. Choose sugar free, noncarbonated beverages.

- Water, Crystal Light, sugar free beverages (flavored waters, G2, PowerAde Zero, etc.)
- Broth (low sodium)
- Coffee, hot tea, unsweetened tea
- Do not add sugar or honey to your beverages. Artificial sweeteners like stevia, Splenda, and Equal are okay.

- 6. Begin taking the BARIATRIC chewable multivitamin 2 weeks before surgery**

Nutrition After Surgery

NUTRITION: AFTER SURGERY

After Surgery Diet Stages

Step 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 with 1 ounce per hour and move up to 3 ounces per hour.
- 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, do not drink too much at one time, do not gulp. **Drink slowly!**

Step 2: Protein Shakes – discharge from the hospital until your follow-up visit with your surgeon

- Once you can take in 3 ounces of clear liquids, you will start to drink protein shakes. You will go home on protein shakes. You should also drink plenty of clear liquids to stay well hydrated. Drink 3-4oz of fluid 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, Gatorade). 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).



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

Your goal is to drink 32 fluid ounces of water plus enough protein shakes to get 60-80 grams of protein for women and 80-100 grams for men. Please stick to this plan until your clinic visit with your provider.

Step 3: Pureed Foods

- **Pureed foods** should have no lumps or bumps. You should not have to chew them. You should be able to put them in your mouth and swallow them.
- Eat 6-8 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 when you feel full. If you keep eating, you may have pain, reflux (heart burn), 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 Choices: 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 high in carbohydrates and 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 Step 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

Step 4: Soft Foods

- You can now start to eat cooked **soft-solid 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 don't overeat. 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: 64oz/day

Good soft-solid protein choices are:

Food	Serving Size	Protein per Serving
Beans (black, pinto, navy, etc.) & Lentils	½ cup	6-9 g
Cheese, most types	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	1 Tbsp.	4g
Tofu	¼ cup	5
Yogurt, Greek	1 container (5.3 oz.)	10-15g

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

Foods to Avoid:

- High carbohydrate foods such as bread, cereal, crackers, potatoes, pasta, rice, chips, grits, snack foods. These foods are easy to overeat and keep you from meeting your protein goal.
- 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.

Sample Meal Plan for Step 4 – soft 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

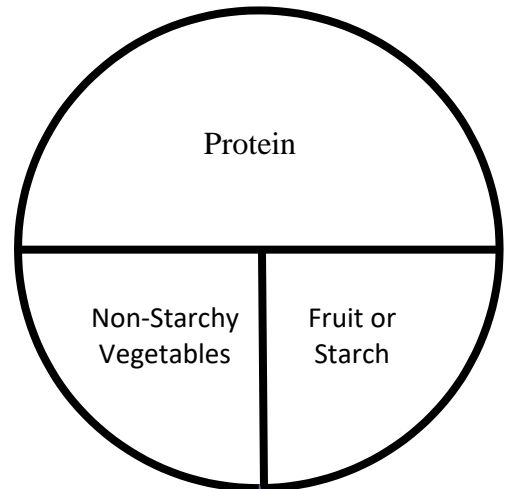
NUTRITION: LONG TERM EATING PLAN

This will start about 6 weeks after surgery. 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 full.
- Read food labels!
- Keeping a food journal may 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, noncarbonated, caffeine free fluids daily.
- Do not drink while eating and wait 30 minutes after the meal before drinking

Protein

Following weight loss surgery, it is important to eat enough protein. It is recommended you eat a **minimum of 60-80 g** of protein per day.

Protein is best absorbed when spread evenly throughout the day. If you are eating 5-6 small meals per day, aim for at least 10g of protein at each meal. Do not eat or drink more than 20-30g of protein in a single sitting.

Foods to Limit or Avoid

- Foods high in sugar – may cause dumping syndrome
- High carb foods – grits, oatmeal, potatoes, rice, pasta, cereal, chips/snack foods
- Liquid calories – juice, sweet tea, coffee drinks

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

NUTRITION: PROTEIN SUPPLEMENT PRODUCTS

For the first few months after surgery, most patients need at least 1 protein drink per day to get at least 60 grams by the end of the day. Here are some tips for picking a good option:

- The best choice is something that gives you a high number of protein grams for a low number of calories. For example, 30 grams of protein for 160 calories is better than 10 grams of protein for 200 calories.
- Whey protein is preferred; however, soy, egg, and vegan options are also available. If you are lactose intolerant, look for a protein powder with whey protein isolate as the only protein source.
- Flavored, unflavored, and even clear liquid options are available.
- Compare cost per gram of protein. There are several affordable options.
- It is convenient to have both pre-made drinks and powders.
- As a general guideline, choose something with at least 20 grams of protein, less than 10 grams of carbohydrates, and less than 5 grams of fat.

Here are some protein supplement options:

- **Premier Protein Shakes** – 30g protein, 160 calories
- **Ensure Max Protein/Boost Max** – 30g protein, (150-160) calories (must be **MAX**)
- **Fairlife Core Power** – 26g protein, 170 calories
- **Shamrock Farms Rockin' Protein** – 20g protein, 90 calories, clear liquid
- **Orgain Organic & Plant Based Protein Powder & Shakes** – 21g protein
- **Body Fortress Whey Protein Powder** – 30g protein, 200 calories per scoop
- **GNC 100% Whey Protein Powder** – 24g protein, 140 calories per scoop
- **Pure Protein Natural Whey Powder** – 23g protein, 130 calories
- **Isopure Low Carb Protein Powder** – 25g protein, 110 calories per scoop
- **Matrix and Nectar Protein Powder** – for fun flavors, 1-866-333-7403 or www.SI03.com
- **Unjury Protein Powder** – 21g protein, 100 calories per scoop – 1-800-517-5111 or www.unjury.com
- **Pro-Stat** – 15g protein and 100 calories in 1 fluid ounce dose



NUTRITION: READING FOOD LABEL

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.

Nutrition Facts	
2 servings per container	
Serving size	1 cup (140g)
Amount per serving	
Calories	160
	% Daily Value*
Total Fat 8g	10%
Saturated Fat 3g	15%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 60mg	3%
Total Carbohydrate 21g	8%
Dietary Fiber 3g	11%
Total Sugars 15g	
Includes 5g Added Sugars	10%
Protein 3g	
Vitamin D 5mcg	25%
Calcium 20mg	2%
Iron 1mg	6%
Potassium 230mg	4%

*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day is used for general nutrition advice.

Bariatric Vitamin Supplement Guide

NUTRITION: BARIATRIC VITAMIN SUPPLEMENT GUIDE

You will need to take vitamins for the rest of your life. Vitamins should be chewable, liquid or crushed until 6 months post-op. **DO NOT TAKE GUMMY MULTIVITAMINS.**

We follow the ASMBS Guidelines for supplementation following weight loss surgery.

Type	Amount
Multivitamin NO GUMMIES	200% DRI for most nutrients Should also contain: <ul style="list-style-type: none"> • Thiamin – at least 12 mg • Folate – 400-800 mcg • Zinc – 8-22 mg • Copper – 2 mg • Magnesium • Selenium
Calcium	1200-1500 mg per day
Vitamin D	3000 IU per day
Iron	Males: 18 mg per day Females: 45-60 mg per day
Vitamin B12	350-500 mcg per day (sublingual)

MULTIVITAMINS

Type	Daily Amount	Additional Supplements to Take	Where to Purchase
Bariatric Advantage Advanced Multi EA	2	Calcium	www.bariatricadvantage.com
Bariatric Choice All-in-One	4		www.bariatricchoice.com
Bariatric Fusion	4		www.bariatricfusion.com
Celebrate Multi-Complete with iron (chewable) *available in 4 different iron levels	2	Calcium	www.celebratevitamins.com
Optisource	4	Thiamin + Vitamin D	Walgreens
Opurity Bypass & Sleeve Chewable	1	Calcium May need additional iron	www.opurity.com
ProCare Bariatric Chewable	1	Calcium	www.procarenow.com
BariatricPal Multivitamin	1	Calcium	www.bariatricpal.com

CALCIUM

- 1200-1500 mg daily
- Calcium citrate is preferred. If your calcium supplement contains calcium carbonated, take it with your meal.
- Calcium is best absorbed spread out 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
Citracal Pearls or Gummies (calcium carbonate)	6 per day
Opurity Calcium Citrate	4 per day
Viactiv chews (calcium carbonated)	2 per day
Wellesse Liquid Calcium	2 Tbsp.

IRON

- Check your multivitamin. Some multivitamins already contain your daily dose of iron.
- 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

NASCOBAL/BARIACTIV VITAMINS

- Available by prescription only (not covered by Medicare or Medicaid)
 - Nascobal (vitamin B12) – 1 intranasal spray, 1x per week
 - BariActiv Multivitamin – 2 per day
 - BariActiv Calcium + Vitamin D – 4 per day
 - BariActiv Iron – 3 per day
- Includes free shipping and auto refills
- Available in chewable or capsules.

If you are interested in taking a multivitamin that is not listed above, please ask the dietitian if it meets ASMBS guidelines prior to taking it.

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.
- Recipe Websites
 - <https://www.unjury.com/blog/recipes/>
 - <http://www.bariatricchoice.com/free-bariatric-weight-loss-recipes.aspx>
 - <https://www.celebratevitamins.com/about-you/recipes.html>
 - <https://www.pinterest.com/uncweightlosssurgery>

Attending **UNC Bariatric Surgery Support Group** meetings can be very helpful –

- Hillsborough - **When:** 1st Monday of the month at 6pm
Where: Hillsborough Medical Office Building, 1st Floor
Lobby, 460 Waterstone Drive, Hillsborough
- Chapel Hill - **When:** 3rd Wednesday of the month at 6pm
Where: Aesthetic Center, 151 Old Univ. Station Rd, Chapel Hill

Contact UNC Dietitians at (984) 974-3012 or via MyChart

Contact UNC Bariatric Surgery at (919) 966-8436

After Hours Emergency Contact at (984) 974-1000; page on-call SRZ Resident