

You can

CHANGE
YOUR LIFE



BARIATRIC SURGERY

PATIENT RESOURCE GUIDE



ST. CLAIRE HEALTHCARE IS AN ACCREDITED COMPREHENSIVE CENTER FOR BARIATRIC SURGERY

St. Claire HealthCare's Bariatric Surgery Center is accredited as a Comprehensive Center by the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP®), a joint Quality Program of the American College of Surgeons (ACS) and the American Society for Metabolic and Bariatric Surgery (ASMBS).

MBSAQIP-Accredited centers offer preoperative and postoperative care designed specifically for patients with obesity. The MBSAQIP Standards ensure that metabolic and bariatric patients receive multidisciplinary medical care, which improves patient outcomes and long-term success.

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Bariatric surgery is a major event in your life that should be treated as a new beginning.

The main purpose of the surgery is to help you reduce the amount of food you are able to eat by decreasing the size of your stomach. However, obesity is a lifelong disease and there is no operation, diet or medication that can treat obesity by itself.

Surgery doesn't guarantee successful long-term weight reduction; it is simply a tool to help you reach and maintain a healthy body weight. Achieving optimal and permanent weight loss requires commitment to changing old behaviors into healthy lifelong habits!



Thank you for choosing St. Claire HealthCare!

We hope this booklet assists in making sure your new life is on the right track. If you have questions at any point during your surgical weight loss journey, please contact us and we will be happy to help.



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BARIATRIC SURGERY CENTER

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TABLE OF CONTENTS

Failing to Plan = Planning to Fail

Calculating your Body Mass Index.....	3
---------------------------------------	---

Preparing for Surgery

One Month Before Surgery.....	4
One Week Before Surgery	4
Preoperative & Anesthesia Consultation	4
Suggested Shopping List	5
Day Before Surgery.....	5
Afternoon Before Surgery.....	5
Morning of Surgery	6
During Surgery.....	7
After Surgery.....	7-8
Discharge Instructions	8-9
Common Post-Surgical Concerns.....	10-12

Nutrition

Pre-Surgery Diet	13-14
Post-Surgery Diet	14-21
Nutrition After Surgery	22-24
Meal Replacements.....	24
Protein from Whole Foods	25-26
Protein Supplements	27
Vitamin & Mineral Supplements.....	28
How to Compare Supplements	29
Drinking Alcohol	29
Lifestyle Strategies After Weight Loss Surgery	30-31
Nutrition Recap.....	31

Exercise

Exercise After Surgery	32
Types of Exercise	32-33
Target Heart Rate	34
Exercise Goals.....	35
Exercise Recap.....	35

Worksheets

Food Log	36-38
Goals and Follow-up.....	39-40

FAILING TO PLAN = PLANNING TO FAIL

It is essential to prepare ahead of time for your life after weight loss surgery. This includes lifestyle modifications regarding diet and exercise. Make plans before your hospital admission to have a well-stocked pantry and purchase any vitamins or supplements your surgeon or dietitian suggest (*see Suggested Shopping List*). You should also make exercise plans to implement after your surgery and have them approved by your physician.

CALCULATING YOUR BODY MASS INDEX (BMI)

A BMI of 18.5 to 24.9 is considered a healthy weight. A BMI of 25 to 29.9 indicates overweight. A BMI of 30 or higher is considered obesity. A BMI over 39 is considered extreme obesity.

Body Mass Index Table																																				
	Normal					Overweight					Obese					Extreme Obesity																				
BMI	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Height (inches)	Body Weight (pounds)																																			
58	91	96	100	105	110	115	119	124	129	134	138	143	148	153	158	162	167	172	177	181	186	191	196	201	205	210	215	220	224	229	234	239	244	248	253	258
59	94	99	104	109	114	119	124	128	133	138	143	148	153	158	163	168	173	178	183	188	193	198	203	208	212	217	222	227	232	237	242	247	252	257	262	267
60	97	102	107	112	118	123	128	133	138	143	148	153	158	163	168	174	179	184	189	194	199	204	209	215	220	225	230	235	240	245	250	255	261	266	271	276
61	100	106	111	116	122	127	132	137	143	148	153	158	164	169	174	180	185	190	195	201	206	211	217	222	227	232	238	243	248	254	259	264	269	275	280	285
62	104	109	115	120	126	131	136	142	147	153	158	164	169	175	180	186	191	196	202	207	213	218	224	229	235	240	246	251	256	262	267	273	278	284	289	295
63	107	113	118	124	130	135	141	146	152	158	163	169	175	180	186	191	197	203	208	214	220	225	231	237	242	248	254	259	265	270	278	282	287	293	299	304
64	110	116	122	128	134	140	145	151	157	163	169	174	180	186	192	197	204	209	215	221	227	232	238	244	250	256	262	267	273	279	285	291	296	302	308	314
65	114	120	126	132	138	144	150	156	162	168	174	180	186	192	198	204	210	216	222	228	234	240	246	252	258	264	270	276	282	288	294	300	306	312	318	324
66	118	124	130	136	142	148	155	161	167	173	179	186	192	198	204	210	216	223	229	235	241	247	253	260	266	272	278	284	291	297	303	309	315	322	328	334
67	121	127	134	140	146	153	159	166	172	178	185	191	198	204	211	217	223	230	236	242	249	255	261	268	274	280	287	293	299	306	312	319	325	331	338	344
68	125	131	138	144	151	158	164	171	177	184	190	197	203	210	216	223	230	236	243	249	256	262	269	276	282	289	295	302	308	315	322	328	335	341	348	354
69	128	135	142	149	155	162	169	176	182	189	196	203	209	216	223	230	236	243	250	257	263	270	277	284	291	297	304	311	318	324	331	338	345	351	358	365
70	132	139	146	153	160	167	174	181	188	195	202	209	216	222	229	236	243	250	257	264	271	278	285	292	299	306	313	320	327	334	341	348	355	362	369	376
71	136	143	150	157	165	172	179	186	193	200	208	215	222	229	236	243	250	257	265	272	279	286	293	301	308	315	322	329	338	343	351	358	365	372	379	386
72	140	147	154	162	169	177	184	191	199	206	213	221	228	235	242	250	258	265	272	279	287	294	302	309	316	324	331	338	346	353	361	368	375	383	390	397
73	144	151	159	166	174	182	189	197	204	212	219	227	235	242	250	257	265	272	280	288	295	302	310	318	325	333	340	348	355	363	371	378	386	393	401	408
74	148	155	163	171	179	186	194	202	210	218	225	233	241	249	256	264	272	280	287	295	303	311	319	326	334	342	350	358	365	373	381	389	396	404	412	420
75	152	160	168	176	184	192	200	208	216	224	232	240	248	256	264	272	279	287	295	303	311	319	327	335	343	351	359	367	375	383	391	399	407	415	423	431
76	156	164	172	180	189	197	205	213	221	230	238	246	254	263	271	279	287	295	304	312	320	328	336	344	353	361	369	377	385	394	402	410	418	426	435	443

Source: Adapted from Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report.



A BMI calculator is available on our website.
www.st-claire.org/surgicalweightloss

PREPARING FOR SURGERY

***FAILURE TO COMPLY with these instructions the months and days leading up to your surgery may result in YOUR PROCEDURE BEING CANCELED OR POSTPONED to a later date. If you have any questions regarding these preoperative instructions, call your surgeon's office.**



**You absolutely must quit smoking prior to surgery!
Smoking will slow the healing process!
This is a non-negotiable requirement to have bariatric surgery.**

ONE MONTH BEFORE SURGERY

Your surgeon will discuss all of your current medications during your preoperative appointments. It is important to remember the following guidelines, unless your surgeon tells you otherwise:

- No Dep-Provera shots for three months before your procedure because they increase the risk of developing a blood clot
- Stop taking birth control pills, hormone replacement therapy and herbal supplements
- Stop any oral or injectable steroids, including into joints or your back, because they increase the risk of ulcer formation and disrupt the healing process
- You may continue taking thyroid medications such as Synthroid, testosterone, Flonase and steroidal creams

ONE WEEK BEFORE SURGERY

Your surgeon advises you to:

- Stop taking aspirin, ibuprofen or any other NSAIDS
- Start taking folic acid
- Start taking vitamin D3 and a multivitamin with iron

* If you are unsure about which medications to stop taking when, or have ANY other questions related to your procedure, please call your surgeon's office. Your surgeon and his staff will discuss when to resume any of these medications after your procedure.

*Continue any psychiatric medications as prescribed BEFORE AND AFTER surgery. Any changes to these medications should be made by the provider who prescribes them. Be sure to follow up with the prescribing provider of any anxiety, bipolar or depression medication within one month after your procedure. Plans to change any of these medications need to be reported to your bariatric surgery team.

PREOPERATIVE & ANESTHESIA CONSULTATION

An appointment will be scheduled a few days before surgery for your preoperative (PAT) consultation. Be sure to bring a complete health history, an up-to-date list of current medications, and pill bottles, including over-the-counter meds and herbal supplements.

During this appointment, a physician will perform a physical exam and answer any questions you may have. Necessary labs will be drawn and the nurse will give you specific information regarding your surgery, including which medications to take the morning of your surgery.

DAY BEFORE SURGERY

- You will be on a clear liquid diet. This consists of water, sugar-free Jell-O, clear broth, sugar-free popsicles, flavored water (Crystal Light, Propel, PowerAde Zero), sugar free Kool-Aid and decaf coffee and tea.
- Absolutely nothing by mouth after midnight. This includes mints, gum, food, drink and smoking (you should have quit two weeks ago).
- Make sure to thoroughly cleanse yourself. A bottle of Hibiclens antibacterial soap will be given to you during your preoperative consultation appointment. Be sure to shower with this soap, washing from chin to toes, paying extra attention to any skin folds around the stomach or pelvic area.
- Swish and gargle with antibacterial mouthwash. Make sure to do this for 60 seconds both the evening before and morning of surgery.
- Do not take insulin or diabetes medications after midnight.
- Take only the medications approved during your preoperative consultation.

AFTERNOON BEFORE SURGERY

- Call our surgical services department at 606.783.6686 the afternoon before your procedure to receive your arrival time for the morning of your surgery.



SUGGESTED SHOPPING LIST

You may want to purchase these items before your hospital admission:

- Antibacterial mouthwash
- Liquid, sugar-free Adult Tylenol (if you cannot tolerate the pill form)
- Gas-X, Mylanta, Maalox (Liquid Mylicon)
- Imodium (Loperamide)
- Lip balm
- Colgate Wisp (Or similar mini toothbrush)
- Books, magazines, puzzle books
- Protein mixer cup
- Blender that will crush ice
- Measuring cups and spoons
- Containers to pre-prepare your protein and meal choices

MORNING OF SURGERY

- Remember, nothing to eat or drink after midnight!
- You may take medications that were instructed during your preoperative consultation, including all heart, seizure and blood pressure medications, unless otherwise directed, with a SMALL sip of water.
- Shower with the Hibiclens soap again, from chin to toes.
- You may brush your teeth and gargle with antibacterial mouthwash for 60 seconds, but do not swallow.
- Leave all jewelry and valuables at home.
- Make sure to bring the following items with you to the hospital:
 - › This booklet
 - › Home medications or an up-to-date list of current medications, including frequency and dose
 - › Comfort items, such as lip balm, your own pillow, robe, slippers and reading material
 - › Loose-fitting clothes for your discharge home
- Report to the registration desk just inside of the Medical Center's main entrance to check in.
- Make sure to then sign in at our Same Day Surgery Desk on the fourth floor.
- After a nurse checks you in, you will start getting ready for the surgery by:
 - › Changing into a gown
 - › Removing all jewelry, dentures, contacts, glasses and so on
 - › Having necessary labs drawn and an IV started
 - › Taking any preoperative medications
 - › Reviewing your health history with nursing and anesthesia staff
- Up to two family members can then stay with you until you are taken to the operating room (OR).
 - › Once you are taken to the OR, your family will be directed to the waiting room where restrooms, televisions, beverages and a patient tracking screen are provided.

DURING SURGERY

Once you're in the operating room, St. Claire's Anesthesiology staff will put you to sleep and place a breathing tube in your airway. Your abdomen will be cleaned and draped in a sterile manner. Most gastric sleeve surgeries last 60-90 minutes. However, the length of surgery varies by each patient's anatomy and surgical findings. Your operating room nurse will keep your family updated, and after the surgery, your surgeon will speak to your family.



AFTER SURGERY

Post-op, you will be taken across the hall to the Post Anesthesia Care Unit (PACU) for at least 30 minutes. A nurse will monitor your blood pressure, heart rate and oxygen saturation. Every effort will be made to manage your pain and make you as comfortable as possible.

From the PACU, you will be transferred to your room by the nursing staff. You'll then be encouraged to begin deep breathing/coughing exercises using an incentive spirometer like the one pictured.



It is important to use your incentive spirometer as instructed by our hospital staff. This will decrease your risk of respiratory complications such as pneumonia. Staff will assist you with getting in and out of bed and walking within just a few hours after surgery. It is also very important to walk as much as possible. This will help prevent blood clots and decrease pain.

Expect to have several small incisions on your stomach. Dermabond, an adhesive, will be used on the incisions to help hold them together. Dermabond is light purple in color, waterproof and acts as a barrier to bacteria, preventing infection. Do not peel or pick at the incisions, as this adhesive will wear off in one or two weeks after surgery. Avoid using lotion on your abdomen as this will also remove Dermabond®.

HOSPITAL STAY

The typical stay for a gastric sleeve patient is one night, but this could vary. Within a few hours of arriving to your hospital room you will likely begin a clear liquid diet. You should drink very small amounts of liquid and increase slowly. Drink one ounce an hour for the first four hours. Try to gradually increase to one ounce every half hour (*see Post-Surgery Diet*). If you begin to feel nauseous, stop sipping for about ten minutes. If all goes well, you will be discharged from the hospital the day after your surgery.

DISCHARGE INSTRUCTIONS



Call 911 if you have shortness of breath, difficulty breathing, chest pain, or any other condition you feel could be life-threatening.

WOUND CARE

- You may shower any time after your surgery, but do not to pick or peel at the Dermabond covering your incisions. Gently wash over your stomach. Your incisions may get wet in the shower, but keep them dry at all other times.
- Do not put peroxide, ointments, creams or lotions on your incisions unless otherwise instructed by your surgeon.
- You may have a small amount of drainage from your surgical sites. It is normal for the drainage to be clear or pink in color. If drainage does occur, you may cover the draining incision with a bandage to protect your clothing. Contact your surgeon immediately if the incisions appear to have pus, an odor, or you notice spreading redness.
- No tanning bed or prolonged sun exposure to the abdomen for eight weeks after surgery, as it could cause your already tender incisions to burn more easily.

ACTIVITY

- No lifting, pushing, pulling, or tugging more than 25 pounds the first three weeks after your procedure. You may return to work one-two weeks after surgery with this lifting restriction. If your employer will not allow you to return to work with lifting restrictions, you may be off three weeks.
- You may resume your daily self-care activities upon discharge from the hospital, as moderate activity is recommended.
- It is crucial that you continue walking once you get home. Walking every one to two hours while awake will help prevent respiratory complications and blood clots from forming.
- You may climb stairs; just take one at a time.
- Let your surgeon know of any travel plans you have during the first few months after surgery.
- Be sure to take your incentive spirometer home from the hospital. Your nurse will review this with you.
- No driving within 24 hours of anesthesia or while taking narcotic pain medication.
- No smoking for at least eight weeks post-op. We ask that you make every effort to stop smoking permanently. Our staff will be happy to refer you to St. Claire HealthCare's tobacco cessation specialist.

CALL YOUR SURGEON IF YOU EXPERIENCE

- Bleeding of any kind, whether it is from your incisions, vomit or stool
- Signs of infection such as a temperature of 100.5 or more, redness and/or swelling at incision sites, pus at incision sites or foul smelling drainage
- Nausea or vomiting that is not relieved by medications or prevents you from keeping down fluids for a 24-hour period
- Pain not relieved by medication
- Calf or leg pain
- Swelling, warmth, redness or tenderness in your legs or pelvic area

MEDICATION MANAGEMENT

Medications You Will Go Home With - Your surgeon will discharge you home with liquid forms of medication to control nausea/vomiting, pain, and heartburn. St. Claire pharmacists will be consulted to provide liquid or other appropriate forms of medications that you're already taking at home. We strongly encourage you to take advantage of St. Claire's Retail Pharmacy. The liquid forms of medication given may not be kept in stock by other pharmacies and can take up to three days to arrive. St. Claire's pharmacy keeps these medications in stock and will deliver them right up to your room before you are discharged.

An appointment will be scheduled with your family doctor for the week after surgery to address any changes that may need to be made to your home medications.



Even if you have no symptoms of heartburn, you must take the Prevacid or Protonix prescribed to decrease the amount of acid coming into contact with the healing staple line!

This medication should be taken for the first 30 days after surgery. It may be discontinued if you are having no signs or symptoms of heartburn after 30 days. If you do not receive this at discharge please let our staff know ASAP.

Medications to Avoid for Six Weeks After Gastric Sleeve - Do not take aspirin or any other blood thinners as well as anti-inflammatories and steroids unless otherwise directed by your surgeon or physician. Do not use NSAIDS (like ibuprofen). Discuss ANY medications you are taking with your surgeon and do not take anything, including over-the-counter, without his approval.

Pregnancy and Birth Control – It is not recommended for women to become pregnant for two years after surgery to maximize your weight loss and to allow you to reach a stable weight. Women often experience a fertility boost after surgery, so just because you've never been able to get pregnant in the past doesn't mean you won't be able to post-op! If you become pregnant, please set up an appointment with your OB/GYN and surgeon as soon as possible.

Vitamin Requirements – See *Vitamin & Mineral Supplements*.



Questions about your medications?

Call the Pharmacy Experience Hotline at **606.780.5346**. Leave a brief message for the pharmacist and a member of our pharmacy team will contact you within 24 hours.

Hydrating for Weight Loss Success

Staying hydrated after weight loss surgery takes planning and discipline. Plan to keep a water bottle with you at all times and take small sips throughout the day.



COMMON POST-SURGICAL CONCERNS

Pain – Mild pain, tenderness and soreness throughout the abdominal area is normal.

- Tylenol may be used for mild pain and discomfort.
- Prescription pain medication may be used for severe pain. A prescription will be given to you after your surgery. Take only as directed.
- Take a warm bath, only after your three week post-op period has passed and your incisions have healed.
- Walk frequently.

Contact your surgeon if you have severe pain not controlled with your prescription medication or severe pain that lasts longer than two hours. Pain should resolve within four to six weeks after surgery.

Constipation – This can be caused by the anesthesia used during surgery, inactivity, diet or certain medications, such as narcotics.

- Your bowels should move by day two or three at home.
- Drink plenty of fluids.
- Increase physical activity as your surgeon allows.
- Eat foods with lots of fiber such as fresh fruits, vegetables and whole grains (when diet stages permit).
- Fiber laxatives such as Metamucil and Citrucel are safe for long-term use to treat infrequent bowel movements (less than three a week). Purchase these in the powder form and add the powder to your usual fluids. Be sure to read the label to make sure the fiber powder mixes into fluid without thickening.
- Stool softeners, such as Colace and Docusate, may be used to treat hard stools.
- Check with your surgeon before taking a stool softener or fiber laxative.
- Notify your surgeon if moderate to severe constipation does not respond to over-the-counter remedies within one week or if constipation is accompanied by rectal bleeding, abdominal pain, cramps, nausea or vomiting.

Nausea and Vomiting – It is not unusual for patients to feel some nausea during the first few months after their surgery. Not following dietary and nutrition recommendations will cause nausea and/or vomiting.

- If you notice nausea and/or vomiting after eating, you could have eaten too fast, eaten too much or failed to chew enough. Eat slowly, chew your food well and eat no more than recommended amounts.
- Do not consume drinks that are cold, contain caffeine or are carbonated; these may cause nausea and vomiting.
- Each time you add a new food to your diet, pay attention to how your body reacts. Some foods are not well tolerated at first, but you may be able to try them again later on.
- Do not lie down too soon after your meal.

Notify your surgeon if vomiting lasts throughout the day and/or you are unable to keep fluids down.

Diarrhea – Immediately after surgery, you may temporarily have diarrhea. If liquid stools occur more than three times in a day, you may take Imodium.

- Limit high-fat, greasy foods, milk, milk products and foods that are extremely hot or cold.
- No liquids with meals; sip fluids between meals only.
- Try eating smaller amounts more frequently.
- Sugar alcohols such as sorbitol and xylitol may act as laxatives, so read all food labels carefully.
- Contact your surgeon if you have diarrhea lasting longer than 24 hours or diarrhea that impairs your ability to stay hydrated.

Food Gets “Stuck” – You may notice excessive salivation, nausea, vomiting, heartburn, cramping, thirst or chest pain, pressure, or fullness when food is not passing through your stomach.

- Relax and lie down if possible.
- Don’t eat; only drink small sips of water for several hours. Contact your surgeon if you cannot drink liquids for a 24-hour period.

Dehydration – If you do not drink your suggested daily amount of fluids, dehydration may occur. Persistent nausea, vomiting and/or diarrhea can also lead to dehydration. Remember to SIP, SIP, SIP BETWEEN MEALS to get adequate fluid intake.

Heartburn – Carbonated drinks, fatty foods and overeating may cause heartburn so steer clear of these.

Bloating – Only eat the amount of food recommended by your dietitian.

Lactose Intolerance – Some patients are not able to tolerate dairy after surgery. You may notice gas, bloating and/or discomfort after consuming dairy products. Try milk brands such as Lactaid or Dairy Ease to help with this problem. Keep in mind, patients who are lactose intolerant are usually still able to eat yogurt.

Blockage – If you do not chew your food properly, your new stomach opening (which is now about the size of a dime) may become blocked. Chew food very well, especially meats! Contact your surgeon if you experience pain or persistent nausea and/or vomiting. He may advise you to regress to clear liquids for a certain time.



Hair Thinning or Excessive Shedding – This can be caused by the stress of surgery, rapid weight loss or a nutrient deficiency. Hair loss may occur three to four months post-op. To help reduce, adhere to the following guidelines:

- Increase protein
- Be sure to follow the vitamin recommendations provided by our dietitian
- Make good, healthy food choices
- Drink plenty of fluids

Mental Health – You are about to experience a major lifestyle and body change, therefore, you may experience major changes in how you view yourself and those around you. While we hope patients gain confidence as they begin to lose weight and adapt a healthier lifestyle, some may struggle to cope with the changes they are experiencing. Relationships may also suffer or become tense. If you have any of these experiences, please let your bariatric team know so they can connect you to an experienced mental health professional.

Transfer Addiction – Patients undergoing a weight loss surgery may replace an addiction to food with a new, unhealthy addiction such as alcohol, gambling or drug use. If you have used food for comfort in the past, you may be at an increased risk for developing these habits, especially if you are not prepared with safe and healthy replacement options. PLEASE speak with your surgeon or his staff to help identify such problems. We can help provide you with healthy replacements for emotional eating.

Weight Loss Plateaus – You may experience periodic plateaus in your weight loss journey. This is normal and expected. Try changing up your diet and exercise activity as a way to jump-start your weight loss.

NUTRITION

PRE-SURGERY DIET

In the months and weeks prior to bariatric surgery, your diet is important. It may be tempting to splurge on all your favorite foods, but this is not the time. Prior to surgery, you should begin to learn how to eat a healthier diet and smaller portions so that you are better prepared to transition to your post-surgery diet. Eating a well-balanced diet will help ensure that you are consuming the nutrients you need to be healthy. Being well-nourished and losing weight before surgery will actually reduce risk of post-operative complications and speed recovery.



You should attend the Bariatric Nutrition Class as soon as possible after starting our program and begin to make changes in food choices and portion sizes.

Use the Meal Pattern provided at the Bariatric Nutrition Class as a guide for planning meals, preparing and portioning foods before surgery. You should also begin to keep a food and activity log. See page 32 for an example.

About two weeks before surgery, the provider may advise you to be on a very strict diet that is higher in protein, but low in calories, fats and carbohydrates, especially refined sugars and saturated fats. Your provider may also suggest that you take a multi-vitamin and mineral supplement prior to surgery.

The purpose of the pre-surgery diet is to:

- Reduce fat deposits around the stomach.
- Reduce the size of your liver. When you are overweight, your liver often contains a lot of fatty tissue — a condition commonly known as “fatty liver.” The liver also stores a form of sugar called glycogen, which encourages fluid storage as well. When you follow a diet very low in starches and sugars, you tend to lose these glycogen and fluid stores, resulting in your liver shrinking in size.
- Increase protein intake, which will help preserve and protect lean body mass.

This diet is recommended for two weeks just prior to surgery and is NOT to be followed post-operatively:

Meal 1 — One serving High Protein Bariatric Protein Supplement

Select from the list of preferred products provided by your registered dietitian (RD) at the Bariatric Nutrition Class or Bariatric Clinic. The supplement must contain about 180 to 200 calories and 25 to 40 grams protein per serving, and must be low in sugars and fats. Powdered supplements must be mixed with either water or fat-free milk, depending upon the instructions provided by your RD.

Meal 2 — One serving High Protein Bariatric Protein Supplement

Meal 3 — One serving High Protein Bariatric Protein Supplement

Meal 4 — One serving High Protein Bariatric Protein Supplement

Between protein supplements you should sip sugar-free, calorie-free clear liquids throughout the day in order to stay well-hydrated. Choose from water, Crystal Light, sugar-free popsicles, sugar-free Jell-O, unsweetened tea, fat-free broth or bouillon.

DAY BEFORE SURGERY



The day before surgery, consume ONLY CLEAR LIQUIDS.

You must not consume anything after MIDNIGHT the day before surgery. Your stomach needs to be completely empty in preparation for surgery.

It is important to follow your pre-operative diet provided by your surgeon 10-14 days before surgery, because a smaller liver can decrease the chances of complications. The sole purpose of this diet is to shrink the size of the liver (NOT WEIGHT LOSS). During your procedure, your liver has to be lifted out of the way to gain access to the stomach underneath. This can lead to a liver injury, resulting in increased bleeding, infection or other complications. Be sure to read food labels to avoid sugar and high fructose corn syrup. Also, avoid high-calorie beverages. Our staff will be happy to suggest appropriate bariatric protein product and clear liquid products.

**Depending on your BMI, your surgeon may instruct you to follow a CLEAR LIQUID diet two weeks prior to your operation.*

POST-SURGERY DIET

After bariatric surgery, it is important to follow the recommended nutritional guidelines to prevent complications and ensure success. Please adhere to the following guidelines unless otherwise directed by your provider. Failure to comply with these dietary instructions could result in serious complications.



STAGE 1

After surgery, you may begin the Stage 1 diet as early as four hours following surgery (at the discretion of nursing staff), starting with very small amounts and slowly increasing. Until your appointment the Friday after surgery, you should consume only CLEAR LIQUIDS. You should choose clear liquids that are sugar-free, caffeine-free, calorie-free, non-carbonated and non-alcoholic.

GOALS	ACCEPTABLE LIQUIDS	REMINDERS
<ul style="list-style-type: none"> • Day 1: Slowly sip 2 oz. (two medicine cups) of liquid every hour for the first 4 hours. <i>Increase to slowly sip 3 oz. per hour (one medicine cup every 20 minutes) as tolerated.</i> • Day 2 & 3: Slowly sip 4 oz. of liquid every hour (1 medicine cup every 15 minutes). <p><i>Your provider may have you progress more quickly or slowly, depending upon how you feel. You will receive instructions before leaving the hospital.</i></p>	<ul style="list-style-type: none"> • Water • Flavored water such as Fruit 2-0, Propel, Vitamin Water Zero, SoBe Water, Mio or Hint • Water with powder packets of True Lemon, True Lime, Just Lemon or Just Lime • Crystal Light • Light lemonade (Minute Maid) • Decaffeinated coffee or tea (you may add sugar substitute) • Sugar-Free Jell-O • Clear broth or bouillon • Sugar-free popsicles (less than 25 calories each) 	<ul style="list-style-type: none"> • GO SLOWLY! • SIP, Don't gulp! Stop if you feel fullness or nausea. Wait a few minutes, then begin sipping again. • No straws! This will help you avoid nausea, vomiting and discomfort. • MEET FLUID NEEDS in order to avoid dehydration. Your goal is 50 to 64 ounces a day.

****When your IVs are discontinued or you are discharged home, increase your oral fluid intake as tolerated toward 4 to 8 oz. over each hour in order to reach your daily fluid goal of 64 oz. each day.***

Remember to sip, do not gulp, and do not use straws. GO SLOWLY, especially the first few weeks after your surgery, to allow for post-op healing. If you feel increasing fullness or pressure under your breast bone, SLOW DOWN and take smaller sips.

STAGE 2

On Day 4 following surgery, you will advance to a combination of CLEAR LIQUIDS AND FULL LIQUIDS. CLEAR LIQUIDS are important for hydration and FULL LIQUIDS are required for nutrition, especially protein. PROTEIN is necessary to heal the surgical wounds and to minimize the loss of muscle and other lean tissue as you lose weight. You will also need to begin taking vitamin and mineral supplements, and will need to continue supplements. You will need to continue these supplements for life (see Vitamin & Mineral Supplements).

Follow the Stage 2 diet from Day 4 through 14 following surgery.

GOALS	ACCEPTABLE LIQUIDS	REMINDERS
<ul style="list-style-type: none"> • Slowly increase fluid intake toward 4 to 8 oz. (4 to 8 medicine cups) each hour. • Work your way up to a total of 64 oz. of fluid each day. • About HALF of fluid should be WATER OR CLEAR LIQUIDS (for fluid) and HALF of fluid should be FULL LIQUIDS (for protein). 	<ul style="list-style-type: none"> • CLEAR LIQUIDS listed in Stage 1, plus • FULL LIQUIDS: <ul style="list-style-type: none"> • Pre-made whey protein shakes – 20-30 grams of protein • Protein powder (whey, soy, whey isolate)— add to liquids below to provide at least 25 grams of protein per serving. • Fat-free (skim) milk • Soy milk – low fat/sugar • Sugar-free pudding (made with fat-free milk) • Sugar-free, fat-free yogurt or Greek yogurt • Tomato juice or V-8 Vegetable Juice 	<ul style="list-style-type: none"> • AIM FOR 64 OZ. FLUID EACH DAY. • AIM FOR 60 TO 80 GRAMS OF PROTEIN EACH DAY. Have 3 protein shakes a day while on Stage 2 – Full Liquids, each containing about 25 grams of protein. • CONTINUE TO SIP SLOWLY! • NO STRAWS! • BEGIN VITAMIN & MINERAL SUPPLEMENTATION <i>(See Vitamin & Mineral Supplements)</i>

SAMPLE MEAL PLAN—STAGE 2

BREAKFAST

- Slowly sip 8 to 10 oz. of FULL LIQUID (about 25 grams of protein).
- Wait 1 hour and take 1 or 2 chewable Post Bariatric multivitamins (dose depends on brand).

- Slowly sip 8 to 10 oz. of CLEAR LIQUID in between breakfast and lunch.

LUNCH

- Slowly sip 8 to 10 oz. of FULL LIQUID (about 25 grams of protein).
- With lunch, take 1 (500mg) Calcium Citrate + Vitamin D3 chewable supplement or 1 tablespoon of liquid calcium supplement.

- Slowly sip 8 to 10 oz. of CLEAR LIQUID in between lunch and dinner.

DINNER

- Slowly sip 8 to 10 oz. of FULL LIQUID (about 25 grams of protein).
- With dinner, take 1 (500mg) Calcium Citrate + Vitamin D3 chewable or liquid supplement.

- Slowly sip 8 to 10 oz. of CLEAR LIQUID during the evening.
- In the evening, take 1 (500mg) Calcium Citrate + Vitamin D3 chewable or liquid supplement.

Nutrition Priorities:

- Meet fluid needs.
- Eat protein foods first.
- Continue to avoid high-fat and high-sugar foods.
- Always take vitamin and mineral supplements.



STAGE 3

For the next week, days 15 to 21 after surgery, you will progress to a soft/pureed diet for bariatric patients.

GOALS	ACCEPTABLE LIQUIDS	REMINDERS
<ul style="list-style-type: none"> • If you are tolerating full liquids well, you may now replace full liquids with soft/pureed foods. All foods must be blended to a baby food consistency. • SLOWLY eat 1 to 2 oz. of soft/pureed protein food. If still hungry, add 1 oz. soft/pureed non-starchy vegetable. • Eat 5 to 6 small meals daily until you can tolerate ½ cup of food at one time. Then, change to 3 meals a day, no snacks. • No liquids for 15 minutes before and 30 minutes after meals. Sip liquids between meals only. • It should take 20 to 30 minutes to eat each meal. 	<p>PROTEIN:</p> <ul style="list-style-type: none"> • Scrambled egg whites or egg substitute. • Fat-free cottage cheese. • Sugar-free and fat-free yogurt. • Pureed meats, poultry, fish, moist — add liquid as needed. • Soft tofu. • Egg/chicken/tuna salad made with low-fat mayonnaise and pureed. • Soft, cooked fat-free dried beans, pureed. • Continue to add some protein powder to foods/liquids in order to reach daily goal. For example, add unflavored protein powder to cottage cheese, yogurt, or beans to increase protein content. <p>VEGETABLES/FRUIT:</p> <ul style="list-style-type: none"> • Well-cooked, non-fibrous vegetables, pureed and thinned with liquid to baby food consistency. • Canned fruit in water (not syrup), pureed. • Soft banana, pureed. • Unsweetened applesauce. 	<ul style="list-style-type: none"> • Continue to get 60 to 80 grams PROTEIN each day, and 50 to 64 oz. of FLUID each day. • Continue to take vitamin and mineral supplements. • Each meal should be no more than ¼ cup (2 oz.) total, gradually increasing toward ½ cup at a time. • Buy small plates, bowls, cups, spoons, etc., to help you eat the correct amount. • Take tiny bites and EAT SLOWLY. • Eat foods in this order: high protein food first, followed by vegetables then lastly, fruit. • Listen to your body. Stop eating when you are satisfied, NOT when you feel full. • All foods must be low-fat and low in sugar. • Avoid rice, bread and pasta until comfortably consuming adequate PROTEIN each day and non-starchy vegetables. Keep fruit intake very small due to sugar content.

SAMPLE MEAL PLAN—STAGE 3

BREAKFAST

- Slowly eat 1 to 2 oz. of SOFT/PUREED FOOD (12 to 16 grams of protein).
- Wait 1 hour and take 1 or 2 Post-Bariatric multivitamins (dose depends on brand).

- Slowly sip 10 to 12 oz. of CLEAR LIQUID between breakfast and snack.

SNACK

- Slowly eat 1 to 2 oz. of SOFT/PUREED FOOD (12 to 16 grams of protein).

- Slowly sip 10 to 12 oz. of CLEAR LIQUID between snack and lunch.

LUNCH

- Slowly eat 1 to 2 oz. of SOFT/PUREED FOOD (12 to 16 grams of protein).
- With lunch, take 1 (500mg) Calcium Citrate + Vitamin D3 chewable or liquid supplement.

- Slowly sip 10 to 12 oz. of CLEAR LIQUID in between lunch and snack.

SNACK

- Slowly eat 1 to 2 oz. of SOFT/PUREED FOOD (12 to 16 grams of protein).

- Slowly sip 10 to 12 oz. of CLEAR LIQUID in between snack and dinner.

DINNER

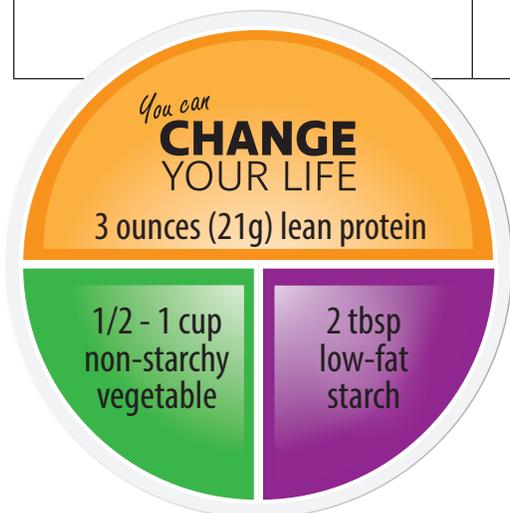
- Slowly eat 1 to 2 oz. of SOFT/PUREED FOOD (12 to 16 grams of protein).
- With dinner, take 1 (500mg) Calcium Citrate + Vitamin D3 chewable or liquid supplement.

- Slowly sip 10 to 12 oz. of CLEAR LIQUID.
- In the evening, take 1 (500mg) Calcium Citrate + Vitamin D3 chewable or liquid supplement.

STAGE 4

Once you are tolerating 4 oz. (1/2 cup) pureed food at a time, with 3 meals and 2 snacks a day, it is time to transition to low-fat, protein-rich solid foods. Remember to keep portions small and do not overfill your stomach, or you will stretch your stomach.

GOALS	ACCEPTABLE LIQUIDS	REMINDERS
<ul style="list-style-type: none"> To start, each meal should be no more than 1/2 cup (4 oz.) total. Gradually increase until you can take about 3/4 cup (6oz.) to 1 cup (8oz.) at a meal. As you can eat more at one time, transition toward only 3 meals a day, NO SNACKS. Continue to consume adequate protein first, and adequate fluid. Continue to sip liquids between meals. No liquids for 15 minutes before and 30 minutes after meals. Introduce new foods one at a time, carefully monitoring for tolerance. Eat slowly. It should take 20 to 30 minutes to eat each meal. See Meal Pattern Below. 	<p>PROTEIN/DAIRY:</p> <ul style="list-style-type: none"> Very lean meats including poultry and fish. Non-fat dairy foods including fat-free milk, low-sugar, fat-free yogurt, low-fat cheeses and fat-free cottage cheese. Low-fat soy milk. Scrambled egg white or egg substitute. Fat-free dried beans. <p>NON STARCHY VEGETABLES</p> <ul style="list-style-type: none"> Canned, fresh or frozen non-starchy vegetables. Begin to add raw vegetables that can be chewed to a mushy consistency. <p>HEALTHY CARBOHYDRATES</p> <ul style="list-style-type: none"> Starchy vegetables, low in fat Whole grains (low-sugar) Canned fruit in water, fresh fruit 	<ul style="list-style-type: none"> Continue to get 60 to 80 grams PROTEIN each day. Eat protein foods first, then vegetables. Chew, chew, chew! You cannot over chew your food. Take small bites and eat slowly. Chew to a ground consistency. Drink, drink, drink! Continue to consume 64oz. of FLUID each day, between meals. Sip, don't gulp. No straws. Do not drink alcoholic beverages, sweetened beverages, sports drinks or juices. Buy small plates, bowls, cups, spoons, etc., to help you eat the correct amount. STOP EATING when you are satisfied, not when you are full. Continue to take vitamin and mineral supplements — for life!



SAMPLE MEAL PLAN—STAGE 4

BEFORE BREAKFAST
<ul style="list-style-type: none">• Sip 8 to 10 oz. of fluid.
BREAKFAST
<ul style="list-style-type: none">• Scrambled egg whites OR low-fat cottage cheese or low-sugar, non-fat yogurt (less than 5 grams sugar per serving)
<ul style="list-style-type: none">• Wait at least 30 minutes, then sip at least 16 oz. of fluid and take 1 or 2 chewable Post-Bariatric multivitamin (dose depends on brand) between breakfast & lunch.
LUNCH
<ul style="list-style-type: none">• Tuna or egg salad made with low-fat mayonnaise or low-fat bean soup. After lunch take 1 (500mg) Calcium Citrate & Vitamin D3 Chewable Supplement.
<ul style="list-style-type: none">• Between Lunch and Dinner, wait 30 minutes, then sip at least 16 oz. of fluid.
DINNER
<ul style="list-style-type: none">• Crockpot chicken cooked in canned tomato juice OR a chickpea veggie burger with mustard. After dinner take 1 (500mg) Calcium Citrate + Vitamin D3 chewable supplement.
AFTER DINNER
<ul style="list-style-type: none">• Wait 30 minutes, then sip 8 to 16 oz. of fluid until bedtime. Take 1 (500mg) Calcium Citrate + Vitamin D3 chewable supplement (especially post-menopausal women).

Eventually, the goal is for your meals to consist of:

- 3 ounces of lean protein – EAT THIS FIRST – before anything else! 3 ounces of lean meat will provide about 21 grams of proteins.
- ½ to 1 cup Non-Starchy Vegetable – EAT THIS SECOND. Keep it low in fat.
- 2 level tablespoons starch – choose healthy starches that are low in fat. Eat this only if you are still hungry. EAT SLOWLY, STOP EATING WHEN YOU ARE FULL.
- Continue to drink calorie-free, sugar free liquids between meals.
- Continue to take a Multi-Vitamin & Mineral Supplement and Calcium Citrate Supplement.

NUTRITION AFTER SURGERY

Life after surgery will be dramatically different, especially as you are getting adjusted during the weeks following your procedure. While each patient's individual recovery and lifestyle plan will vary, there are some general guidelines on what you can expect after having vertical sleeve gastrectomy, or gastric sleeve. Listed below are some guidelines that can help you be successful with weight management after your procedure:

- **Protein First.** Protein deficiency can cause issues such as hair loss, skin problems, swelling, muscle wasting, weakness, poor healing, impaired immunity and increased risk of infection. Since you will not be able to eat much, it is important to eat your high protein foods first. Concentrate on lean meat, dried beans, fat free dairy products, tofu, eggs or egg substitutes. The general recommendation is to consume 60 to 80 grams of protein a day. Even after you are back to eating regular foods, you may not be able to eat this much, so a protein shake or powder will help you reach this goal. *See Protein from Whole Foods and Protein Supplements.*
- **Hydration is Key.** You will need 50 to 64 oz. of fluid each day to avoid dehydration. About half of this should be plain water; the other half may be clear liquids or may have a protein supplement added. Each morning, fill a container with your daily water regimen. Then, keep a cup with you and sip all day long, spreading your fluid intake out evenly throughout the day. This will help you drink the needed amount without overfilling your stomach. (Sip, don't gulp! Drinking large amounts of liquid quickly may cause nausea and vomiting.)
- **Re-Think Your Drink.** Sweetened beverages are a source of large amounts of unnecessary calories, and usually add little to no nutritional value. Avoid carbonated soft drinks; sweetened, caffeinated, or alcoholic beverages; sports drinks; and juices. St. Claire strongly recommends you permanently limit caffeine and eliminate carbonation, such as soda, for your entire life. Caffeine can cause cravings for simple carbs and may stimulate your appetite, while carbonation can cause abdominal discomfort, pain and bleeding. Water is always the best beverage choice!
- **Nutritious Food, Smaller Portions.** It is important pre-bariatric and post-bariatric surgery to build healthier eating habits. Before surgery, you should begin education to prepare you for your post-op journey and start making changes in your food choices. After your operation, you will only be able to eat small amounts, which will help you lose weight. But it is extremely important to fill the limited space with foods your body needs to be well-nourished and healthy! Otherwise, you may develop nutritional deficiencies that may have a negative impact on your health. Over time, you will be able to eat more and it is possible to stretch your small stomach so that you overeat again — so life-long portion control is a must. Work with your dietitian to learn more about portion sizes and how to choose and prepare healthier foods!
- **Avoid “Junk Food” and Other Fats.** Junk food and overly processed foods usually digest quickly and don't keep you satisfied for long. Generally, junk food is not very nutritious, as it may contain a lot of fat, sugar and calories. These “empty calories” can add up quickly, causing weight gain. To successfully lose weight and prevent weight gain, you must avoid these foods. That means no cakes, pies, pastries, cookies, doughnuts, muffins, candies, snack chips, fried or greasy foods, etc. Choose “real food,” not processed, food-like substances.

When cooking, be sure to use heart healthy fats such as olive, sunflower and canola oils. Try substituting salad dressing, mayonnaise and real butter for low fat or spray salad dressing and butters. Other ways to decrease fat include grilling, steaming, broiling, roasting and baking instead of frying. Remove the skin from chicken before cooking and eliminate high fat meats such as pepperoni, sausage, salami and bologna.

NON-STARCHY VEGETABLES:

- Artichoke
- Asparagus
- Bamboo Shoots
- Beans
(*Green, Wax, Italian*)
- Bean Sprouts
- Beets
- Broccoli
- Brussels Sprouts
- Cabbage
- Carrots
- Cauliflower
- Celery
- Cucumber
- Eggplant
- Green Onions/Scallions
- Greens
(*Collard, Kale, Turnip*)
- Kohlrabi
- Leeks
- Lettuce/Salad Greens
- Mushrooms
- Okra
- Onions
- Pea Pods
(*Regular peas are a starch.*)
- Peppers
- Radishes
- Rutabaga
- Sauerkraut
- Summer Squash
- Spaghetti Squash
- Spinach
- Swiss Chard
- Tomato
- Turnips
- Water Chestnuts
- Zucchini Squash

- **You Must Eat Vegetables.** Non-starchy vegetables are nutrition powerhouses! They provide lots of nutrients that make us healthy, have very few calories, provide fiber and fill you up, not out. Half of your plate should be covered with non-starchy, low-fat vegetables. This is non-negotiable!

Non-starchy vegetables account for $\frac{1}{3}$ of each meal (about $\frac{1}{2}$ to $\frac{3}{4}$ cup) and should be eaten after protein. (Tip: Use fresh or frozen. In a large skillet, place about 1 to 2 teaspoons olive oil and chopped onion and cook until onion is soft. Add about a cup of fat-free chicken broth and your vegetables. Bring to a boil, then reduce heat, cover with lid and steam until just tender—do not overcook.) Healthy carbohydrates should be about $\frac{1}{6}$ of your total meal (about $\frac{1}{4}$ to $\frac{1}{3}$ cup) and eaten last. You should choose complex carbohydrates that are also high in fiber, such as starchy vegetables without added fat and sugars, fruit without added sugar, or whole grain products. Avoid simple carbs such as cookies, chips, cakes and sweets. Sugars should be limited; artificial sweeteners and sugar free water flavorings are a good alternative. Remember, bread, rice and pasta swell in your stomach—only small portions.

- **Practice Portion Control.** Even if you eat healthy foods, you can consume too many calories if you eat large portions. Learn the appropriate portion of various types of foods and measure out those portions accordingly. You may have learned to take larger portions from your family members, from dining out or elsewhere, but now is the time to re-evaluate what you think is an appropriate amount to eat. Over time, this will become your new norm. Pre-portion foods, use a small plate and remember, it's OK to leave food on your plate if you get full!



MEAL REPLACEMENTS

Meal replacements are products such as low-calorie shakes, smoothies and bars that can be eaten instead of a meal. They are intended to help reduce food choices and keep calorie intake low during the weight loss stage of a weight management program. While we do not recommend that such products play a major role in your post-op diet, they may be very handy when you know you will be in a situation where you will not have access to healthy foods. For example, when traveling or shopping, you might take along a protein shake or bar to eat until you return home. *Please bring all meal replacements and supplements with you when you meet with the dietitian.*

PROTEIN FROM WHOLE FOODS

To avoid malnutrition, it is necessary to eat enough protein each day. Your protein intake should be around 60 grams for women and up to 80 grams for men. Generally, about 1.1 to 1.5 grams per kg of ideal body weight is adequate, depending upon pre-surgery protein status. You may use high-quality liquid bariatric protein supplements and protein powder to help reach this goal. When you are able to eat regular foods, select foods that provide higher protein for less calories, fat, and sugar. Nuts and peanut butter, for example are not the best protein sources due to high fat content. Also, some protein-containing foods do not contain complete protein. **The foods in bold are the better choices on the list below.**

It is important to spread your protein intake throughout the day to help your body use it properly for healing and to minimize muscle loss while you lose weight. Also, the more protein you have, the more water you should drink to avoid dehydration and kidney stones.

	PORTION SIZE	GRAMS OF PROTEIN	CALORIES
MEATS, POULTRY, FISH			
Beef/Turkey Jerky	1 oz dried	10-15	116
Beef, Pork, Poultry, Fish (Lean, not fried)	1 oz	7	75
Tuna Fish, water-packed	1 oz	7	38
Imitation Crab Meat	1 oz	3	27
Crabmeat	1 oz	6	29
Shrimp, Lobster	1 oz	6	35
Egg	1	6	78
Egg Substitute	¼ cup	6	30
Baby Food Meat	1 oz	4	31
Hot Dog, Low-Fat	1 oz	3.5	50
SOY AND VEGETABLE PROTEIN			
Soy milk, Low-Fat	8 oz	7	60
Edamame, fresh or frozen	½ cup	8	17
Edamame, dry roasted	1 oz	13	100
Tofu	1 oz	3	24

	PORTION SIZE	GRAMS OF PROTEIN	CALORIES
LEGUMES AND NUTS			
Lentils	½ cup	9	100
Lima beans	½ cup	7	32
Kidney, Black, Navy, Cannellini beans	½ cup	8	97
Refried beans (Fat-Free)	½ cup	6	90
Hummus	½ cup	7	221
Chili with beans, drained	½ cup	10	210
Peanut butter	2 Tbsp	7	188
Nuts	1 oz	4-6	164
Sunflower seeds	1 oz	5	166
MILK AND DAIRY			
Milk, skim, 1%, or Fat-Free Lactaid	8 oz	8	90
Non-fat dry milk	1/3 cup	8	80
Yogurt, Fat-Free, Low-Sugar	6 oz	5	110
Greek Yogurt, Plain, Non-Fat, Low-Sugar	5 oz	12-18	85
Cheese, hard (Low-Fat)	1 oz	7	50
American Cheese, Fat-Free	1 slice (0.7 oz)	5	35
Cottage Cheese, Ricotta (Part Skim)	2 Tbsp or ½ cup	3.5/14	81
String Cheese, Low-Fat	1 stick	6	50
Sugar-Free Pudding made with skim milk	½ cup	4	102
GRAINS			
Bread	1 oz. slice	3	67
Cereal	½ cup hot or ¾ cup cold	3	80
High-protein cereals	¾ cup	9	230
Rice, pasta	1/3 cup	3	60
Quinoa	1/3 cup	6	73
VEGETABLES			
Fresh, frozen, canned	½ cup, 1 cup raw leafy greens	2	30
FRUIT			
Fresh or canned fruit in 100% juice	1 small, ½ cup	0	54

PROTEIN SUPPLEMENTS

**Please bring all protein supplements with you when you meet with the dietitian.*

Bariatric protein supplements are designed to provide high quality protein for medical supplementation following bariatric procedures. A high quality supplement is extremely important for health maintenance while you are able to eat only small volumes. Choose supplements that provide 100 to 200 calories, 20 to 30 grams of protein, and less than 5 grams of sugar per standard serving. A good supplement will provide at least 15 grams of protein per 100 calories. The best protein source is whey or whey isolate. Your dietitian will provide a list of recommended bariatric protein supplements from which you should choose. You will also receive recipes to help you vary flavor without adding carb or calories.

DRINKING ALCOHOL

We ask that our weight loss surgery patients stop all alcohol use after their procedure. Alcoholic beverages contain calories without the nutritional value and can trigger your appetite. Alcohol works against weight loss. It is absorbed quicker after weight loss procedures, and can cause you to become intoxicated from smaller amounts of alcohol intake than expected. Alcohol also promotes water loss, contributing to dehydration.

VITAMIN & MINERAL SUPPLEMENTS

**Please bring all vitamin/mineral supplements with you when you meet with the dietitian.*

Vitamin and mineral deficiencies have been observed in patients after weight loss surgery and over time may lead to hair loss, anemia, osteoporosis, nerve, liver and/or kidney disorders, and more. Iron, Vitamin B12, calcium, Vitamin D, folate, and thiamine are most affected after gastric sleeve surgery.

You must take nutritional supplements for your lifetime following surgery. Chewable (NOT gummy) or liquid supplements are recommended for at least the first 3 to 6 months following bariatric surgery. A list of recommended bariatric supplements will be provided by your dietitian, please choose from that list.

You will need to purchase, minimally, a bariatric chewable multi-vitamin/mineral supplement, and a bariatric chewable calcium citrate with vitamin D supplement. Your dietitian will tell you if other supplements are needed, based upon your individual needs.

RECIPES FOR MAKING HIGH-PROTEIN SUPPLEMENTS AT HOME

HIGH-PROTEIN MILK

**About 57 grams of protein and 290 calories, depending on choice of protein powder.*

In a blender, mix:

- 1 cup skim milk, soy milk, Lactaid, or almond milk
- 1 oz. (two scoops of whey, soy or whey isolate protein powder
- Vanilla or flavoring, like unsweetened cocoa powder or peppermint extract

HIGH-PROTEIN CREAM SOUP

**About 58 grams of protein and 280 calories, depending on choice of protein powder.*

Mix:

- 1/3 cup nonfat dry milk powder
- 1 tsp chicken or beef bouillon
- 3 Tbsp. protein powder

Add enough hot water to equal 1 cup and mix well.

Multivitamin (MVI) and Mineral Supplement

- Buy only a Bariatric Chewable Adult multivitamin/mineral supplement with iron. It should contain: iron (about 36 mg), vitamin B12 (500 to 1000 mcg), vitamin D3 (3000 IU), folate (800 mcg), thiamine (3 mg). It is best if it also contains copper, zinc, and selenium.
- The multi-vitamin should contain minimal calcium, because calcium and iron should be taken separately in order to improve absorption.
- The number of tablets you need to take each day depends on the individual product. The dose is usually 1 to 2 a day.
- If you decide to switch to a pill form after 6 months, soft gels or capsules may be better absorbed than tablets. You will usually need to take 2 to 3 a day, depending upon the brand, at separate times in order to increase absorption.
- **Do NOT take MVI in gummy form.** Gummies do NOT absorb well.

Calcium Citrate (with Vitamin D3)

- Take 500 to 600 mg of calcium 3 times per day to equal at least 1,500 mg per day.
- Spread doses out throughout the day to improve absorption.
- Do NOT take calcium supplements at the same time as your other vitamins. Calcium and iron (in the MVI) compete for absorption sites. It is best to take your multivitamin with iron 2 hours apart from your calcium supplement.
- Chewable and liquid calcium supplements are best absorbed.
- **Do NOT use gummy calcium supplement.** Chewy supplements are acceptable, but gummies are not usually calcium citrate and are not the best absorbed.
- Choose Calcium CITRATE. Avoid calcium carbonate, calcium triphosphate, oyster shell, bone meal, etc.

HOW TO COMPARE SUPPLEMENTS

**Please bring meal replacements and supplements with you to your appointments with the dietitian.*

When choosing nutritional supplements, be sure to compare more than the price per bottle. The least expensive may be lower in quality or be short on key nutrients. Look at the content of each product you are considering, compare this to the nutrients you need and determine how many of the tablets or doses you will need each day to most closely meet your goals. If the supplement is short on some nutrients, you will need to purchase additional individual supplements to make this up, which will add on cost. Check of the number of daily doses per bottle. A product that costs a little more per bottle may contain more daily doses per bottle and may actually be more economical.

You may want to compare prices from various suppliers, considering shipping and handling if applicable, and add in the cost of any additional supplements you will need. Make sure you consider the quality of the supplements you are evaluating. If you are in doubt, please discuss products with your dietitian before purchasing.

LIFESTYLE STRATEGIES AFTER WEIGHT LOSS SURGERY

AT HOME

- Plan menus in advance so when you go grocery shopping, you ONLY buy what you need to prepare your meals.
- Try to avoid snacking altogether. But, you might keep your pantry stocked with a few healthy items like a protein bar, low-fat/sugar yogurt, or vegetables so if you're craving a snack, you have healthy choices rather than junk food on hand.
- If cooking for only yourself, just prepare what you will be eating.
- Learn what the appropriate portion of food looks like and plan accordingly.
- Use food scales to weigh and measuring cups/spoons to measure if necessary.
- Use a smaller or divided toddler plate.
- Do not go back for second food servings.
- Do not eat while doing other activities such as driving, reading or watching TV. Instead, find a hobby such as needlework that you can do while watching TV.
- Processed foods are, in general, less healthy so do not eat out of a bag, box or carton.
- Divert your thoughts from cravings and food when you aren't hungry by drinking a glass of water while engaging in a hobby.

AT RESTAURANTS

- Most restaurants have their menu available online so plan what you will be ordering before you arrive at the restaurant.
- Most restaurants now offer a "lite" menu section; if they do not, use your post-op dining card to request a smaller portion meal, like one off the kids' menu.
- Don't be afraid to ask for food prepared using a healthier cooking method, such as grilled.
- Don't order appetizers and don't accept the free bread, chips, etc., that some restaurants offer.
- Ask for a to-go box to be delivered with your order then as soon as your food arrives and place half of your meal into the box.
- Try to avoid buffets and fast food restaurants.

AT HOME OR AT RESTAURANTS

- Put your utensils down between bites to help you eat slower.
- Try new foods! Remember, you are trying to develop new, healthier eating habits so be on the lookout for recipes and new menu items that are healthy and delicious.
- When you want to revert to your old food habit ways, think about how much better you feel without those unwanted calories and pounds.

After a successful week, find non-food ways to reward yourself! Go to the movies – but skip the popcorn, go to a sports game – but skip the funnel cakes and hot dogs or go shopping for a new, smaller outfit.

NUTRITION RECAP

- Eat three meals a day. NO snacks.
- Eat protein first, vegetables second, healthy carbs last.
- Be sure to eat non-starchy vegetables at lunch and supper each day.
- Eat SLOWLY.
- Take smaller bites and chew thoroughly.
- Stop eating when you are no longer hungry.
- Do not drink any fluids 15 minutes before or 30 minutes after eating.
- Drink plenty of fluids (water and other clear, calorie-free fluids) during the day.
- Don't use straws.
- Do NOT drink alcohol.
- Do NOT smoke.



EXERCISE

EXERCISE AFTER SURGERY

Statistics show that bariatric surgery patients who perform moderate physical activity five days a week for 30 minutes had significantly more weight loss than those who didn't, according to the Ronald K. Evans study on Surgery for Obesity and Related Diseases.

In addition to aiding in weight loss, exercise can:

- Reduce the risk of dying prematurely from heart disease or other co-morbidities
- Reduce the risk of developing diabetes, high blood pressure and colon cancer
- Reduce blood pressure in people who have high blood pressure
- Build and maintain healthy bones, muscles and joints
- Reduce feelings of depression and anxiety

TYPES OF EXERCISE

Walking is the first exercise for bariatric surgery patients, and an easy way to get moving! Walking as exercise can be started before and continued after surgery. St. Claire HealthCare nurses encourage you to get walking as soon as possible to aid in the healing process. An exercise regimen featuring walking can be followed year-round, outside when the weather is nice, or indoors at the gym when the weather isn't so great.

Walking tips to help you control your weight after bariatric surgery include:

- Start by walking on a flat surface and gradually add hills or slopes as you get stronger.
- Start with small distances and gradually increase the distance and/or amount of time you walk.
- Have multiple walking routes to alternate, keeping you from getting bored with your walking program.
- It may help to walk with a family member or friend to stay motivated.
- Walk only where you feel safe.
- If you can, invest in a good pair of walking shoes.
- Use a pedometer as a way to see activity progress.
- You can use a variety of GPS applications to map out a route and check distances.
- Take a bottle of water with you on longer walks. Sip water at intervals, especially if you walk outside on hot days.

Aerobic Exercise can also be a great way to help transform your life after your bariatric surgery. Before beginning an aerobic exercise before or after surgery, it is very important that you check with your healthcare provider.

- The best form of aerobic exercise is one that you will enjoy. It is difficult to stick with an exercise program if you dread it!
- A variety of aerobic activities can help you from becoming bored with your exercise program. Try doing different activities on different days.
- Swimming and water aerobics are good forms of exercise, especially if you have joint problems or joint pain.
- If you want to take an aerobics class, always start with a low-impact class geared for beginners. Examples include swimming, seated exercise, biking (elliptical and recumbent), rowing and Zumba Gold.
- Research has shown that increasing lifestyle activities can have the same effect on health and weight loss as a structured exercise program.

It's easy to work more exercise into your everyday life. Small choices made to benefit your health can add up quickly. Some examples include:

- Taking the stairs instead of the elevator
- Parking at the far end of parking lots and walking to the office or store
- Mowing the lawn and raking leaves
- Getting up from your desk to deliver a message instead of using email
- Walking instead of driving when you can



Strength Training may include the use of weight machines, free (hand-held) weights and resistance bands. Strength training is not recommended for the first 3-4 weeks after your surgery. As with all exercise programs, it is very important to check with your healthcare provider before starting a strength-training program. Here are some quick tips to help you in your strength-training:

- It is very important to use correct form when doing strength training. This will help prevent injuries.
- When starting a strength-training program, it may be helpful to take a class or hire a personal trainer. The instructor or trainer will show you the correct way to use the equipment.
- Strength-training workouts should always be preceded by a 10-15 minutes warm-up (such as walking, using the treadmill or riding an exercise bike). This will raise the core body temperature and ready the joints and muscles for the workout.
- To begin, use light weights; a set of 1-5 pound dumbbells is a good starting place.

TARGET HEART RATE

Your target heart rate will help you determine if you are not working hard enough or too hard during your routine.

Periodically as you exercise, take your pulse on the inside of your wrist, on the same side as your thumb. Use your first two fingertips to press gently over the blood vessels on your wrist. Do this for ten seconds and multiply by six. The range your target heart rate should be in is 50-85% for at least 20-30 minutes to get the best results.

During the first few weeks of exercising, aim for the lower heart rate of 50% and gradually build up to 85% of your maximum heart rate.

At least halfway through your exercise routine, check your pulse. If your target heart rate hasn't been reached, you may want to consider increasing your intensity. If it is higher, you need slow down.

AGE	TARGET HR ZONE 50-85%
20 years	100-170 beats per min.
30 years	95-162 beats per min.
35 years	93-157 beats per min.
40 years	90-153 beats per min.
45 years	88-149 beats per min.
50 years	85-145 beats per min.
55 years	83-140 beats per min.
60 years	80-136 beats per min.
65 years	78-132 beats per min.
70 years	75-128 beats per min.

EXERCISE GOALS

By the time you reach your six-week post-op appointment, you should be able to complete 30 minutes of walking per day. After six weeks, it may be time to begin a more intensive exercise routine, including aerobic, strengthening and flexibility exercises. Patients sometimes complain about losing motivation or sight of their goals. Try to stay motivated by practicing the following tips:

- Begin your exercise program gradually and progress slowly over time.
- Vary workouts to alleviate boredom.
- Develop specific, realistic and achievable goals.
- Anticipate obstacles — have a back-up plan.
- Keep your walking shoes or exercise clothes in the car.
- Share your progress with others.
- Work out with a partner.

EXERCISE RECAP

- Routinely check pulse during workouts.
- Perform moderate physical activity 30 minutes a day, 5 days a week.
- Alternate exercises to keep from getting bored.
- Start slowly and work your way up to more difficult and/or longer workouts.



KEEP A FOOD AND ACTIVITY LOG.

Every day, write down what, how much and at what time of day you eat. Record how much physical activity you did, what type and for how long. At the end of each day, review your records. Did you make good food choices? Did you take your supplements? Did you get in your protein? Did you drink your fluid? Also, pay attention to trends. Do you have a habit of eating snacks at certain times, even when you are not hungry? Do you eat in response to stress or other negative emotions? Can you identify the triggers that make you do so?

FOOD & ACTIVITY LOG

Name _____ Weight _____ Date _____

Goals _____

DAY & DATE	BREAKFAST	LUNCH	SUPPER	SNACK	PROTEIN	SUPPLEMENT	ACTIVITY <i>(type/minute)</i>	GOALS MET
Monday								
Tuesday								
Wednesday								
Thursday								
Friday								
Saturday								
Sunday								

GOALS AND FOLLOW-UP

Name _____

My personal goals for (date) _____

GOAL #1 _____

Practical Ways to Make This Happen _____

Follow-up (Date) _____

How did I do? New goal? _____

GOAL #2 _____

Practical Ways to Make This Happen _____

Follow-up (Date) _____

How did I do? New goal? _____

GOAL #3 _____

Practical Ways to Make This Happen _____

Follow-up (Date) _____

How did I do? New goal? _____



GOAL CHECKLIST

- Eat 3 meals a day on a regular schedule
- Take smaller bites
- Use a smaller plate
- Choose smaller portions
- Chew thoroughly, take your time — 20 to 30 minutes per meal
- Eat more non-starchy vegetables each day
- Eat whole grains instead of refined grain products
- Decrease fat in diet
- Choose leaner meats
- Limit fried foods
- Add less fat for cooking & seasoning
- Choose fat-free dairy
- Decrease sugary foods
- Omit sugary beverages
- Eliminate carbonated beverages
- Decrease caffeine
- Limit dining out, make better choices
- No alcoholic beverages
- Use non-food rewards
- Consume ____ oz. protein each day
- Drink 64 oz. water or sugar-free clear liquids a day
- Drink liquids between meals only
- Sip beverages instead of gulping
- Take vitamin/mineral supplements
- Increase physical activity
- Spend less “screen time” or time sitting
- Write in food/activity log each day

Notes _____

*If you have any questions,
we're here to support you.*

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