

Welcome!

Here at the Bariatric and Metabolic Center of Colorado we strive for excellence in all we do. In the time you have already spent with our team, I hope that you have had the chance to see how much you matter to us and how dedicated we are to helping you accomplish your dreams of a healthier future.

This is an exciting time for you! Many patients have researched weight loss options for years and have attempted numerous diets without long-term success. Studies show that more than 95% of people with a BMI of greater than 35 are unable to sustain the long-term weight loss that they desire with diets and exercise alone. If this has been your experience, you are not alone. We can help you. Surgery has proven to be a very powerful and successful long-term weight loss tool.

Surgery is not an easy choice or a magical cure. You are about to begin a journey that requires dietary, lifestyle and psychological changes to help you achieve and sustain a healthier more meaningful life. This manual will provide you with the comprehensive keys to optimize your surgical success. Our dedicated partnership will be very important in maximizing your weight loss by helping you turn the lifestyle changes discussed in this manual into habits.

Your amazing interdisciplinary team of practitioners, dietitians and mental health professionals here at the BMCC have each been carefully selected and represent a wealth of experience in bariatric surgery and integrated non-surgical weight loss and collectively serve as an invaluable resource for you. We look forward to any questions and/or comments you may have before, during and after surgery.

Our front desk staff is also available for any questions you may have about scheduling, insurance based issues or any other challenges that may arise. Our office hours are Monday-Thursday 8:00 AM to 4:30 PM and Friday 8:00 AM to 4:00 PM with a lunch break between 12:00 and 1:00, and a friendly voice is always available to assist you during these office hours.

Thank you for choosing our team. We consider it an honor to help you experience a new horizon in your weight loss journey!

Regards,

Joshua Long, M.D.

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Why Center of Excellence?

In an effort to maximize optimal care of bariatric surgery patients nationwide, the American Society for Bariatric and Metabolic Surgery (ASMBS) has developed a comprehensive screening process for identifying qualified institutions and surgeons who have demonstrated a high standard of care in the area of bariatric surgery. Patients considering bariatric surgery must consider a Center of Excellence as a requirement when seeking the surgery. Patients considering bariatric surgery are strongly encouraged to choose a Bariatric Surgery Center of Excellence.

What does the designation mean?

The Center of Excellence designation ensures several expectations in standard of care:

- A multidisciplinary approach to treatment of bariatric surgery patients.
- A program that meets the standards of the NIH, ACS and ASMBS.
- Certified centers with experienced bariatric surgeons tend to have better outcomes.
- The high volume consistent with a Center of Excellence translates into lower complication rates.

What are the areas of emphasis at our Center of Excellence?

At this Center of Excellence, our experienced professionals, our comprehensive program, and our favorable results best highlight our success. Some of our unique strengths:

- We have a compassionate and experienced multidisciplinary team
- We have a comprehensive program with complete pre- and post-op support
- Patient education is an integral part of our program, complete with an extensive patient “manual”, lecture series, and support groups.
- We have long-term follow-up with our multidisciplinary team, resulting in excellent continuity of care
- Follow-up and guidance provided to our patients aids them in making necessary lifestyle and dietary changes for long-term success

Testimony to the importance and effectiveness of bariatric surgery

It is not uncommon to hear negative press coverage regarding complications of deaths which have resulted from bariatric surgery. This is a testimony to the importance of seeking a Center of Excellence, since these centers have low rates of complications and mortalities. It is equally important to recognize that for those with morbid obesity, there is NO other effective treatment. **Bariatric surgery** allows these patients to:

- Lose significant weight
- Reverse many obesity-related health problems
- And, favorably impact longevity and quality of life

Our Center of Excellence is committed to supporting this important trend in healthcare.

What is Obesity

"Obesity" means severely overweight. "Morbid" means causing illness or disease. "Morbid obesity" means a person meets the National Institute of Health definition by body mass index (BMI) to define morbid obesity. BMI simply adjusts a person's weight by their height. The NIH states that having a BMI of 35 with serious health conditions, or a BMI greater than 40 meets the criteria for morbid obesity.

Operations to address obesity problems have been developed because many non-surgical weight-loss programs do not result in long term, clinically significant weight loss. These procedures are known as bariatric surgery. Such procedures are not without risk. There is no absolute guarantee that surgery will be completely effective. For you to benefit from the operation, you must make significant changes in your eating habits. Bariatric surgery for morbid obesity helps in developing these improved habits, but will not automatically make you lose weight.

Some of the many co morbidities, or health conditions, associated with morbid obesity include:

- Hypertension or high blood pressure
- Heart disease
- Arthritis or joint pain
- Liver disease
- Back pain
- Menstrual disorders- PCOS, infertility
- Sleep disorders- Sleep apnea
- Shortness of breath with movement
- Fatigue
- Diabetes (type 2)
- Depression

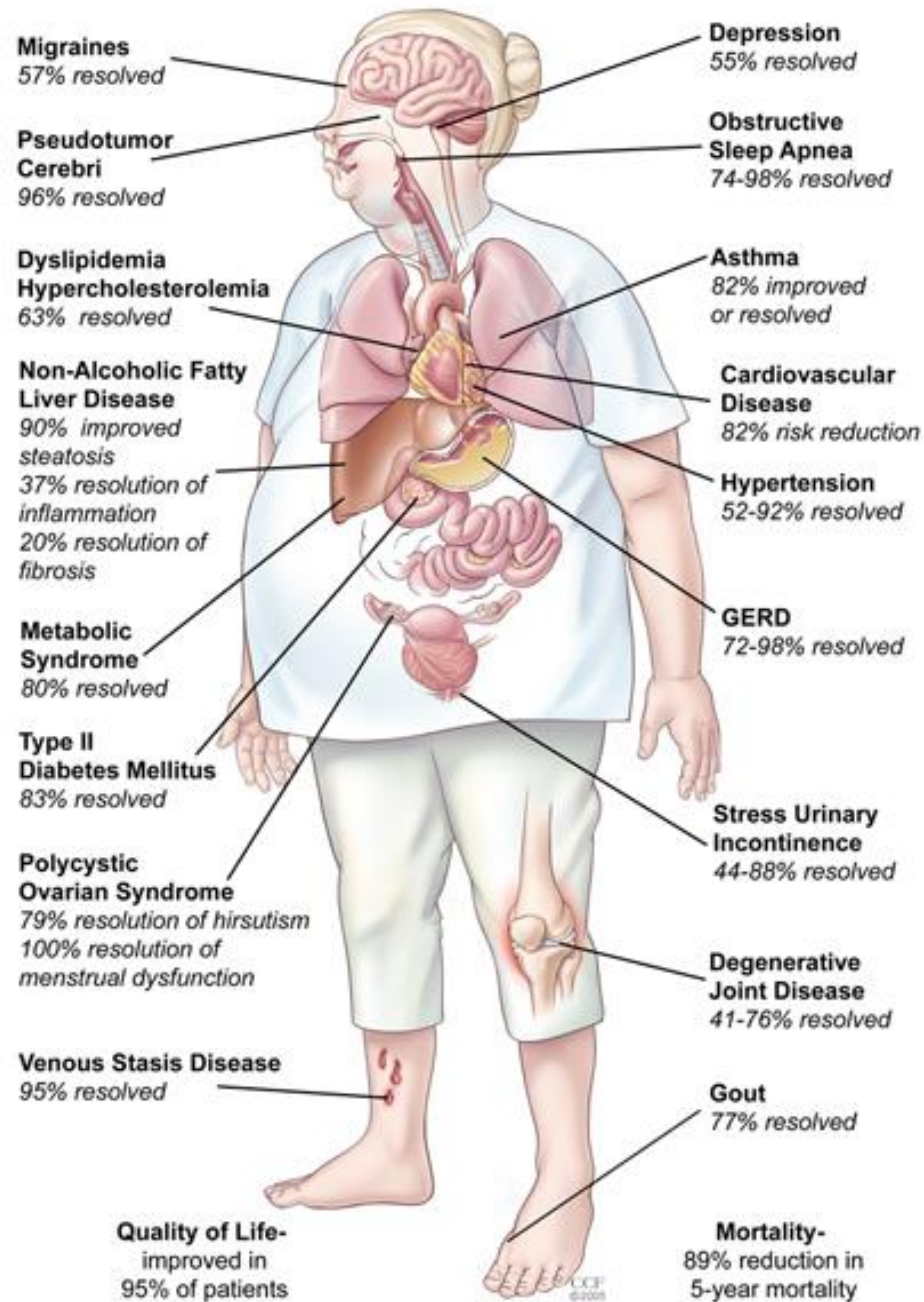
What is My BMI?

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.

Weight Loss Surgery

The American Society of Bariatric and Metabolic Surgery states that weight loss surgery (or bariatric surgery) is known to be the most effective and long lasting treatment for morbid obesity and many related conditions. It is very successful when it is used in conjunction with changes in eating and exercise habits. It is considered the only treatment that has resulted in long-term weight loss. Below is a diagram of how medical conditions can improve after bariatric surgery.



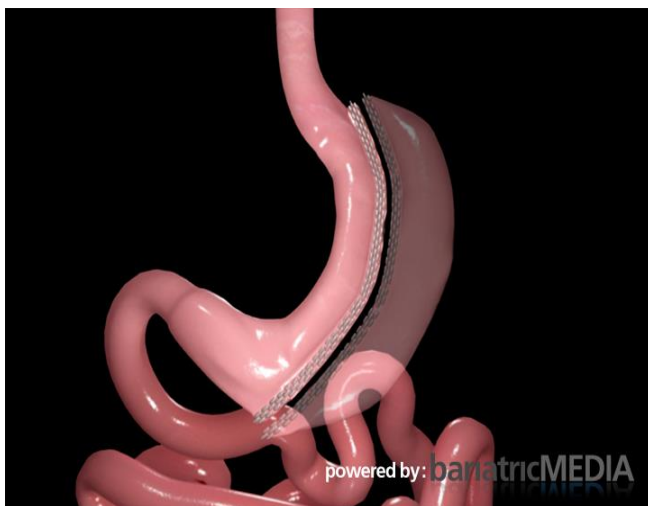
Sleeve Gastrectomy

The sleeve gastrectomy is a restrictive surgical procedure that limits the volume of food intake necessary to make a patient feel full. There is no rearranging of the anatomy, foreign object placement, or malabsorption.

How does the sleeve gastrectomy work?

During this procedure, a thin tube-like sleeve of stomach is created using a stapling device, and the rest of the stomach is removed. The sleeve is similar in shape to a hot dog. Removing some of the stomach limits the amount of food you can eat and helps you feel full sooner. It allows for normal digestion and absorption. Food consumed passes through the digestive tract as before surgery, allowing it to be fully absorbed in the body.

This procedure is almost always done laparoscopically through five small incisions in the abdomen. Laparoscopic surgery usually results in a shorter hospital stay, faster recovery, smaller scars, and less pain than open surgical procedures.



Like other operations, the Sleeve Gastrectomy is a **TOOL** to help you reach your weight loss goal. It is not a solution to obesity in and of itself. You can expect to lose about 1-2 pounds per week over the course of a year. If you do not change your eating and exercise habits this may be slower or you may risk regain of weight over time. The following are vital to the success of sleeve patients:

- The small sleeve requires that you be in the present moment, eat small amounts very slowly, and chew very well. (Failure to do this may result in complications or sleeve stretching and weight regain).
- Eat 5 to 6 small, frequent meals per day, about $\frac{1}{4}$ - $\frac{1}{2}$ cup per meal. Your protein goal is 60-80 grams a day. As the sleeve portion stretches a bit (small amount is normal), and your portion sizes get closer to $\frac{1}{2}$ - 1 cup of food per meal, your meal pattern will gradually change to 3 meals per day.
- Solid foods will keep you full longer. They also fill you up faster with fewer calories.
- Increase the length of your mealtime to at least 20 to 30 minutes. After 30 minutes stop eating. The slower you eat the less risk of discomfort you will have.

- Do not graze or snack!
- You must drink at least 64 ounces of water or low calorie beverages (**between meals**) per day.
- Do not drink liquids either 30 minutes before or 30 minutes eating after solid food.
- Do not drink any high calorie beverages (more than 20 calories per 8 oz.). These will not make you feel full, but they will provide calories, and thereby impede your weight loss.
- **Sip** your beverages slowly. The size of the stomach will not let you gulp liquids initially. Gulping food and beverages will lead to vomiting and/or abdominal pain.
- Stop eating as soon as you are full. If you eat too fast you may not realize you have hit your full point, which may cause great discomfort.
- Since the quantity of food you can eat at each meal is reduced, it is important that what you eat is of good nutritional value. Each meal should include a lean protein source (meat, fish, eggs, or cheese), fruit or vegetable, and a small amount of whole grains. Remember: always eat protein first!
- Avoid combining solids and liquids at meals. When you drink with meals, it causes food to move through your system faster and you do not stay full as long. Do not drink liquids within 30 minutes of eating solid food.

What to Expect before Surgery

To become a candidate for surgery you must pass our extensive screening process. You will visit with our dietitian, mental health professional, nurse practitioner and surgeon. We want to make sure that you are physically and mentally ready for this surgery. We also want to create a relationship with you, so that you feel comfortable visiting and talking with us as you proceed through this journey.

It is possible that we may ask you to get some extra evaluations or testing done, such as an EKG, heart stress test, or pulmonary clearance. This can be scheduled through your primary care physician, or our office can help you set up any needed appointments. These are only recommended if we have specific concerns about your physical health, and the surgery risks it may create.

Preparing for surgery

You **MUST** stop taking the following medications prior to surgery

- Ibuprofen, Advil, Aleve, aspirin and any other Anti-inflammatory with these ingredients **2 weeks** prior to your surgery date.
- Estrogen containing medications, such as birth control or hormone replacement, must be stopped **10 days** prior to surgery.
- Herbal Products and vitamins. Good rule of thumb is to stop all of them **1 week** prior to surgery.

If you or your other health care providers have any questions or concerns about stopping these medications, please contact our team.

Be sure to inform us of ALL the medications you are taking so that we can discuss whether or not to stop any of them prior to surgery.

Please make a visit to see your PRIMARY CARE PROVIDER 2-3 weeks before surgery to make temporary adjustments to medications: crushable medications and short acting instead of long-acting. These changes will be needed for the first MONTH after surgery. If your PCP has any questions please have them call and talk to one of our providers to clarify.

Stop taking your multi-vitamin with minerals 7 days before surgery.

Beginning at midnight the night before surgery, you are to refrain from drinking, eating, or chewing gum (to avoid swallowing). If you were told to take one of your medications the morning of surgery, take it with a small sip of water only.

Patients must be smoke-free for 6 months prior to Gastric Sleeve. Failure to comply with instructions may result in cancellation of your surgery. **You must also stay smoke free after surgery--for the rest of your life!** By smoking after surgery you are putting yourself at risk for many health issues and potential complications, including, but not limited to: ulcers, leaks, strictures, and poor wound healing, not to mention all of the other health problems associated with smoking.

If you are able to engage in physical activity, it is recommended to participate in some type of moderate physical activity for at least 2 weeks before surgery. The better shape you are in before surgery, the faster your recovery will be.

It is encouraged that you start paying attention to portion sizes as practice for your life after surgery. Try to eat slower and chew your food more thoroughly. It is a good rule for all of us!

- Also do not participate in the “last hurrah” phenomenon. This is where patients have a very large and rich meal shortly before the surgery date. Last hurrah behavior significantly increases your operative risk, as these meals cause the liver to swell and the blood vessels of the intestine to become engorged. Both of these phenomena make surgery much more technically demanding on the Operative Team. This surgery in no way means you can never eat again. It just means you will not need to eat as much. You’ve come so far, why jeopardize your chances of the best possible outcome?
- Before surgery, make sure you are staying hydrated. Drink at least 64-oz of water or no-calorie fluid per day. Hydration will not only help you recover from surgery faster, but it will make you feel better and more energized every day. Hydration can also help you to feel full so you do not consume as many calories. Get used to carrying a water bottle with you at all times.
- Losing even a few pounds before surgery may decrease your surgical risk. Not only is the scale moving in the right direction, but weight is lost from the abdominal organs first. This enhances visibility for your surgeon, which improves your chance of having your procedure performed laparoscopically.

Preoperative Liquid Diet

You will be required to follow a liquid diet 7 days prior to surgery. This helps shrink your liver to allow your surgeon the best possible view of your stomach. We cannot sufficiently stress the importance of following this diet. We know it is hard, but it is crucial to the success of your surgery.

Ready To Drink

Product	Where to buy
Atkins Shakes	Wal-Mart, Grocery Store
Boost <i>Glucose Control</i>	Grocery store, www.boost.com
Carnation Instant Breakfast <i>no sugar added</i>	Grocery store
EAS Myoplex Carb Control	Grocery store, Vitamin Shoppe, http://eas.com
Labrada Lean Body Protein Drink	Vitamin Shoppe, www.bariatriciating.com
Muscle Milk <i>Light</i>	Vitamin Shoppe
Optisource	www.walgreens.com
Slim Fast <i>Low Carb</i>	Grocery store

- Limit yourself to **5 shakes a day**.
- Drink 64 oz of decaffeinated, non-carbonated, low calorie (≤ 20 calories/serving) beverages a day.
- No other liquid calories or solid foods are allowed during this time.
- Discontinue all vitamin and mineral supplements during this time.

Product	Where to buy
365 Whey Protein	Whole Foods
Aria Protein	Vitamin Shoppe, Whole Foods
Biggest Loser Protein 2 Go	Whole Foods/Grocery store, GNC, Sports Authority, 24 Hour Fitness
Biggest Loser Protein All Natural	Whole Foods/Grocery store, GNC, Sports Authority, 24 Hour Fitness
Carnation Instant Breakfast <i>no sugar added</i>	Grocery store
Designer Why Protein 2 Go	Whole Foods/Grocery store, GNC, Sports Authority, 24 Hour Fitness
Designer Whey Protein	Whole Foods/Grocery store, GNC, Vitamin Shoppe, www.designerwhey.com
Solgar Whey to Go	Whole Foods, Vitamin Shoppe
Nature's Plus Spiru-tein Unsweetened (Dairy Free)	1 scoop
Nature's Plus Spiru-tein Gold (Dairy Free, Soy free)	1 scoop

- A total of **5 shakes a day**.
- Each shake should contain 1 scoop of your protein powder.
- Follow the instructions on how much milk to add.
- Use fat-free/skim milk or unflavored, unsweetened soy milk, or lactaid milk instead of water.
- Drink 64 oz of decaffeinated, non-carbonated, low calorie (≤ 20 calories/serving) beverages a day.
- No other liquid calories or solid foods are allowed during this time.
- Discontinue all vitamin and mineral supplements during this time.

Suggested Shopping List before Surgery

Equipment:

- Water bottle
- Measuring cups and spoons
- Small bowls and plates
- Blender or food processor
- Mesh strainer
- Small forks and spoons (baby utensils)

Food:

- Protein supplements (≤ 5 grams of sugar per serving)
 - Refer to approved protein supplement list
- Low-calorie beverages (i.e. Crystal Light™, sugar-free Kool Aid™, diet juice)
 - Refer to low-calorie drink list
- Skim milk (if lactose intolerant, try lactose-free milk or unsweetened soy milk)
- Broth (beef, chicken, vegetable)
 - Low sodium is the best choice
- No added sugar, low-fat yogurt (≤ 15 grams of sugar per serving)
- Sugar-free gelatin, sugar-free popsicles
- Fat-free cottage cheese
- Fat-free gravy mix
- Low-fat canned soups
 - Low sodium is always preferable
- Fruit: fresh, frozen, or canned in own juice or water (no sugar added)
- Vegetables: fresh, frozen or canned (please note that corn and peas do not blend well)
- Vegetable juice
 - Low sodium is always preferable

The Day of Surgery

What should you bring with you to the hospital?

- License or passport
- Health insurance card (if you are using your insurance)
- If you use a CPAP, bring it with you, but leave it in the car. If we need it after surgery, we will ask for it.
- Do not bring any valuables (jewelry, watches or excess cash)
- Comfortable clothing such as pajamas or sweat pants that can get dirty (in case your incisions bleed a little and stain your clothes). Make sure they are easy to get on and off
- Books, magazines or any other ideas for entertainment while in the hospital
- The hospital does have wireless internet so you could have someone bring a laptop in for you if you desire
 - You do not need to bring any medications you may be on, as the hospital will provide those for you
- Basic Toiletries (toothbrush, hairbrush, etc.)

What will my day look like?

When you arrive at the hospital you will proceed to admissions, which is on the first floor of the hospital near the emergency room. You will be asked for your identification, and you will be asked to complete paperwork with the admissions secretaries. They will then bring you to a pre-operative area where they will start preparing you for surgery. A small IV will be inserted into your arm to provide fluids and medications to you for the duration of your time at the hospital. If any blood tests are required they will be drawn at the same time. You will also receive a small injection into your abdominal skin that contains Heparin, which helps to prevent blood clots. You will receive instructions before and after surgery about blood clot prevention, including the need to walk after surgery, and deep breathing techniques through the use of a breathing machine called an incentive spirometer. Your nurses will teach you how to use this. This is very important in order to prevent pneumonia!

Your surgeon and practitioner will come by to make sure all your questions are answered and that you are ready for surgery. The anesthesiologist who will be providing your care will also visit you and ask you about your previous experiences with anesthesia. Please make sure you know of any allergies or issues you have had with anesthesia (if any) so that the doctor will be able to best care for you. Once all the paperwork is done and you have seen all your providers, you will be brought back to the operating room. You will notice that several people will be in the operating room, including your surgeon, practitioner, surgical tech, nurse and anesthesiologist. Once you are transferred to the operating table, the anesthesiologist will give you a mask that supplies oxygen, and will begin putting medication in your IV. In most cases, the next thing you will remember will be the recovery room.

After you are asleep, compression leg devices will be placed on your lower legs and they will massage your legs during surgery to prevent blood clots. Pads and pillows will be placed under your arms and feet to ensure that you are comfortable and protected.

Surgery time is variable. It usually takes 90 minutes. This will vary based on your past surgical history and anatomy. After surgery you will be brought to the recovery room where you will spend about 1-2 hours waking up and getting comfortable. During this time your surgeon and practitioner will visit with your friends and family in the waiting room, or they will call them, depending on your preference. Once you are awake, and your discomfort is under control, you will be transferred to the surgical floor.

Recovery after Surgery-What to Expect

After you are cleared for transfer by the recovery room staff, you will be moved to the bariatric floor. There you will be encouraged to get out of bed and walk as soon as you are able, and you will be monitored closely by the nursing staff. You will not be allowed to eat or drink anything the day of surgery (not even ice chips). This is for your safety. The nurses can provide you with some mouth swabs that will help keep your mouth moist. All rooms are private so you will not have to share with a roommate.

The following morning your surgeon and/or physician assistant will come by to see how you are doing and answer any questions you may have. They will take a look at your incisions and see how you are feeling. Once you have your upper GI X-Ray, to confirm that there is not a leak on your staple line, you will be allowed to start a bariatric clear liquid diet.

The average length of stay for a Sleeve Gastrectomy patient is 2 days.

Diet

As mentioned before, you will not be able to eat or drink anything the day of surgery. The following morning, if you are cleared by your surgical team, you will be allowed to start your clear liquid diet. You will be surprised with your lack of hunger. You will find that very small amounts of Jell-O, broth, or even water will fill you up quickly. Be sure to progress slowly, merely sipping fluids until you have an idea of the volume you can consume. Do not drink too fast or gulp! This will cause you pain or discomfort. Be sure to stay hydrated. The initial goal is at least 40 ounces of fluid daily with the ultimate goal of 64 ounces daily. At first this fluid volume goal will be difficult to achieve, and because of this we will keep your IV fluids going until we see you are able to drink at least four 1oz cups of water every hour. Once you meet this goal you will then be disconnected from the IV. Be sure to ask your nurse for these 1 ounce cups if they are not provided to you.

Some people say that they have to remind themselves to eat during the first few weeks after surgery. This is not uncommon. The days following surgery you will have significant swelling to your stomach and intestines. This will allow only a very small amount of fluid to feel full. As the days go by the swelling will decrease, and liquids and vitamins will be easier to tolerate. Do not push it! If you cannot keep anything down, and it has been a few days since surgery, please call our office.

Do not worry about your vitamins while you are in the hospital. Preferably, begin the vitamin supplements 2 weeks after surgery when you begin the pureed foods diet. Everyone is different as far as which vitamins they like and can consume. If you are struggling to find the right vitamins for you, please call our dietitian.

Exercise

YOUR RECOVERY STARTS IMMEDIATELY! Those patients who wake up and immediately participate in fully expanded coughing, deep breathing exercises and walking routinely avoid unnecessary complications and longer hospital stays.

You **MUST** get up (with nursing assistance at first) and walk in the hallways every 1-2 hours as soon as possible (ideally within 3 hours) after surgery. This is **VERY** important as it helps to **AVOID BLOOD CLOTS** which is your greatest risk after surgery! This not only helps prevent serious blood clots, it helps your body get rid of the gas placed in your abdomen during surgery.

Do not lift anything over 10 pounds for the first 2 weeks after surgery. After two weeks, do not lift anything over 20 pounds until 6 weeks after surgery to avoid developing a hernia. As time passes the pain will subside.

You may shower 48 hours after surgery. If you have any extenuating circumstances, or if you need to travel long distances immediately after surgery, please let us know so we can provide you with more specific instructions.

Incisions

There are generally 4 to 5 incisions on your abdomen after surgery. These are typically very small incisions that will be closed with an absorbable suture under your skin. Occasionally, you may see a knot of suture. Do not be concerned if this knot is visible as it will fall off when the hidden piece of suture dissolves in about 3 weeks. You will have steri-strips (white tape) over your incisions after surgery. Make sure to leave the steri-strips in place. The steri-strips are not holding anything together, the absorbable suture under the skin is, but they are there to make sure your scars look nice once you are healed and to help keep your incisions clean. You can take these strips off in about a week. Showering with them on is fine as they can get wet.

You will be allowed to shower 48 hours after surgery- this can be done at the hospital, or at home since most patients go home within 48 hours of the procedure. If you do decide to take a shower at the hospital, you may want to bring your own shampoo or soap for your comfort. Do not scrub the steri-strips—allow the soap and water to run over the top of them.

Pain

Your pain and comfort is very important to us, so much so that we have a very aggressive and comprehensive pain management strategy in place for you to minimize this as much as possible. However, you can expect to have some abdominal pain after surgery, but we will do our absolute best to keep you comfortable. Prior to surgery (after you are asleep), anesthesia will perform a nerve block on you. This will dramatically reduce your pain after surgery and can numb the abdominal wall for up to 48 hours. The majority of the pain you will feel after surgery is related to retained gas and can even present as shoulder pain. When you first get to the bariatric floor you will receive pain medication through your IV. This pain medication is fast acting. The first morning after surgery your surgeon or practitioner will encourage you to change to an orally administered pain medication. There are many reasons for this. First, you cannot take the IV pain medication home with you so it is in your best interest to be weaned from the IV medication early in your hospital stay. Secondly, the IV pain medication only lasts for about 2 hours. If you fall asleep, you may have pain when you wake up again. This is because the IV pain medication has worn off. The oral pain medication provides 4-6 hours of pain relief which provides greater comfort than the IV medication. As soon as you are able to drink fluids you should be able to take the oral pain medication. Your nurse can help break them up or crush them if necessary.

Deep Breathing and Coughing

After surgery the natural tendency is to take smaller, shallower breaths and not cough to avoid pain or discomfort. However, avoiding deep breathing and coughing can rapidly lead to pneumonia and increased complications including increasing the length of your hospitalization. After surgery, you will be given 1 and in some cases 2 breathing exercise devices. To AVOID PNEUMONIA please begin to work toward maximum breath volume (in most cases more than 1500 cc on the device) at least 10 times every hour. With coughing it is also important to get maximum chest expansion and actually see your abdomen rise as well focusing on a very deep full breath and coughing with a very deep, resonate and full cough. You must cough until your cough is completely clear at least every hour. Tips: make sure you are sitting more upright in your bed or in the chair to straighten your chest for maximum expansion, make sure to float the

device for at least 20 seconds with each breath, using the device appropriately should make you feel like coughing. Pitfalls: shallow breathing or coughing will NOT prevent pneumonia!

Going Home after Surgery

Typically Sleeve Gastrectomy patients go home after about 2 nights in the hospital. Upon discharge you will be given instructions. These will include the need to:

- Move around as much as possible. Do not just sit around, as this will increase your risk of blood clots, pneumonia and negatively affect your healing time.
- Stay hydrated. Bring your 1 oz cups home with you and make sure to drink at least 4-5 of them per hour while you are awake. If you become dehydrated, you may feel nauseated, lethargic, weak and constipated. Once you are comfortable with the pace of drinking, you may switch to a water bottle.
- Follow the full liquid diet for 2 weeks after surgery then advance as directed by this manual and your dietitian. Begin taking vitamins when you start the puree portion of the diet.
- Keep your steri strips on your incisions until they fall off (up to 2 weeks). If you notice redness or swelling under the strips you can take them off and wash the area with soap and water. If there is any hint of infection, call the office.
- Take your pain medication as needed. We will provide you with a prescription for the oral pain medications you were taking in the hospital. Generally you will only need them for a few days after surgery if at all. You can use Tylenol if the pain is not bad enough for the stronger pain medication (but NOT both together!).

Driving or traveling

Do not drive if you cannot twist to look over your shoulder or if you are still taking the narcotic pain medication prescribed for you. No saunas, hot tubs, swimming or bath tubs until you have had your 2 week follow-up appointment and we have seen your incisions and released you to do so. If you have any extraneous circumstances or you need to travel long distances to get home after surgery please let us know so we can provide specific instructions. If you live more than 2 hours from Parker you will need to plan to stay nearby for at least 7-10 days after surgery as directed by your surgeon. Hotel information is available if needed.

Medications

You may resume all of your preoperative medications (if approved by your surgeon) when you go home. **It is ideal to transition to NON-Oral contraceptives (eg. Mirena- ask your obstetrician) before surgery as oral contraceptives are not absorbed well and may FAIL.** But in the unlikely scenario that both your OB and surgeon agree that oral contraceptives are the best option, you must wait at least 1 month after surgery to resume oral hormone-containing medications. For many patients there is a dramatic increase in fertility 2-3 months after surgery, and without proper precautions, there is an increased risk of early pregnancy after surgery. Please contact your gynecologist or family doctor to discuss contraception before surgery. If you are taking any sustained release medications (name followed by ER XR or SR; (Example: Wellbutrin SR), you will need to have your prescription changed to regular tablets, since your body may no longer absorb these medications properly. Your surgeon will discuss any changes to other medications before you are discharged.

Medications to Avoid

Following your Sleeve Gastrectomy surgery, it is advisable to refrain from using non-steroidal anti-inflammatory (NSAIDS) medications, for the rest of your life! One of the most common adverse effects of NSAIDS is stomach irritation that can lead to an ulcer.

NSAIDS to avoid (Even if ordered by another Doctor):

Salicylates

1. acetylsalicylic acid (Aspirin)
2. choline Mg trisalicylate (Trilisate)
3. diflunisal (Dolobid)
4. salsalate (Disalcid)

Arylacetic Acids

1. naproxen (Naprosyn, Aleve)
2. naproxen sodium (Anaprox)
3. fenoprofen calcium (Nalfon)

Acetic Acids

1. indomethacin (Indocin)
2. sulindac (Clinoril)
3. tolmetin sodium (Tolectin)
4. diclofenac (Voltaren, Cataflam)

Anthranilic Acids

1. mefenamic acid (Ponstel)
2. meclofenamate Na (Meclomen)

Propionic Acids

1. ibuprofen (Motrin, Advil, Nuprin)
2. ketoprofen (Orudis, Orudis-KT)

Pyrrolacetic Acids

1. ketorolac (Toradol)

Other

1. etodolac (Lodine)
2. nabumetone (Relafen)

Seek medical attention to: Go to the ER or call the office for:

- Abdominal pain that gets worse rather than better.
- Drain color that changes from thin red to green or puss.
- Fever greater than 101°F.
- Difficulty breathing and/or chest pain.
- Constant nausea or vomiting with the inability to stay hydrated.
- Swelling or pain in one leg—could be a sign of a blood clot.
- Abdominal pain that gets worse rather than better.
- Incisions become red, tender or hot.
- Foul smelling discharge from incisions.
- Any other questions or issues.

The First Few Weeks after Surgery

Expected Weight Loss

Everyone loses weight at a slightly different pace. As previously stated, the first month or two after surgery most can expect to lose an average of a pound per day. Do not expect that every day you get on the scale you will be down exactly one pound. There will be days where you may lose nothing (or even gain temporarily!) and other days where you notice five pounds of weight loss. We recommend that you do not get on the scale every day. It will drive you crazy. A weigh in about once every week is advisable. Please call the office if your weight has not decreased over a two week span or your averaged weight loss after the first month does not average roughly 1 pound per day.

Diet

Do not advance your diet too soon! If you do, you may have problems with nausea and vomiting which can be severe for some patients. Also, you may risk developing a leak at the staple or suture line which can quickly cause a life threatening emergency. This can cause you to quickly become septic, which is a life threatening emergency. Swelling is part of the healing process, and maximal swelling occurs approximately 7–10 days after the surgery. So even if you think you are ready for more advanced food, allow your body the time it needs to heal properly.

Avoid carbonated beverages because they can cause you to feel uncomfortably full and may even lead to the over stretching of your sleeve portion of your surgery in the future which can impede your weight loss.

Be careful not to drink your calories. Things such as regular juice and soda are simply empty calories. You are better off eating the actual fruit to get the fiber and nutrients, plus you will feel full from the solid nutrition.

Solids will keep you full, helping you lose weight faster.

What is dumping syndrome and will I get it?

“Dumping syndrome” can occur following some types of stomach surgery including gastric sleeve surgery. It is triggered by rapid emptying of the stomach contents into the small intestine, commonly resulting from the consumption of sugar-containing foods and fat-containing foods (when a high-sugar or high-fat food rapidly passes through the stomach into the small intestine, it draws a large amount of fluid into the intestine with it). Dumping syndrome can cause increased pulse rate, low blood pressure, weakness, sweating, dizziness, diarrhea, cramping and nausea. These symptoms can last for a few hours and can be very uncomfortable. This does **NOT** typically occur with a Sleeve Gastrectomy. It is still **VERY** important that you avoid these foods as they will slow down or prevent weight loss.

Exercise

Move your body as much as you can. You will find that as your diet advances and you begin losing weight your energy level will increase. Use this increased energy to get out for a walk, go for a swim or hit the gym. Exercise is vital for your maximum weight loss success. If you do not exercise you will lose fat and muscle. Exercise is the only way to say to your body, “take the fat and leave the muscle”.

Exercise will also make it easier to maintain your weight loss. The initial exercise goal is approximately 20 minutes per day of light exercise (eg. walking) immediately after leaving the hospital. This should gradually increase to about 60 minutes/day over the next 4-6 weeks. At 6 weeks after surgery, we ask that you maintain 60 min/d 5 days per week and then add 2 days of resistance training which will be a lifelong commitment.

Ketosis

The body typically burns carbohydrates for energy when they are available, maintaining fat stores and protein for the body. As you are rapidly losing weight your body will have to start burning the fat stores for energy instead. When the body starts to break down fat, rather than glucose, the levels of ketones in the blood will begin to increase. The body may attempt to liberate the excess amount of ketone byproducts through the lungs. This causes the breath to have a sweet, fruity smell. This can lead to symptoms of bad breath, metallic tastes, dry mouth, some nausea and the sensation that things that were once a little sweet are now disgustingly sweet. This ketosis phase will pass as the weight loss slows and your water will once again taste normal.

Things to help during the ketosis phase:

- Drink lots of water- this will flush out the ketones through increased urine output.
- Gargle with water or sugar free mouthwash.
- Add some flavor (like a fresh lemon) to water to hide the metallic taste.
- Make sure you are getting enough protein.
- Use sugar free breath mints (avoid gum as it causes you to swallow air which can make you feel full or gassy.)
- Dilute sweet things- use less crystal light than the package directs, add milk to protein shakes, or add more water to things.

Returning to work

The timeframe for returning to work varies based on the individual and what line of work they are in. On average, most patients return to work about 2 weeks after surgery. Those who have jobs that require lots of activity will want to take at least 2 weeks off to recover. The biggest issue is that it is very difficult to stay hydrated due to the swelling of the sleeve portion placing you at a higher risk early on for dehydration. If you are not continuously sipping on water all day long or if you get distracted at work, you will be unable to make up for the lost fluids later in the day. As time passes and the swelling goes down, it will become easier to get adequate hydration. Another issue is that you may be very tired after surgery due to healing and the limited caloric intake. As you advance your diet and reach your daily protein goals, this will typically resolve. Since you can't be certain how your body will react after surgery, allow yourself a day or two beyond what you think you will need. You can always return ahead of schedule if you're ready.

Hair loss?

One of the possible side effects associated with bariatric surgery is temporary hair loss. The hair loss is thought to occur as your body scavenges some of your protein to make up for its calorie deficit. Those patients who experience this side effect lose their hair starting several months after surgery to a year later. However, the vast majority of patients re-grow most of their hair within 8 to 12 months (pre-existing baldness does not resolve). Make sure you are getting enough protein, taking your vitamins and drinking enough water. All of these will minimize your hair loss. The most important thing to know is that once the weight loss slows down the hair loss slows down as well.

What if I vomit after surgery?

If you are vomiting after surgery take a look at your diet. Common culprits include eating too fast, eating too much, advancing your diet too soon, or not chewing food well. Frequent daily vomiting is not the norm after surgery. If you are vomiting more than several times per week, please contact our office. On a rare occasion people can get a stricture, which makes eating and drinking difficult and may feel as if food and/or water are getting "stuck" in the esophagus.

Can I get pregnant following sleeve gastrectomy surgery and is it safe?

Pregnancy can be safe following surgery. However, it is strongly recommended that a woman wait until she is at least **18 months post-operative** before getting pregnant to assure that her weight has stabilized. Under appropriate circumstances, pregnancy can be safe after weight management procedures (WMP). However, due to the severe risk of birth defects and associated medical problems, including, but not limited to, neural tube defects, malnutrition, low birth weight, prolonged neonatal ICU stay, and even autism, it is absolutely imperative that you avoid pregnancy for the first **18 months (1.5 years)** after bariatric surgery. Additionally, **we absolutely mandate that you not get pregnant during periods of acute weight loss. In other words, do not get pregnant until your weight has been stable for at least a full year! This is for the safety and health of you and your baby.** Additionally, both men and women who were infertile prior to Sleeve Gastrectomy surgery may **regain their fertility**. Therefore, you need to take proper precautions to decrease the risk of early pregnancy. Birth control pills are not a very reliable source of birth control in the first year. It is recommended that women talk to their OB/GYN about changing to a patch, shot, vaginal ring or IUD for birth control.

If a Sleeve Gastrectomy patient does become pregnant, it is important that your surgeon or practitioner is aware of your pregnancy so that he/she can make the appropriate referrals. Your surgeon and your OB/GYN will work closely together to ensure that you have a healthy and safe pregnancy. It is strongly recommended that pregnant post-bariatric surgery patients maintain frequent follow-up appointments (every 4-6 weeks) throughout the course of their pregnancy. Hydration is essential during pregnancy and consuming at least 64 oz of non-carbonated, non-caffeinated, low-calorie (>20 calories per serving) fluids per day is recommended. During pregnancy, you have additional protein needs and your surgeon and dietitian will work together to determine your specific protein requirements. It is important that labs are monitored regularly including standard prenatal labs, B-12 and folate, vitamin D (25-hydroxy), iron profile and ferritin, albumin and prealbumin to ensure that vitamin or mineral deficiencies do not occur. Your surgeon and OB/GYN will also work together to determine appropriate vitamin and mineral supplements to ensure complete micronutrient supplementation including multivitamin, thiamine, B-12, folic acid, vitamin D, Omega 3 fatty acids, and iron. Remember, the emphasis during pregnancy post bariatric surgery is no longer focused on weight loss but rather on maintaining a healthy body weight which supports a safe and healthy pregnancy.

When Should I Come in For Post-Operative Visits?

After surgery it is vital to your success to follow up with our office. Those that follow up regularly tend to do the best with their weight loss outcomes.

You will be instructed to make a two-week post-operative visit upon discharge from the hospital. Please call our office at 303.269.4370 to schedule that appointment. Each time you come to the office for a visit, we will assist you in the scheduling of your subsequent appointments. Please bring your calendar with you to facilitate the process.

Required Post operative visits

Schedule of Pre and Post-Operative Visits

Visit	Provider	Date	Purpose	Labs
Pre-Op (~1 mo before surgery)	Surgeon or Practitioner		Complete surgery “to-do” list, consents	Pre-Op labs at PAT
2 week	Surgeon/Dietitian		Assess Stability/Recovery	Only by Request
6 week	Dietitian		Diet progression, Adjustment	Only by Request
3 month	NP, Dietitian, Counselor		Track Progress	Only by Request
Pre-6 month	Lab		Blood Panels	*CBC, Iron Panel , Vitamin D and Thiamine
6 month	Surgeon or NP Dietitian, Counselor		Track Progress	See above, should be faxed to office prior to visit
Pre-Annual (1-5 years)	Lab		Blood Panels	*CBC, Iron Panel, Vitamin D, PTH, Ionized Ca, Thiamine
Annual (1-5 years)	Surgeon or NP Dietitian, Counselor		Track Progress	See above, should be faxed to office prior to visit

***** Fax all labs to the office 303-269-4371**

Required Laboratory Tests Sleeve Gastrectomy

The following is a list of laboratory tests that we require. Labs should be drawn at least 1 week prior to your appointment with us. Please go fasting (nothing to eat or drink for 8 hours).

INITIAL CONSULTATION

CMP	Iron & IBC	DX Codes:	V72.83
CBC	Hemoglobin A1C		263.9
Vitamin B-12/Folate	Lipid Panel		
Ferritin	TSH		
Vitamin B1, whole blood	Vitamin D, 25 Hydroxy		

LABS REQUIRED FOR POST-OPERATIVE VISITS:

6 MONTH

CBC	Vitamin B-12/Folate	DX Codes:	579.9
CMP	Vitamin B1, whole blood		579.8
Ferritin	Iron & IBC		263.9
Vitamin D, 25 Hydroxy			
Vitamin B1, whole blood			

ANNUALLY

CBC	Vitamin B-12/Folate	DX Codes:	579.9
CMP	Ferritin		579.8
Iron & IBC	PTH & Ionized Calcium		263.9
Vitamin B1, whole blood			
Vitamin D, 25 Hydroxy			
HgbA1C			

Please have the results faxed to our office (303) 269-4371 so that we may review the results and discuss them with you at your next your appointment.

Nutrition Guidelines for Sleeve Gastrectomy

This diet emphasizes calorie restriction and proper nutrition to facilitate weight loss, help build healthy eating habits, and minimize obstruction. We strongly recommend that patients try to lose some weight before surgery. Even modest pre-operative weight loss decreases the surgical risks of each bariatric procedure.

Key Long Term Goals:

1. Drink a minimum of 64 fluid oz. (8- 8 oz cups) of liquids every day
 - a. Do NOT drink fluids 30 minutes before meals, during meals and for 30 minutes after meals
 - b. Sip permitted beverages slowly
 - c. Do not use a straw (straws cause you to swallow excess air)
 - d. All beverages should ideally be no calorie (low calorie ≤ 20 calories/serving also permitted)
 - e. Avoid alcoholic, carbonated and caffeinated beverages
2. Eat 5-6 small meals at about $\frac{1}{4}$ - $\frac{1}{2}$ cup per meal. Long term, if your portions get close to 1 cup per meal, transition into 3 meals and 1 protein snack a day.
3. Eat protein first at all meals to help increase protein intake. Minimum protein intake goal is 60 grams per day once on a regular diet.
4. Multivitamins with minerals, elemental Iron 60-100 mg, 1500 mg calcium citrate, vitamin D3 2000 IU, 250-500 mcg sublingual vitamin B-12, and B-50 complex supplements are required every day for the rest of your life. Chewable or liquid vitamins may be tolerated best for the first few weeks. With the Sleeve Gastrectomy sometimes additional vitamins are required. You must be VERY committed to consistently taking all recommended vitamins every day for the rest of your life in order to avoid deficiencies with the Sleeve Gastrectomy.
5. Eat small bites, chew well and take time between your bites to prevent blockage and break down food. Eat slowly. If starches (potatoes, rice, and pasta) or dryer meats have tendency to stick avoid these.
6. Stop eating when you start to feel full. Remember full feeling may not occur for up to 20-30 minutes. Indications of over-fulling include a feeling of pressure in the center of your upper abdomen, just below your rib cage or feeling of nausea.
7. Calorie-dense foods, drinks, and snacks (and grazing behavior) need to be avoided in order to achieve and maintain optimal weight loss.
8. Begin exercising now! Your ultimate exercise goal is 60 minutes a day, 5 times per week which you may not achieve until after some initial weight loss. Initially, start with 30 minutes per day.
9. The diet will be advanced slowly as follows:
 1. Stage 1: Full Liquid Diet (Weeks 1-2 post-op)
 2. Stage 2: Pureed Liquid Diet (Week 3 post-op)
 3. Stage 3: Soft Diet (Weeks 4-6 post-op)
 4. Stage 4: Regular Diet (Week 6 post-op and beyond)

Stage 1: Full Liquid Diet **(Weeks 1 and 2)**

1. You will remain on the full liquid diet through at least the end of post operation week 2. Your highest risk for a leak along the suture line is weeks 1-3 post operation. Therefore, it is VERT important to follow the recommended diet progression.
2. At each meal, sip 2 oz (1/4 cup), or more if tolerated, of a liquid protein source over the course of 20 minutes. You do not have to finish everything. When you feel full STOP!
3. Drink at least 40 oz (5 cups) and gradually increase to 64 oz of water or low calorie beverages between high protein drinks. Remember to avoid carbonation, caffeine, and citrus.
4. Make sure you keep track of the amount of protein you consume each day. Remember, you need a minimum of 60 grams of protein each day.

Foods Allowed	Protein (g)	Foods to Avoid
Low sodium broth (chicken, beef or vegetable)	0 g	All other liquids and foods
Sugar-free Jell-O™	0 g	
Sugar-free popsicles	0 g	
Diet Ocean Spray™ (made w/Splenda)	0 g	
Decaffeinated tea	0 g	
Sugar-free Kool Aid™	0 g	
Crystal light™	0 g	
Water	0 g	
1 cup skim, 1%, or Lactaid milk	8 g	
1 cup unsweetened or light soy milk	6 g	
2 T non-fat powdered milk	6 g	
Protein shake (from approved list)	Varies	
1 cup blended and strained low-fat cream soup made with skim milk	8 g 6-8 g	
1 cup low-fat unsweetened Kefir	5-9 g	
Drinkable yogurt		

***You can add protein powder to all of the above items to either provide or increase the protein content.**

Low Calorie Drink Choices

≤ 20 calories per serving

<u>Item</u>	<u>Serving</u> (fl. oz.)	<u>Calories</u>	<u>Protein</u> (gm)	<u>Sugars</u> (gm)	<u>Fat</u> (gm)	<u>Sodium</u> (mg)
AquaFina Splash -Citrus Blend, Grape	8	0	0	0	0	65
*Crystal Light -Lemonade, Orange, Raspberry Ice	8	5	0	0	0	10
Crystal Light On-The-Go packs	1 pkt	5	0	0	0	10
*Eating Right Vitamin Water -Dragon fruit, orange, fruit punch, lemonade, pomegranate black cherry	8	0	0	0	0	35
FUZE Slenderize - Blueberry Raspberry, Cranberry Raspberry, Strawberry Melon	8	10	0	0	0	10
Glaceau Vitamin Water Zero -Acai blueberry pomegranate, lemonade, orange, grape- raspberry, mixed berry, peach-mandarin, green tea	8	0	0	1	0	0
MetroMint -Choc mint, Cherrymint, Lemonmint, Orangemint, Peppermint, Spearmint	8	0	0	0	0	0
Mio - Berry Pomegranate, Fruit Punch, Mango Peach, Peach Tea, Sweet Tea, Strawberry Watermelon	8	0	0	0	0	0
Nestle Pure Life -Kiwi Fresh, Raspberry Splash	8	0	0	0	0	50
Olade -Cranberry, Lemon, Pomegranate, Strawberry, Tropical	8	5-15	0	0-2	0	5-10
Ocean Spray Diet Juice -Blueberry, Blueberry Pomegranate, Cranberry, Cranberry Grape, Grape, Grape Pomegranate	8	5	0	2	0	50
Propel Fitness Water -Berry, Blueberry Pomegranate, Grape, Kiwi Strawberry, Lemon	8	10	0	2	0	75
SoBe Lifewater 0-Cal (Sweetened w/ Spenda & Sweet-one)	8	0	0	0	0	25

*Contains aspartame / acesulfame-potassium

Criteria for low calorie beverages:

1. Contain 5 grams of sugar or less per serving.
2. Contain 20 calories or less per serving.
3. Total calories from fluids should not exceed 60 calories per day. **Do not drink your calories.**
4. If you consistently drink vegetable juice, skim, 1%, Lactaid, or soy milk limit to no more than 12 ounces per day as these beverages contain more than 20 calories per serving.
5. **Check flavored waters that have “tea” in the name, some are caffeinated**
6. Watch sodium content of beverages. According to the American Heart Association one should not exceed 1500 mg sodium daily from both beverages and foods.

Fluids – Why Are They So Important?

Adequate fluid intake is absolutely vital to your health and well-being. While humans can survive weeks without food, we can survive only a couple of days without water! Throughout your weight loss journey, you will repeatedly hear us talk about the importance of adequate fluid intake. What you drink, and how much you drink, is just as important as the food you eat.

We ask that you drink a **minimum of 64oz** (or 8 cups) of water, or a low-calorie beverage, every day. Water is the optimal choice to meet your daily fluid needs, but there are several low-calorie beverage alternatives you may try as well (see provided list). Following gastric sleeve surgery you may no longer be able to comfortably drink a large glass of water at once when you become thirsty or dehydrated. Instead, you will need to sip your fluids gradually throughout the day, thereby preventing dehydration. In the early stages of dehydration, you may feel no symptoms at all. So please don't wait until you feel thirsty - by then you are already partially dehydrated.

Why Do I Need To Drink At Least 64 Ounces Of Fluid Each Day?

- Replenish fluids lost through normal bodily functions, such as breathing, sweating and urinating
- Facilitate numerous biochemical and metabolic processes, many of which involve weight loss!
- Enable proper muscle function, including your heart. (Muscle tissue is 70% water)
- Maintain healthy, glowing skin
- Feel alert and energetic
- Maintain a stable electrolyte balance in the body
- Ensure optimal functioning of the digestive and urinary tract
- Maintain healthy blood pressure levels

Beware the Consequences of Dehydration:

- Hunger (or Nausea and Vomiting)
- Headaches
- Fatigue and Dizziness
- Irritability
- Heat exhaustion
- Muscle cramps
- Poor concentration and motor performance
- Dry skin and wrinkled appearance
- In extreme cases, kidney failure and death!

Protein Supplementation

There are numerous options for you in the protein supplement aisle. It is important that you choose supplements that will provide you with complete and high quality protein sources. You should look for products made from milk (whey or casein), eggs, or soy. **Products which are collagen or gelatin based are made from animal skins, are not complete, and should be avoided.** Many collagen and gelatin products may state that they have been fortified with amino acids, however, the added amino acids are often not in ample amounts to make it a complete protein. When reading the ingredients list on protein supplements look for:

- Whey protein isolate (best choice)
- Whey protein concentrate
- Whey protein
- Whey protein blends
- Egg protein
- Soy protein
- Soy protein isolate

Approved Protein Supplements – Ready To Drink

≤ 5 g sugar per serving

Brand	Portion	Kcal	Protein	Sugar	Flavors	Where to buy:
Atkins shakes	10 oz	160	15	1	caramel, chocolate, strawberry, vanilla	Walmart Grocery store
Bariatrix (PROTI)	8 oz	90	15	0	chocolate, mixed berry, mocha, vanilla	www.bariatrix.com www.smartforme.com
Boost <i>Glucose Control</i>	8 oz	190	16	4	chocolate, strawberry, vanilla	Walmart Grocery store
Cytosport Pure Performance	20 oz	160	40	0	tangerine, tropical, watermelon	www.bariatriceating.com
EAS AdvantEDGE Carb Control- Dairy free	11 oz	110	17	0	caramel, chocolate, strawberry, vanilla	Walmart Grocery store
EAS Myoplex Carb Control	11 oz	150	25	1	chocolate, strawberry, vanilla	GNC Vitamin Shoppe
EAS Myoplex Lite	11 oz	170	20	1	chocolate, strawberry, vanilla	GNC Vitamin Shoppe
Isopure Zero Carb (Splenda)	20 oz	160-190	40	0	grape, green tea, mango peach, melon, orange, passion fruit, raspberry	GNC Vitamin Shoppe Max Muscle www.bariatriceating.com
Lean Body On-the-Go	14 oz	180	25	0	banana, chocolate, strawberry, vanilla	GNC Max Muscle Vitamin Shoppe
Muscle Milk Light	14 oz	160-170	20	0	chocolate, vanilla (not café latte)	GNC Vitamin Shoppe
New Isopure Plus	8 oz	60	15	0	fruit punch, grape	www.bariatriceating.com GNC
Oh Yeah!	14 oz	220	32	3	banana, chocolate, cookies and cream, strawberry, vanilla	GNC Vitamin Shoppe
Optisource High Protein	8 oz	200	24	0	caramel, strawberry	www.walgreens.com www.bariatricadvantage.com
Premier Protein	11 oz	160	30	1	chocolate, strawberry, vanilla	Costco, Sam's Club
Pure Protein	1 can	150-170	35	1-2	banana, chocolate, cookies and cream, strawberry, vanilla	GNC Vitamin Shoppe
Slim Fast Low Carb	12 oz	190	20	1	chocolate, vanilla	Walmart Grocery store
Worldwide Sport Pure Protein® Shake	12 oz	160	35	1	banana, chocolate, cookie & cream, strawberry, vanilla	www.bariatriceating.com

Approved Protein Supplements – Powders

≤ 5 g sugar per serving

Brand	Portion	Kcal	Protein	Sugar	Flavors	Where to buy:
365 Whey Protein Powder (sweetened w/ Stevia)	1 scoop	80	16	0	Vanilla	Whole Foods
Bariatric Support Basic Essentials	8oz	90	15	1	Chocolate, vanilla	Sprouts www.twinlab.com
Bariatric Advantage	2 scoops	150-160	27	1-2	Chocolate, vanilla, orange cream, iced latte, banana, strawberry	www.bariatricadvantage.com
Beneprotein	1 packet	25	6	0	Unflavored	www.walgreens.com
Biochem Sports (Stevia)	1 scoop	80	20	<0.5	Natural, berry, caramel, chocolate, strawberry, vanilla	Whole Foods, Sprouts Vitamin Cottage/Shoppe
Body Fortress Super Advanced Whey Isolate	1 scoop	130	30	<1	Chocolate, vanilla crème	GNC, Walmart
Carnation Instant Breakfast No added sugar	1 packet	150	15	12	Sugar coming from milk-chocolate, vanilla	Grocery store
Celebrate Chike Meal Replacements	1 packet	190	28	4	Chocolate, vanilla, banana, strawberry, orange	www.celebratevitamins.com
Designer Whey Protein Powder	1 scoop	100	18	2	Unflavored, chocolate, vanilla	GNC ,Whole Foods Vitamin Cottage/Shoppe www.designerwhey.com
Dymatize ISO 100 (Splenda)	1 scoop	106	24-25	0	Banana, berry, chocolate, pina colada, vanilla	GNC Vitamin Shoppe
EAS 100% Whey Protein Powder	1 scoop	120	23	1	Chocolate, vanilla	GNC, Vitamin Shoppe Target, Walmart
Gold Standard 100% Whey	1 scoop	120	24	1	Banana, chocolate, choc mint, strawberry, straw-ban, punch	GNC, Vitamin Cottage/Shoppe
Isopure Zero Carb - don't follow serving size on container for 2 scoops	1 scoop	105	25	0	Apple melon, banana, chocolate, cookies & cream, mango peach, mint choc, punch	GNC Vitamin Shoppe
Iso-Extreme - don't follow serving size on container for 2 scoops	1 scoop	143	30	4	Berry blast, blue ice, tropical punch	Max Muscle
Organic Protein (Vegan Plant Based)	2 scoops	150	21	3	Creamy Chocolate Fudge, Vanilla bean	Costco, amazon.com
RAW (Vegan Plant Based, Non-Soy)	1 scoop	80	18	1	Chocolate, Vanilla, Vanilla Spiced Chai, Original	King Soupers, Vitamin Cottage, Whole Foods, amazon.com
Solgar Whey to Go	1 scoop	70	16	1	Vanilla bean	Vitamin Cottage/Shoppe, Whole Foods
Nature's Plus Spiru-tein Unsweetened (Dairy Free)	1 scoop	80	14	0	Strawberry, vanilla, chocolate, peaches and cream, banana	Vitamin Cottage, King Soopers, Grocery stores
Nature's Plus Spiru-tein Gold (Dairy Free, Soy free)	1 scoop	100	12	0	Banana Berry, vanilla, strawberry, chocolate, tropical fruit, chocolate cherry	Vitamin Cottage, King Soopers, Grocery stores
Syntrax Nectar or Nectar Sweet	1 scoop	90	23	0	Apple, cherry, chocolate, , lemonade, lemon tea, orange, strawberry, straw-kiwi, vanilla	Vitamin Shoppe www.bariatriceating.com
Unjury Protein Powder	1 scoop	100	20	3	Unflavored, *chocolate, *strawberry, *vanilla, chicken soup, cheese	www.unjury.com

PHASE 1: FULL LIQUID DIET

SAMPLE MEAL PLAN

Below are sample plans that you may use while on the full liquid diet. Week 1 Meal plan provides a minimum of **40 grams** of protein and **40 oz** (5 cups) of fluid. Week 2 Meal Plan provides a minimum of **60 grams** of protein and **64 oz** (8 cups) of fluid. Portions may vary for each individual. Stop drinking when you are satisfied.

Time	Portion	Clear liquid	Portion	Full Liquid	Grams Protein
6:00 AM	4 oz	Water or low calorie beverage	-		
7:00 AM	-		4 oz	Skim milk w/ ½ scoop protein powder	14
8:00 AM	4 oz	Water or low calorie beverage	-		
9:00 AM	4 oz	Water or low calorie beverage	-		
10:00 AM	-		4 oz	Protein Shake	14
11:00 AM	4 oz	Water or low calorie beverage	-		
12:00 PM	-		4 oz	Strained low fat cream soup made with milk ** May add 2 Tbsp of non-fat powdered milk for additional 6 grams of protein	4 6
1:00 PM	4 oz	Low sodium chicken, beef, or vegetable broth	-		
2:00 PM	4 oz	Water or low calorie beverage	-		
3:00 PM	-		4 oz	Protein Shake	14
4:00 PM	4 oz	Water or low calorie beverage	-		
5:00 PM	4 oz	Water or low calorie beverage	-		
6:00 PM	-		4 oz	Skim milk w/ ½ scoop protein powder	14
7:00 PM	4 oz	Water or low calorie beverage	-		
8:00 PM	4 oz	2 oz water or low calorie beverage and Sugar Free popsicle (counts as 2 oz clear fluid)	-		
9:00 PM	4 oz	Water or low calorie beverage	-		
Total Fluid	44 oz		20 oz	Total Protein	66

Time	Portion	Clear liquid	Portion	Full Liquid	Grams Protein
6:00 AM	6 oz	Water or low calorie beverage	-		
7:00 AM	-		6 oz	6 oz Skim milk w/ ½ scoop protein powder	20
8:00 AM	6 oz	Water or low calorie beverage	-		
9:00 AM	6 oz	4 oz water or low calorie beverage and Sugar Free popsicle (counts as 2 oz clear fluid)	-		
10:00 AM	-		6 oz	Protein Shake	18
11:00 AM	6 oz	Water or low calorie beverage	-		
12:00 PM	6 oz	Water or low calorie beverage	-		
1:00 PM	-		6 oz	Strained low fat cream soup made with milk ** May add 2 Tbsp of non-fat powdered milk for additional 6 grams of protein	6 6
2:00 PM	6 oz	Water or low calorie beverage	-		
3:00 PM	6 oz	Water or low calorie beverage	-		-
4:00 PM	-		6 oz	Protein Shake	18
5:00 PM	6 oz	Low sodium chicken, beef, or vegetable broth	-		-
6:00 PM	6 oz	Water or low calorie beverage	-		-
7:00 PM			6 oz	Protein Shake	18
8:00 PM	6 oz	Water or low calorie beverage	-		
9:00 PM	6 oz	Water or low calorie beverage	-		
Total Fluid	66 oz		20 oz	Total Protein	66

Stage 2: Pureed Diet (week 3)

1. Beginning week 3 after surgery, you may SLOWLY add foods of a pureed texture. All foods for the next week will be BLENDED to the consistency of applesauce or baby food.
2. You can continue to include foods from the full liquid diet throughout this stage.
3. It is important to eat food slowly, take small bites, and if applicable chew foods thoroughly to avoid blockage or nausea. Try 2-4 Tbsp of food at a time to see if it is tolerated. Each meal should consist of only 4 Tbsp (1/4 cup) to 8 Tbsp (1/2 cup) of food.
4. Remember to always eat protein first at each meal. Your recommendation is for 60-80 grams each day. During this phase the majority of your protein needs may be met from drinking protein supplements.
5. Stay hydrated, drink 8 cups (64 oz) of water or low calorie beverages between meals.
6. Avoid drinking 30 minutes before meals, during meals and wait 30 minutes after meals before you resume drinking.
7. Continue to keep track of your protein intake and measure portions at every meal.
8. Continue taking a chewable or liquid multi-vitamin with minerals, 1500 mg of calcium citrate, Vitamin D3 2000 IU, B-50 complex, and 250-500 mg vitamin B12 daily. To help minimize nausea, take these with meals.

Important Tips:

- You may need to add skim milk, clear broth, water, or low sugar and low fat sauces to foods when blending to make the foods into a thin “applesauce” consistency.
- Add non-fat powdered milk or approved protein powder to your foods to increase protein content.
- Try one new food at a time. If you feel nauseated or experience gas or bloating after eating, then you are not ready for this food. Wait a few days before trying this food again.
- Portions may vary depending on individual tolerances. Listen to your body. STOP eating when satisfied.

Pureed Diet Allowed Foods:

Food Group	Foods Allowed	Protein per serving (approximate)	Foods to Avoid
Meat and meat substitutes	2 Tbsp (1 oz) blended meat (add broth, water, fat-free gravy, or low-fat low-sugar sauce) ¼ cup low-fat cottage cheese (small curd) ¼ cup low-fat ricotta cheese ½ cup soft tofu ½ cup mashed beans 2 Tbsp baby food meats ½ cup protein drink or powder	7 grams 7 grams 7 grams 7+ grams 7 grams Varies Varies	All other foods
Milk	1 cup skim, 1%, or Lactaid milk 1 cup unsweetened or light soy milk 2 T non-fat powdered milk ¾ cup (6oz) low-sugar/low-fat yogurt or soy yogurt (15 grams of sugar or less, no fruit pieces) ¾ cup (6 oz) Greek yogurt (15 grams of sugar or less, no fruit pieces) 1 cup sugar free pudding made w/ skim milk 1 cup blended low-fat soup (made with skim or 1% milk, add protein powder or non-fat powdered milk to increase protein) 1 cup low fat unsweetened Kefir	8 grams 6 grams 6 grams 5 grams 16 grams 8 grams 8 grams 8 grams	All other foods
Starch	½ cup cream of wheat or rice (make with skim milk to increase protein) ½ cup baby oatmeal (make with skim milk to increase protein) Mashed or blended: potatoes, sweet potatoes, winter squash (no skin or seeds, make with skim milk)	3 grams *Add protein powder or non-fat powdered milk to increase protein	All other foods
Fruit	½ cup pureed fruit ½ cup unsweetened applesauce ½ cup baby food fruit	0 grams *Add protein powder or non-fat powdered milk to increase protein	All other foods
Vegetable	½ cup pureed vegetables ½ cup baby food vegetables	2 grams *Add protein powder or non-fat powdered milk to increase protein	All other foods

Tips for pureeing foods:

1. Use broth, fat free gravy, low-fat/low-sugar sauces, milk, diet fruit juice, or vegetable juice for liquid.
2. Always add fluid when pureeing, mixing equal parts of solids and liquids. Vegetables and fruits may not require as much liquid as compared to meats.
3. Food may puree more easily when cut into small pieces before placing in blender or food processor.
4. Eat pureed food immediately, freeze or refrigerate (no more than 48 hours).
5. Use clean ice cubes trays when freezing pureed foods in 1-2 Tbsp portions. Then, just pop the cubes into a glass bowl to microwave or reheat.

Recipes for the Pureed Diet

Basic ingredients to keep at home:

- 100% whey protein powder, 100% soy (or plant based) protein, non-fat powdered milk
- Fresh, frozen, or canned (in own juice or water packed) fruits. Fruits must be unsweetened meaning “no sugar added” and blended to smooth texture.
- Skim, 1%, unsweetened soy or Lactaid milk
- Pure extracts (vanilla, almond, coconut, etc)
- Da Vinci or other sugar-free syrup (vanilla, hazelnut, caramel, raspberry, etc)
- Unsweetened cocoa powder, cinnamon, nutmeg, apple pie spice

Basic Shake Starter:

1 scoop protein powder

½ to 1 cup milk, unflavored soymilk or Lactaid

½ cup ice cubes (optional)

- Portion size for protein shakes should be 6-8 oz.
- To increase variety, add your favorite fruit or flavored syrup to your shake.
- Add no more than ¼ cup of fruit for each protein shake.
- When using extract flavoring or sugar-free syrup measure ½ to 1 teaspoon depending on how strong you like the flavor.
- On average an 8 oz shake will provide about 24 grams of protein (depending on the protein powder you use).
- Please see “Bariatric Cookbooks” list for additional recipe sources.

During the full liquid diet phase please avoid making your shakes with fruit or yogurt, these ingredients can be added during phase 3.

Recipe Ideas:

<u>Apple Pie Almandine</u> 2 scoops vanilla flavored protein powder 1 cup ice 4 ounces water ½ teaspoon apple pie spice ¼ teaspoon almond extract	<u>Vanilla Orange Dreamsicle</u> 2 scoops vanilla flavored protein powder 4 ounces water 1 cup ice ¼ teaspoon sugar-free orange gelatin powder ¼ teaspoon vanilla extract
<u>Caramel Cream</u> Basic shake starter 4 oz sugar-free vanilla yogurt 1 teaspoon caramel sugar-free syrup * cut back on the amount of ice	<u>Chocolate Covered Banana</u> 2 scoops chocolate flavored protein powder 1 cup ice 4 ounces water 1/8 teaspoon banana extract
<u>Tropical Blend</u> Basic shake starter ¼ cup frozen papaya 1 teaspoon pure coconut extract ½ teaspoon pure vanilla extract	<u>Yogurt Smoothie</u> 1 container (6oz) of sugar-free/low-fat yogurt ½ cup skim milk ¼ cup powdered milk ½ banana or ¼ cup frozen fruit
<u>Raspberry Delight</u> Basic shake starter 1 teaspoon sugar-free raspberry syrup	<u>Caramel Mocha</u> 1 cup cold decaffeinated coffee 1-2 scoops chocolate flavored protein powder 1 teaspoon unsweetened cocoa powder 3 tablespoons sugar-free caramel flavored syrup 5 ice cubes

PHASE 2: PUREED DIET SAMPLE MEAL PLAN

Below are sample meal plans that you may use while on the pureed diet. This meal plan provides 60 grams of protein and 64 oz of fluid. Portions may vary for each individual. Make meals last at least 20 minutes.

Meals should only be $\frac{1}{4}$ cup to $\frac{1}{2}$ cup per serving. Start with $\frac{1}{4}$ cup and if you are satisfied STOP eating. Remember to always eat your protein first!

Time	Portion	Clear liquid	Portion	Food	Grams Protein
6:00 AM	-		1/4-1/2 cup	1/4-1/2 cup Greek Yogurt	7-15
7:00-8:30 AM	12 oz	Water or low calorie beverage	-		-
9:00 AM	-		1/4-1/2 cup	1/4-1/2 cup low-fat cottage cheese (small curd)	7-15
10:00-11:30AM	12 oz	Water or low calorie beverage	-		
12:00 PM	-		4-6 oz	Protein Shake	15-20
1:00 PM-3:00 PM	12 oz	Water or low calorie beverage	-		
3:30 PM			1/2 cup	1/2 cup BLEND low-fat cream soup made with milk **Add 2 Tbsp of non-fat powdered milk for additional 6 grams of protein	4 6
4:30 PM-6:00 PM	12 oz	Water or low calorie beverage	-		
6:30 PM			1/2 cup	1/2 cup instant mashed potatoes made with skim milk ** Add 2 Tbsp of non-fat powdered milk for additional 6 grams of protein	3 6
7:30 PM-10:00 PM	16 oz	Water or low calorie beverage			
Total Fluid	64 oz			Total Protein	48-69 g

Time	Portion	Clear liquid	Portion	Food	Grams Protein
6:00 AM	-		1/2 cup	1/2 cup cream of wheat made with milk ** Add 2 Tbsp of non-fat powdered milk for additional 6 grams of protein	4 6
7:00-8:30 AM	12 oz	Water or low calorie beverage	-		-
9:00 AM	-		1/4-1/2 cup	1/4-1/2 cup low-fat cottage cheese (small curd)	7-15
10:00-11:30AM	12 oz	Water or low calorie beverage	-		
12:00 PM	-		4-6 oz	Protein Shake	15-20
1:00 PM-3:00 PM	12 oz	Water or low calorie beverage	-		
3:30 PM			1/2 cup	1/2 cup refried beans	7
4:30 PM-6:00 PM	12 oz	Water or low calorie beverage	-		
6:30 PM			1/2 cup	1/2 cup sugar free, fat free chocolate pudding made with skim milk **Add 1/2 scoop chocolate protein powder for additional 7 grams protein	4 7
7:30 PM-10:00 PM	16 oz	Water or low calorie beverage			
Total Fluid	64 oz			Total Protein	49-63 g

*Remember, the serving sizes listed above is only suggestions.

Stage 3: Soft Diet

(Weeks 4 to 6)

1. After a week on the Pureed Diet, you may SLOWLY add foods that are soft in consistency. Soft foods that can be mashed easily with a fork.
2. You will be on the Soft Diet for a minimum of 2 weeks. Remember to go slowly and try one new food at a time. Advancing your diet too quickly may cause food to get stuck in your digestive tract.
3. Continue to eat 5-6 small meals a day to maximize protein intake. Remember, you will produce less ghrelin, the hormone responsible for your appetite; therefore, you may not feel hungry at meal times.
4. Continue to measure your portions. Start with a $\frac{1}{4}$ cup (2 oz) and increase to no more than $\frac{1}{2}$ cup (4 oz) portions per meal. Always STOP eating when you start to feel full.
5. Continue to stay hydrated. Drink 64 fl. oz (8 cups) of water or low-calorie fluids between meals. Avoid drinking 30 minutes before meals, during meals and wait 30 minutes after meals to resume drinking to avoid pouch expansion.
6. Continue to avoid caffeine during this phase. Caffeine can dehydrate you and irritate the stomach lining.
7. Continue to keep track of your daily protein intake. Your minimum goal is 60 grams of protein per day.
8. Non-protein foods should only be added to your diet AFTER you have met your protein goal of 60 grams of protein per day.
9. Continue taking your multi-vitamin with minerals, 1500 mg calcium citrate, Vitamin D3 2000 IU, B- 50 complex and 250–500 mcg Vitamin B12 every day. You can either continue taking chewable vitamins or change to pill form, if desired. Spread your calcium throughout the day; no more than 500-600 mg at a time. Please refer to the vitamin and mineral supplement page for additional information.
10. All foods should be cooked without adding fats. Bake, broil, grill, poach or steam meats. Season meats with dried herbs or spices instead of fats.
11. Moist meats are better tolerated. Try adding chicken/beef broths, fat-free gravies, low-fat creamed soups, or plain yogurt to moisten meats. You can also finely dice meats for better tolerance and ALWAYS chew well.
12. Continue to exercise. Goal is a minimum of 30 minutes of exercise most days (5 days or more) of the week.

Soft Diet Allowed Foods:

Food Group	Foods Allowed	Protein per serving	Foods to Avoid
Meat and meat substitutes *Average 7 grams of protein per serving*	2 Tbsp (1 oz) lean ground (turkey, chicken, beef) 2 Tbsp (1 oz) baked fish 2 Tbsp (1oz) water packed tuna or chicken ¼ cup low-fat cottage cheese (small curd) ¼ cup low-fat ricotta cheese 1 oz low-fat cheese (less than 6 grams of fat) ¼ cup egg substitute or 1 scrambled egg 2 Tbsp natural nut butter (peanut, almond, soy) ½ cup tofu ¼ cup tempeh 1 ½ oz soy based meatless burger or nuggets ½ cup pinto, black beans, lentils, edamame 1 cup protein shake	7 grams 7 grams 7 grams 7 grams 7 grams 7 grams 7 grams 8 grams 7+ grams 7+ grams 7 grams 7 grams Varies	Overcooked meats Crunchy peanut butter Lunch meat Sausage Bacon High-fat cheese (6 grams of fat or more per ounce)
Milk *Average 8 grams of protein per serving*	1 cup skim, 1%, or Lactaid milk 1 cup unsweetened or light soy milk 2 T non-fat powdered milk ¾ cup (6oz) low-fat yogurt/soy yogurt (≤ 15 grams of sugar) ¾ cup (6 oz) Greek yogurt (≤ 15 grams of sugar) 1 cup sugar free pudding made with skim milk 1 cup Keifer 1 cup blended low-fat cream soup made w/ milk	8 grams 6 grams 6 grams 5 grams 16 grams 8 grams 8 grams 8 grams	Whole or 2% milk Chocolate milk Milkshakes Regular yogurt (more than 15 grams of sugar per serving)
Starch	½ cup cooked cereal (oatmeal, grits, cream of wheat or rice) made with skim milk ½ cup mashed potatoes, sweet potatoes, winter squash (no skin or seeds)	3 grams *Add protein powder or non-fat powdered milk to increase protein	Cold cereal Pizza dough Bread products Crackers Pastries
Fruit	½ cup canned fruit (in own juices or water packed) ½ banana ½ cup soft melon	0 grams *Add protein powder or non-fat powdered milk to increase protein	Fruits with skins or seeds (oranges, berries, apples) Fruit Juice
Vegetable	½ cup cooked carrots, green beans, zucchini (no skin or seeds)	2 grams *Add protein powder or non-fat powdered milk to increase protein	Vegetables that are tough or stringy (corn, celery, asparagus, broccoli)

PHASE 3: SOFT DIET

SAMPLE MEAL PLAN

Below are sample meal plans that you may use while on the soft diet. This meal plan provides 60 grams of protein and 64 oz of fluid. Portions may vary for each individual. Make meals last at least 20 minutes.

Meals should only be ¼ cup to ½ cup per serving. Start with ¼ cup and if you are satisfied STOP eating. Remember to always eat your protein first!

Time	Portion	Clear liquid	Portion	Food	Grams Protein
6:00 AM	-		1/4 cup	1 scrambled egg or egg substitute	7
7:00-8:30 AM	12 oz	Water or low calorie beverage	-		-
9:00 AM	-		1/4-1/2 cup	1/4-1/2 cup Greek Yogurt	7-15
10:00-11:30AM	12 oz	Water or low calorie beverage	-		
12:00 PM	-		4-6 oz	Protein Shake	15-20
1:00 PM-3:00 PM	12 oz	Water or low calorie beverage	-		
3:30 PM			1/4 cup	2 oz canned tuna or canned chicken with 1 Tbsp fat free mayo ** May mix with 0% plain Greek yogurt for additional 2 grams protein	14 2
4:30 PM-6:00 PM	12 oz	Water or low calorie beverage	-		
6:30 PM			1/2 cup	1/2 cup instant mashed potatoes made with skim milk ** Add 2 Tbsp of non-fat powdered milk for additional 6 grams of protein	3 6
7:30 PM-10:00 PM	16 oz	Water or low calorie beverage			
Total Fluid	64 oz			Total Protein	54-67 g

Time	Portion	Clear liquid	Portion	Food	Grams Protein
6:00 AM	-		1/2 cup	1/2 cup oatmeal made with milk ** Add 2 Tbsp of non-fat powdered milk for additional 6 grams of protein	4 6
7:00-8:30 AM	12 oz	Water or low calorie beverage	-		-
9:00 AM	-		1/4-1/2 cup	1/4-1/2 cup low-fat cottage cheese (small curd)	7-15
10:00-11:30AM	12 oz	Water or low calorie beverage	-		
12:00 PM	-		4-6 oz	Protein Shake	15-20
1:00 PM-3:00 PM	12 oz	Water or low calorie beverage	-		
3:30 PM			1/2 cup	1/4 cup refried beans with 1/4 cup cheese	4 7
4:30 PM-6:00 PM	12 oz	Water or low calorie beverage	-		
6:30 PM			2 oz	2 oz baked salmon or tilapia	14
7:30 PM-10:00 PM	16 oz	Water or low calorie beverage			
Total Fluid	64 oz			Total Protein	57-70 g

*Remember, the serving sizes listed above is only suggestions.

PHASE 4 – A: REGULAR DIET (6-12 WEEKS AFTER SURGERY)

1. After 2 weeks on the soft diet, you may begin the regular diet if ready 6-8 weeks after surgery. Be aware that everyone progresses differently.
2. This is the last stage of the diet progression. Continue to add new foods slowly.
3. During the first phase (A) of the regular diet focus on reaching your protein goal of 60 grams per day and adding in fruits and vegetables. Grains should not be added until the second phase (B) of the regular diet.
4. Follow a low fat diet and avoid simple sugars for life. Your protein goal remains between 60-80 grams daily.
5. Continue to measure your portions. Start with $\frac{1}{4}$ cup and increase to no more than $\frac{1}{2}$ cup serving at each meal. Remember to STOP eating when you feel satisfied.
6. Continue to eat 5-6 small meals each day. As your pouch expands, and your portions are about 1 cup per meal, 3 meals and 1 high protein snack may be more appropriate.
7. Continue to take your multi-vitamin, 1500 mg of Calcium Citrate, Vitamin D3 2000 IU, B-50 complex, and 250-500 mcg of Vitamin B-12 daily for life.
8. Hydration is very important. Continue to drink at least 8 cups (64 oz) of water or low calorie beverages daily. Avoid drinking 30 minutes before meals, during meals and wait 30 minutes after meals before you resume drinking.
9. Continue to track your daily intake. Include portions, protein and fluid intake.

The following are examples of foods from each food group that should be included on the

Regular Diet, Phase A

Food Group	Foods Allowed	Protein per serving	Foods to limit/avoid for best weight loss
Meat and meat substitutes	2 Tbsp (1 oz) cooked lean meat (chicken, fish, turkey, pork, beef) moist meats are tolerated best 2 Tbsp (1oz) water packed tuna or chicken 1 oz lean lunch meat (chicken, turkey) 1 oz (1 slice) low-fat cheese ¼ cup cottage cheese ¼ c ricotta cheese ¼ cup egg substitute or 1 scrambled egg 2 Tbsp natural creamy nut butter (peanut, almond, soy) 1 oz nuts (in moderation) ½ cup beans, lentils, edamame ½ cup tofu ¼ cup tempeh 1 ½ oz soy based meatless burger or nuggets 2/3 cup soy crumbles 1 oz soy chick'n 1 cup protein shake Protein bar	7 grams 7 grams 7 grams 7 grams 7 grams 7 grams 7 grams ~ 7 grams depends on type of nut) 7 grams 7+ 7+ 7 10 7 Varies Varies	Over cooked meats Regular peanut butter High fat lunch meat Salami Bologna Hot dogs Bratwurst Bacon Sausage High fat ground meats High fat cheese (6 grams of fat or more per ounce)
Milk	1 cup skim, 1%, or Lactaid milk 1 cup unsweetened or light soy milk 2 T non-fat powdered milk ¾ cup (6oz) low-sugar/low-fat yogurt or soy yogurt ¾ cup (6 oz) Greek style yogurt 1 cup low fat unsweetened Kefir 1 cup sugar free pudding made w/ skim milk 1 cup low-fat cream soup made w/ milk	8 grams 6 grams 6 grams 5 grams 16 grams 8 grams 8 grams 8 grams	Whole or 2% milk Chocolate milk Milkshake/ Ice cream Regular yogurt (sugar greater than 15 grams per serving)
Starch	½ cup cooked cereal made with milk (oatmeal, grits, cream of wheat or rice) ½ cup potatoes, winter squash, peas, corn	3 grams	Sweetened Cereal (sugar over 5 grams per serving) Pizza dough White bread Pastries Doughnuts Bagels White rice or pasta Instant noodles Chips Crackers Cake Cookies
Fruit	½ cup canned fruit (in own juice or water packed) ½ banana Small fresh fruit (such as peeled apple) ½ cup unsweetened frozen fruit	0 grams	Fruits with tough skins or membranes (may want to wait a couple of months before trying) Fruits with added sugar Fruit juice Dried fruits
Vegetable	½ cup cooked non-starchy vegetable 1 cup raw non-starchy vegetable	2 grams	Vegetables that are tough or stringy such as celery, asparagus, corn or peas (may want to wait a couple of months before trying)

PHASE 4 – A: REGULAR DIET (WEEK 6-12)

SAMPLE MEAL PLAN

This meal plan provides 60 grams of protein and 64oz of fluid. Portions may vary for each individual. Make meals last 20 minutes.

Meals should only be ¼ cup to ½ cup per serving. Start with ¼ cup and if you are satisfied STOP eating. Remember to always eat your protein first!

Time	Portion	Clear liquid	Portion	Food	Grams Protein
6:00 AM	-		1/2 cup	1 scrambled egg or egg substitute 1 link turkey sausage	7 3
7:00-8:30 AM	12 oz	Water or low calorie beverage	-		-
9:00 AM	-		1/4 cup	1 string cheese	7
10:00-11:30AM	12 oz	Water or low calorie beverage	-		
12:00 PM	-		1/2 cup	2 oz lunch meat 1 string cheese	14 7
1:00 PM-3:00 PM	12 oz	Water or low calorie beverage	-		
3:30 PM			1/2 cup	2 TBS natural peanut butter 1/4 sliced peeled apple	7 2
4:30 PM-6:00 PM	12 oz	Water or low calorie beverage	-		
6:30 PM			1/2 cup	2 oz baked chicken 1/4 cup vegetables	14
7:30 PM-10:00 PM	16 oz	Water or low calorie beverage			
Total Fluid	64 oz			Total Protein	61 g

Time	Portion	Clear liquid	Portion	Food	Grams Protein
6:00 AM	-		1/2 cup	1/2 cup Greek Yogurt	15
7:00-8:30 AM	12 oz	Water or low calorie beverage	-		-
9:00 AM	-		1/2 cup	Protein bar	15
10:00-11:30AM	12 oz	Water or low calorie beverage	-		
12:00 PM	-		1/4 cup	2 oz canned tuna or canned chicken with 1 Tbsp fat free mayo ** May mix with 0% plain Greek yogurt for additional 2 grams protein	14 2
1:00 PM-3:00 PM	12 oz	Water or low calorie beverage	-		
3:30 PM			1/4 cup	1 string cheese	7
4:30 PM-6:00 PM	12 oz	Water or low calorie beverage	-		
6:30 PM			2 oz	2 oz baked salmon or tilapia 1/4 cup vegetables	14
7:30 PM-10:00 PM	16 oz	Water or low calorie beverage			
Total Fluid	64 oz			Total Protein	67 g

*Remember, the serving sizes listed above is only suggestions.

PHASE 4–B: REGULAR DIET (12 WEEKS AND BEYOND AFTER SURGERY)

1. This is the last stage of the diet progression. At this point you have been able to consistently meet your protein goal 60-80 grams per day and are able to eat a fruit or vegetable at each meal and snack.
2. During this phase (B) of the regular diet you may begin to add whole grains to your diet.
3. Continue to follow a low fat diet and avoid simple sugars for life. Your protein goal continues to remain between 60-80 grams per day. At this stage you should be trying to get the majority of your protein from solid foods rather than protein shakes.
4. Continue to measure your portions. Start with $\frac{1}{4}$ cup and increase to no more than $\frac{1}{2}$ cup serving at each meal. Remember to STOP eating when you feel satisfied.
5. As your portion sizes get ~1 cup per meal, and you are able to hold more, you should start moving towards eating 3 meals and 1 high protein snack.
6. Continue to take your multi-vitamin, 1500 mg of Calcium Citrate, Vitamin D3 2000 IU, B-50 complex, and 250-500 mcg of Vitamin B-12 daily for life.
7. Hydration is very important. Continue to drink at least 8 cups (64 oz) of water or low calorie beverages daily. Avoid drinking fluids 30 minutes before your meals, during meals and wait 30 minutes after meals before you resume drinking.
8. Continue to track your daily intake. Include portions, protein and fluid intake.

The following are examples of foods from each food group that should be included on the

Regular Diet, Phase **B**

Food Group	Foods Allowed	Protein per serving	Foods to limit/avoid for best weight loss
Meat and meat substitutes	2 Tbsp (1 oz) cooked lean meat (chicken, fish, turkey, pork, beef) moist meats are tolerated best 2 Tbsp (1oz) water packed tuna or chicken 1 oz lean lunch meat (chicken, turkey) 1 oz (1 slice) low-fat cheese ¼ cup cottage cheese ¼ c ricotta cheese ¼ cup egg substitute or 1 scrambled egg 2 Tbsp natural creamy nut butter (peanut, almond, soy) 1 oz nuts (in moderation) ½ cup beans, lentils, edamame (cooked) ½ cup tofu ¼ cup tempeh 1 ½ oz soy based meatless burger or nuggets 2/3 cup soy crumbles 1 oz soy chick'n 1 cup protein shake Protein bar	7 grams 7 grams 7 grams 7 grams 7 grams 7 grams 7 grams ~ 7 grams depends on type of nut) 7 grams 7+ 7+ 7 10 7 Varies Varies	Over cooked meats Regular peanut butter High fat lunch meat Salami Bologna Hot dogs Bacon Sausage High fat ground meats High fat cheese (6 grams of fat or more per ounce)
Milk	1 cup skim, 1%, or Lactaid milk 1 cup unsweetened soy milk 2 T non-fat powdered milk ¾ cup (6oz) low-sugar/low-fat yogurt or soy yogurt ¾ cup (6 oz) Greek style yogurt 1 cup low fat unsweetened Kefir 1 cup sugar free pudding made w/ skim milk 1 cup low-fat cream soup made w/ milk	8 grams 6 grams 6 grams 5 grams 16 grams 8 grams 8 grams 8 grams	Whole or 2% milk Chocolate milk Milkshake/ Ice cream Regular yogurt (sugar greater than 15 grams per serving)
Starch	1 slice whole grain bread ½ cup cooked cereal made with milk (oatmeal, grits, cream of wheat or rice) ¾ cup unsweetened dry cereal (5 g sugar or less) ½ cup potatoes, winter squash, peas, corn 1/3 cup brown rice 1/3 cup whole wheat pasta 1/3 cup Quinoa, Millet, Bulgur, or other whole grain 1 serving whole grain crackers	3 grams	Sweetened Cereal (sugar over 5 grams per serving) Pizza dough White bread Pastries Doughnuts Bagels White rice or pasta Instant noodles Chips Regular crackers Cake Cookies
Fruit	½ cup canned fruit (in own juice or water packed) ½ banana Small fresh fruit (such as peeled apple) Unsweetened frozen fruit	0 grams	Fruits with tough skins or membranes (may want to wait a couple of months before trying) Fruits with added sugar Fruit juice Dried fruits
Vegetable	½ cup cooked non-starchy vegetable 1 cup raw non-starchy vegetable	2 grams	Vegetables that are tough or stringy such as celery, asparagus, corn or peas (may want to wait a couple of months before trying)

PHASE 4-B: REGULAR DIET (WEEKS 12 AND BEYOND)

SAMPLE MEAL PLAN

This meal plan provides 60 grams of protein and 64oz of fluid. Portions may vary for each individual. Make meals last 20 minutes.

Meals should only be ¼ cup to ½ cup per serving. Start with ¼ cup and if you are satisfied STOP eating. Remember to always eat your protein first!

Time	Portion	Clear liquid	Portion	Food	Grams Protein
6:00 AM	-		1/2 cup	1 scrambled egg or egg substitute 1 link turkey sausage	7 3
7:00-8:30 AM	12 oz	Water or low calorie beverage	-		-
9:00 AM	-		1/4 cup	1 string cheese	7
10:00-11:30AM	12 oz	Water or low calorie beverage	-		
12:00 PM	-		1/2 cup	2 oz lunch meat 1 string cheese 1/2 slice whole wheat bread or 2-3 whole wheat crackers	14 7
1:00 PM-3:00 PM	12 oz	Water or low calorie beverage	-		
3:30 PM			1/2 cup	2 TBS natural peanut butter 1/4 sliced peeled apple	7 2
4:30 PM-6:00 PM	12 oz	Water or low calorie beverage	-		
6:30 PM			1/2 cup	2 oz baked chicken 1/4 cup vegetables	14
7:30 PM-10:00 PM	16 oz	Water or low calorie beverage			
Total Fluid	64 oz			Total Protein	61 g

Time	Portion	Clear liquid	Portion	Food	Grams Protein
6:00 AM	-		1/2 cup	1/2 cup Greek Yogurt	15
7:00-8:30 AM	12 oz	Water or low calorie beverage	-		-
9:00 AM	-		1/2 cup	Protein bar	15
10:00-11:30AM	12 oz	Water or low calorie beverage	-		
12:00 PM	-		1/2 cup	2 oz canned tuna or canned chicken with 1 Tbsp fat free mayo ** May mix with 0% plain Greek yogurt for additional 2 grams protein 1/2 slice whole wheat bread or 2-3 whole wheat crackers 1/4 cup vegetables	14 2
1:00 PM-3:00 PM	12 oz	Water or low calorie beverage	-		
3:30 PM			1/4 cup	1 string cheese	7
4:30 PM-6:00 PM	12 oz	Water or low calorie beverage	-		
6:30 PM			1/2 cup	2 oz baked salmon or tilapia 1/8 cup (2 TBS) vegetables 1/8 cup (2 TBS) brown rice	14
7:30 PM-10:00 PM	16 oz	Water or low calorie beverage			
Total Fluid	64 oz			Total Protein	67 g

*Remember, the serving sizes listed above is only suggestions.

Protein Bars

BARS	Kcal	Protein	Fat	Sugars	Where to buy:
ATKINS	180-240	11-19	8-11	1	Atkins.com, GNC, Vitamin Shoppe Grocery Store
Bariatric BARS (Pro-15)	150	15	6	5 or less	www.smartforme.com
Detour	180	15	6	6	Sam's Club
EAS AdvantEdge Carb Control	230	17	8	2	www.allstarhealth.com Walgreens Supermarket
EAS Myoplex Carb Control	260	25	8	1	GNC, Vitamin Shoppe Supermarket, Target, Walgreens
Genisoy Protein Crunch	150-160	15	6	0-1	www.genisoy.com Vitamin Shoppe, Vitamin Cottage
Met-Rx Protein Plus	310	32	9	3	www.metrx.com GNC, Vitamin Shoppe Save on Supplements
Oh Yeah! (Protein Wafers or Good Grab)	190-210	14	9-13	2-5	www.bariatricchoice.com www.bariatriceating.com Vitamin Shoppe
Optimum Nutrition Complete Protein Diet	180	20	2.5	0	www.optimumnutrition.com www.allstarhealth.com GNC, Vitamin Cottage Bally Fitness/24 Hour Fitness Vitamin Shoppe
NITRO-TECH HARDCORE	270	30	7	1	GNC
PermaLean Chocoholic Chocolate	190	21	7	2	www.permalean.com www.bariatricadvantage.com Whole Foods
POWER CRUNCH	200	14	12	5	www.powercrunchbar.com www.bariatricadvantage.com Max Muscle, Vitamin Shoppe It's nutty nutrition 1-800 -372-7008 www.drugstore.com
Powerbar Protein Plus Reduced Sugar	270	22	9	1	www.powerbar.com www.allstarhealth.com Safeway/Albertsons
PURE PROTEIN	190	20	6	2	Grocery Stores, GNC, Vitamin Shoppe www.pureprotein.net
SNICKERS MARATHON low carb	160-170	14	6-7	1	Grocery Stores www.snickersmarathon.com
SOUTH BEACH	210	19	6	0	Grocery Store
STRIVE	200	20	9	0	www.bariatriceating.com
Supreme Protein Bar	360	30	16	4	www.supremeprotein.com GNC, Vitamin Shoppe Bally Fitness, Target
Think Thin	~200	20	6-8	1-2	Wal-Mart Vitamin Cottage, Whole Foods www.thinkproducts.com
Universal Nutrition Doctor's Diet CarbRite	190	21	4	0	www.allstarhealth.com www.universalnutrition.com
Worldwide Sports Protein Revolution	280	32	9	2	www.allstarhealth.com www.gnc.com

Required Vitamin and Mineral Supplements after Surgery

You will not be able to meet certain vitamin and mineral needs without supplementation after the Sleeve Gastrectomy surgery due to decreased portion sizes, decreased digestion, and decreased absorption of nutrients. Patients who have had Sleeve Gastrectomy surgery are at an increased risk of developing vitamin and mineral deficiencies and these deficiencies have been observed in numerous studies. Iron, folate, vitamin B12, thiamine, calcium, and vitamin D are common deficiencies following surgery. Taking daily vitamin and mineral supplements is a lifelong commitment to ensure your health and prevent possible deficiencies and their consequences. It is recommended that you start supplementation the day after you return home from hospital discharge, but it is **essential that you begin vitamin and mineral supplementation two weeks after your surgery when you begin your Stage 3: Pureed Diet** to ensure complete micronutrient repletion. It is recommended that you take the following supplements:

- **Multivitamin-mineral supplement daily**
 - Contains 200% of daily value for at least 2/3 of nutrients (may take 2 vitamins that contain 100% of 2/3 of nutrients) Note: you may need to take 300% of daily value (may take may take 3 vitamins that contain 100% of 2/3 of nutrients) to meet suggested dosages for the following nutrients:
 - Contains 10,000 IU Vitamin A
 - At least 1.5 mg or 100% daily value for thiamin
 - Contains at least 18 mg iron (recommend 45-60 mg iron in Multivitamin)
 - Contains 400-800 mcg folic acid (should not exceed 1000 mcg folic acid because can mask B12 deficiency)
 - Contains 2 mg Copper
 - Contains selenium and zinc
 - Avoid time-released supplements
 - Avoid enteric coating
 - Avoid children's formulas
 - Tolerance may be improved when taken close to meal time
 - May separate dosage
 - Take separate from calcium supplement if contains iron
- **1500 mg of Calcium Citrate**
 - Separate into doses of 500-600 mg at one time
 - Separate calcium doses by at least 2 hours and 2 hours from iron
 - Take separate from iron or multivitamin that contains iron
 - Take calcium separate from thyroid medications by 4 hours
 - Combined dietary and supplemental calcium intake of greater than 1700 mg may be necessary to prevent bone loss during rapid weight loss
- **Vitamin D3**
 - 2,000-3,000 IU orally per day
- **Vitamin B12**
 - Total of 250-500 micrograms orally per day or 1000 micrograms injection monthly
- **B-50 Complex**

IF MENSTRATING OR A HISTORY OF ANEMIA

- Additional elemental iron is needed that is not provided by multivitamin
 - Additional 32-82 mg daily
 - Avoid enteric coating
 - Take separate from calcium supplement by at least 2 hours
 - Take separate from thyroid medication by 4 hours
 - Avoid excessive intake of tea due to tannin interaction
 - Take with vitamin C to increase absorption

It is essential to obtain adequate amounts of vitamins and minerals because they ensure the proper functioning of our bodies. They help to regulate hunger, appetite, nutrient absorption, thyroid and adrenal function, metabolic rate, blood sugar levels, fat and sugar metabolism, energy storage and many other important processes.

When selecting your vitamin and mineral supplements you have a variety of options. The dietitian will help you with selecting a plan that works best for you. Recommended bariatric specific vitamins can be purchased at:

Bariatric Advantage Vitamins

www.coloradobariatric.com

800-898-6888

Validation Code: BMCC for 10% off order total

Celebrate Vitamins

www.celebratevitamins.com

877-424-1953

Opurity Vitamins

www.opurity.com

800-517-5111

If you would prefer over the counter options we recommend a daily multi-vitamin, 1500 mg calcium citrate (taken as three servings of 500 IU each), 2000 IU of Vitamin D3, 250-500 mcg of Vitamin B12, and a B50 Complex. You may ask for a prescription for a multi-vitamin at your two week post-operative appointment. The preferred form of calcium is calcium citrate. Your body is not able to break down calcium carbonate as well after bypass surgery, so make sure you purchase calcium citrate. Calcium may be chewable, liquid, powder, or pill form.

Please ask the dietitian if you have any questions.

Supplement Schedule

NOT taking a thyroid medication

Breakfast- Multivitamin, B-Complex, B-12, Vitamin D, Iron (if needed)

Lunch- Calcium

Dinner- Calcium

Before bed- Calcium

*Remember, calcium needs to be taken at least 2 hour separate from Multivitamin and Iron

TAKING a thyroid medication

Breakfast- NONE

Lunch- Calcium

Afternoon snack- Calcium

Dinner- Calcium

Before bed- Multivitamin, B-Complex, B-12, Vitamin D, Iron (if needed)

*Remember, calcium needs to be taken at least 2 hours separate from Multivitamin and Iron AND ideally 4 hours away from thyroid medication

Brand	Supplement	Dose
Bariatric Advantage-Chewable Multi Formula	Multivitamin	2 chewables
Bariatric Advantage- MultiFormula Crystals with Calcium	Multivitamin Calcium Citrate (500 mg/serving)	3 scoops
Bariatric Advantage - Multi-Formula Capsules (not chewable)	Multivitamin	6 capsules
Bariatric Fusion Vitamin and Mineral Supplement	Multivitamin	4 capsules
Celebrate- Multivitamin Capsule (not chewable)	Multivitamin	3 capsules
Celebrate- Multivitamin Chewable	Multivitamin	2 chewables
Celebrate – Multi Complete	Multivitamin	2 chewables
Celebrate – ENS Multivitamin with Calcium drink mix	Multivitamin Calcium Citrate (500 mg/serving)	2 servings
Celebrate – ENS Multivitamin, calcium, and protein shake	Multivitamin Calcium Citrate (500 mg/serving) Whey protein isolate (25 g/serving)	2 shakes
Centrum	Multivitamin	2 chewables or 2 pills
Prenatal	Multivitamin (prenatal)	1 pill
One a Day VitaCraves	Multivitamin	2 gummies
OpurityBypass and Sleeve Optimized	Multivitamin	1 pill
Bariatric Advantage- Calcium Citrate Lozenges	Calcium Citrate- 500 mg each	3 chewable daily = 1500 mg
Bariatric Advantage- Calcium Crystals	Calcium Lactate-Gluconate – 600 mg per 2 scoops	5 scoops = 1500 mg
Bariatric Advantage- Calcium Chews	Calcium Citrate- 250 mg each	6 chewable daily = 1500 mg
Celebrate – Calcium PLUS 500	Calcium Citrate – 500 mg each	3 chewable daily = 1500 mg
Celebrate – Calcium Plus Chewable	Calcium Citrate – 250 mg each	6 chewable daily = 1500 mg
Celebrate – Calcium Plus Tablet	Calcium Citrate – 167 mg each	9 tablets = 1500 mg
Calcet Creamy Bites www.celebratevitamins.com www.bariatriceating.com	Calcium Citrate – 500 mg each	3 chews = 1500 mg
Citracal Petites pills	Calcium Citrate- 200 mg each (may take 2 at a time)	8 pills = 1600 mg
Citracal Pills	Calcium Citrate – 250-315 mg each pill	6-7 pills daily = 1500+ mg
UpCal D (powder) Available at www.globalhp.com	Calcium Citrate- 500 mg per scoop	3 servings = 1500mg
Blue Bonnet (liquid) Available at Whole Foods	Calcium Citrate - 500 mg per 1 Tbsp	3 servings daily= 1500mg
Opurity Calcium Citrate Plus	Calcium Citrate – 300 mg each	5 pills = 1500 mg

- If you are experiencing nausea after taking your multi-vitamin try taking after meals or at bedtime.
- Do not take your multi-vitamin at the same time as your calcium supplement. Wait at least 2 hours in between. The iron found in most multi-vitamins can block the absorption of calcium.
- Spread out your calcium at least every 2 hours between doses. Your body will only absorb 500-600 mg at a time.

Potential Problems after Gastric Sleeve

Food Getting Stuck

- The sleeve can be temporarily blocked if foods are not chewed well.
- If symptoms of pain nausea, and vomiting persist, contact your surgeon

Constipation

- Constipation may occur due to a sudden change in your diet
- This generally resolves as your diet progresses back to a regular diet
- Drinking adequate fluids and regular exercise will help prevent constipation
- You may need to add a fiber supplement (unsweetened Benefiber or Metamucil) or stool softener. Speak to your nurse or dietitian about available products.

Dehydration

- Dehydration may occur with inadequate fluid intake, persistent nausea, vomiting, or diarrhea. Drink at least 64 oz (8 cups) of water or low-calorie drinks daily.
- Avoid caffeine because this may precipitate dehydration

Heartburn

- Avoid alcohol
- Avoid caffeine
- Avoid carbonated beverages
- Avoid spicy foods
- Do not use a straw

Nausea and Vomiting

- Eating or drinking too fast may cause nausea or vomiting.
- Eating or drinking too much may cause nausea or vomiting.
- Inadequate chewing may cause nausea or vomiting.
- Dry meats, sticky breads, and rice may cause nausea or vomiting

Stretching of the sleeve portion

- Stretching your sleeve portion defeats the purpose of your surgery and puts your weight loss/weight maintenance at risk.
- Avoid large portions of food at one time and strictly avoid all distractions (eg. TV, work, or deep conversations) while eating that often lead to unintentional over-eating.
- Gradually increase the texture of foods as recommended in the early post-operative weeks.
- Follow recommendations for advancing your diet.

Weight Regain

The Sleeve Gastrectomy surgery is a tool that requires proper nutritional and dietary changes to achieve and maintain weight loss. Grazing and snacking all day, going back to old eating habits, consuming high calorie beverages and eating high sugar and high fat foods will result in weight gain. In addition, regular exercise is necessary to facilitate the weight loss and maintain this weight loss.

Recommendations:

- Do not consume high calorie beverages such as regular sodas, juices, and alcohol.
- Avoid high fat and high sugar foods and avoid frequently “eating out” or eating processed foods.
- Do not graze or snack between meals
- Do not drink with meals
- Exercise at least 30 minutes per day initially with an ultimate goal of 60 minutes per day for life!

Basic Nutrition

The key to good nutrition is eating a variety of healthy foods. While gastric sleeve does require some diet restrictions, it is important to remember the volume of food is restricted at each meal. All foods contain calories, but the source varies. Calories come from carbohydrates, protein, fat and alcohol. Fat contains more than double the calories per unit of both carbohydrates and protein. Nutrition guidelines below will help direct you to choosing appropriate foods.

Protein

Proteins function as building blocks for bones, muscles, cartilage, skin, hair and blood as well as for many critical enzymes, hormones, and vitamins. In addition, protein is essential for wound healing post-operatively. Protein is made up of amino acids some of which are essential because they cannot be synthesized by the body and are only obtained from foods.

What foods contain protein?

Protein provides 4 calories per gram. It is found in meat, fish, poultry, eggs, dairy products, , legumes (beans and nuts), seeds and grains. These foods also provide B vitamins (niacin, thiamin, riboflavin, and B6), vitamin E, iron, zinc, and magnesium. B vitamins found in this food group serve a variety of functions in the body. They help the body release energy, play a vital role in the function of the nervous system, aid in the formation of red blood cells, and help build tissues.

Animal sources of protein (meat, poultry, dairy, fish) are considered complete sources of protein that provide essential amino acids. Conversely, plant proteins (bean, nuts, seeds, grains) by themselves are considered incomplete because they lack one or more of the essential amino acids unless legumes and grains are combined in the same meal forming a complete protein.

Grains and legumes are rich in fiber and complex carbohydrates but also can provide protein. By combining two or more of foods from the columns below, you can create a complete protein. The foods listed in one column might be missing an amino acid from a food in another column. When eaten together at a meal your body will receive all essential amino acids.

Combine the plant proteins to make complete proteins:

Barley	Beans	Sesame Seeds
Bulgur	Lentils	Sunflower Seeds
Cornmeal	Dried Peas	Walnuts
Oats	Chickpeas	Cashews
Buckwheat	Soy products	Pumpkin seeds
Pasta		
Wheat		
Rye		

Your long term goal is to get you nutrition from regularly textured (solid) foods. You will feel full on smaller amounts and for longer periods of time when eating regularly textured foods. Solid foods keep you full longer. When you eat liquids or soft foods such as protein shakes or yogurt you may find you feel hungry sooner. If

you are eating a soft food, like yogurt, add some texture to it. For example have yogurt and ½ an apple or some whole grain, high fiber cereal.

When preparing your proteins, remember that moist meats are better tolerated than dry meats which can stick. Moist preparations include steaming, boiling, baking, crock potting, or cooking in a low fat, low sugar sauce. These methods of cooking are also low fat. Some other low fat cooking methods are broiling and grilling, however these may also dry out your meats. For flavor, instead of adding fats you may add any combination of herbs and spices; just limit the amount of added salt.

Litchford, M. Protein nutrition and bariatric patients. *Weight Management Matters*. Winter 2010: 20-22.

Protein Source	Serving Size	Grams of Protein
Meat, poultry, fish, ground meats, wild game	1 oz	7 g
Lean lunch meat	1 oz	7 g
Canned tuna, salmon, chicken	1 oz	7 g
Egg	1	7 g
Milk	1 cup	8 g
Unsweetened Soy Milk	1 cup	6-7 g
Cottage Cheese	¼ cup	7 g
Low-fat cheese	1 oz	7 g
Peanut butter	1 Tbsp	7 g
Tofu	½ c	7 g
Tempeh	¼ c	7 g
Soy based burger	1 ½ oz	7 g
Low-fat/low-sugar yogurt	1 c	8 g
Fat free Greek yogurt	1 c	20+ g
1 c sugar free pudding (made with skim milk)	1 c	8 g
Dry beans, lentils, edamame	½ c	7 g
Nuts and Seeds	1 oz	~6 g
Protein Supplements	Varies	varies

Meat and Meat Substitutes Nutritional Information

The following information will provide you with options for choosing low-fat protein sources. Choose the majority of your proteins from the very lean and lean groups. Choose proteins from the medium-fat and high-fat groups in moderation or avoid.

Type of meat or substitute	Protein (grams)	Fat (grams)	Calories
Very lean meat and substitutes	7	0-1	35
Lean meat and substitutes	7	3	55
Medium-fat meat and substitutes	7	5	75
High-fat meat and substitutes	7	8	100

Information is average per serving, please see below for specific product information.

Poultry

Very Lean	Portion Size
Chicken, white meat, skinless	1 oz
Turkey, white meat, skinless	1 oz
Cornish hen, skinless	1 oz
Lean	
Chicken	1 oz
White meat, skin	1 oz
Dark meat, skinless	1 oz
Turkey	
Dark meat, skinless	1 oz
Domestic duck or goose (drained of fat, no skin)	1 oz
Medium-fat	
Chicken, dark meat, skin	1 oz
Ground turkey, chicken	1 oz
Fried chicken, skin	1 oz

Fish/Shellfish -*Shellfish in moderation due to cholesterol content

Very Lean	Portion Size
Cod	1 oz
Flounder	1 oz
Haddock	1 oz
Halibut	1 oz
Trout	1 oz
Smoked salmon	1 oz
Tuna (fresh or canned in water)	1 oz
Clams*	1 oz
Crab*	1 oz
Lobster*	1 oz
Scallops*	1 oz
Shrimp*	1 oz
Imitation shellfish	1 oz
Lean	
Herring	1 oz
Oysters	6 medium
Salmon (fresh or canned)	1 oz
Catfish	1 oz
Sardines	2 medium
Tuna (canned in oil, drained)	1 oz
Medium-fat	
Any fried fish product	1 oz

Pork

Lean	Portion Size
Top loin chop	1 oz
Tenderloin	1 oz
Sirloin chop	1 oz
Rib chop	1 oz
Ham (fresh, canned cured, boiled)	1 oz
Canadian bacon	1 oz
Medium-fat	
Boston butt	1 oz
Cutlet	1 oz
High-fat	
Spareribs	1 oz
Ground pork	1 oz
Pork sausage	1 oz

Lamb

Lean	Portion Size
Roast	1 oz
Chop	1 oz
Leg	1 oz
Medium-fat	
Rib roast	1 oz
Ground	1 oz

Veal

Lean	Portion Size
Lean chop	1 oz
Roast	1 oz
Medium-fat	
Rib roast	1 oz
Ground	1 oz

Game

Very Lean	Portion Size
Duck (no skin)	1 oz
Pheasant (no skin)	1 oz
Venison	1 oz
Buffalo	1 oz
Ostrich	1 oz
Lean	
Goose (no skin)	1 oz
Rabbit	1 oz

Beef

Lean (Select or Choice grades trimmed of fat)	Portion Size
Bottom round roast and steak	1 oz
95% lean ground beef	1 oz
Eye round roast and steak	1 oz
Sirloin tip side steak	1 oz
Chuck shoulder pot roast	1 oz
Round tip roast and steak	1 oz
Sirloin tip center roast and steak	1 oz
Shoulder petite tender and medallions	1 oz
Round steak	1 oz
Bottom round (Western Griller) steak	1 oz
Shoulder center (Ranch) steak	1 oz
Top sirloin steak	1 oz
Top round roast and steak	1 oz
Tri-tip roast and steak	1 oz
Flank steak	1 oz
Top loin (strip) steak	1 oz
Chuck shoulder steak	1 oz
Brisket flat half	1 oz
Tenderloin roast and steak	1 oz
Shank cross cuts	1 oz
T-bone steak	1 oz
Medium-fat (Prime grades trimmed of fat)	
Ground beef	1 oz
Meat loaf	1 oz
Corned beef	1 oz
Short ribs	1 oz
Prime rib	1 oz

Cheese

Very lean	Portion Size
Low-fat cottage cheese	¼ cup
Fat-free cheese	1 oz
Lean	
4.5%-fat cottage cheese	¼ c
Grated parmesan	2 Tbsp
Cheese with 3 grams of fat or less	1 oz
Medium-fat	
Cheese with 5 grams of fat or less	1 oz
Feta, Mozzarella	1 oz
Ricotta	¼ c
High-fat	
All regular cheeses (Cheddar, Swiss, etc)	1 oz

Other

Very lean	Portion Size
Low fat, low sugar yogurt	1 cup
Low fat, low sugar Greek style yogurt	½ cup
Fat free milk	1 cup
Processed sandwich meat (1 gram fat or less)	1 oz
Egg whites	2
Egg substitutes	¼ c
Sausage with 1 gram fat or less	1 oz
Beans, lentils, peas	½ c
Hot dogs with 1 gram fat or less	1 oz
Lean	
1% milk	1 cup
Processed sandwich meat (3 grams of fat or less)	1 oz
Hot dogs with 3 grams of fat or less	1 oz
Medium-fat	
2% milk	1 cup
Eggs	1
Sausage with 5 grams fat or less	1 oz
Tempeh	¼ c
Tofu	4 oz or ½ cup
High-fat	
Whole milk	1 cup
Processed sandwich meats (8 grams fat or less: bologna, salami, etc)	1 oz
Sausage (Italian, Polish)	1 oz
Bratwurst	1 oz
Hot dog	1 oz
Bacon	3 slices
Peanut butter	1 Tbsp

*Adapted from: Exchange Lists for Weight Management, American Dietetic Association and American Diabetes Association, 200

Protein Content of Common Vegetarian Foods

Food	Serving Size	Grams of Protein
Almonds	¼ cup	8
Almond cheese	1 ounce	7
Barley	1 cup	3
Beans, Peas, & Lentils	½ cup	7
Boca Burger	1 patty	10
Cottage cheese	½ cup	14
Egg, large size or substitute	1 egg or ¼ c. substitute	7
Egg white	1 egg white	3
Fat free American cheese	1 slice	7
Fat free cheddar, shredded	¼ cup	9
Hummus	1/3 cup	3
Low-fat creamed soup	1 cup	6-9
Milk or soymilk	1 cup	8
Nonfat dry milk	1 tablespoon	1
Oats	½ cup	3
Peanuts	¼ cup	9
Peanut butter	2 tablespoons	8
Pecans	¼ cup	2
Pistachios	¼ cup	7
Quinoa	1/3 cup	6
Quorn® Chicken Cutlet	1 Cutlet	11
Quorn® Turkey Roast	1 serving	14
Soynuts	¼ cup	14
Soy cheese	1 ounce	7
Texturized Vegetable Protein (TVP)	¼ cup dry	11
Tempeh, cooked	3 ounces	15
Tofu	¼ cup	5
Vegetables, starchy	½ - 1/3 cup	3
Vegetables, non-starchy	½ c. cooked or 1 c. raw	2
Walnuts	¼ cup	4
Whole grain bread	1 slice	3
Whole grain pasta or rice	1/3 cup	3
Yogurt, light	2/3 cup	8

Why consider limiting animal sources of protein (including meats, eggs, milk and cheese)?

Recent research has indicated that when animal sources of protein are digested, they are not simply digested by your body alone. They are also digested by the bacteria in your intestines. When your intestinal bacteria digest animal proteins (and ingredients in energy drinks) they produce compounds called TMAO's which are then readily absorbed by the body. TMAO's have been shown to be very potent causative agents for cardiovascular disease and are now viewed as possibly more damaging than cholesterol.

Why consider increasing plant based foods?

Over the past century our agricultural methods have depleted more than 70% of food micronutrients (vitamins, minerals and phytochemicals) from foods leading to a state of deficiency for most Americans. Plant based foods are the richest sources of many essential micronutrients and especially phytochemicals that play a direct role in preventing (and even in some cases reversing) cardiovascular disease, cancer, and some auto-immune diseases. Overcoming micronutrient deficiency may also play a role in controlling hunger and appetite suppression.

Carbohydrates

Carbohydrates offer an immediate source of energy for your body. They provide the fuel for your muscles and organs, such as your brain. Carbohydrates provide all the cells of the body with the energy they need for everyday tasks and physical activity.

Two types of carbohydrates:

Simple carbohydrates: These are found in fruits and milk, and are easily digested by the body. They also are often found in processed foods and anything with added refined sugar, such as soft drinks, juice and some candy. Avoid sugar from candy and other sweets. Refined sugar can come from brown sugar, powdered sugar, high fructose corn syrup, raw sugar, sucrose, corn syrup, honey, molasses and evaporated cane juice.

Complex carbohydrates: These are found in nearly all plant-based foods and usually take longer for the body to digest. They are most commonly found in whole-wheat bread, whole-grain pasta, brown rice, and starchy vegetables.

What is a whole grain?

Whole grains contain the entire grain kernel- the bran, germ and endosperm.

Examples include:

-Whole-wheat flour, brown rice, oatmeal, whole cornmeal, bulgur, barley, millet

What is a refined grain?

Refined grains are milled, a process that removes the bran and germ. This gives grains a finer texture and improves their shelf life, but also removes dietary fiber, iron and many B vitamins.

Examples include:

-White rice, white flour, instant oatmeal, white bread

Most refined grains are *enriched*. This means certain B vitamins (thiamin, riboflavin, niacin, folic acid) and iron are added back after processing. Fiber is not added back to enriched grains. Check the ingredient list on refined grain products to make sure that the word “enriched” is included in the grain name. Some food products are made from mixtures of whole grains and refined grains.

Whole Grains – Recommended Brands

What is a whole grain?

Whole grains are food products that use the whole grain, which includes the germ, the bran and the endosperm. Processed foods, also called refined foods, have the bran and the germ removed, taking with it much of the fiber and nutrients.

Why use whole grain foods?

- Recent research indicates that use of whole grain foods helps reduce our risk for heart disease, cancer and diabetes.
- Using whole grains provides a powerful package of nutrients!! When we eat whole grains we get the bran, germ, fiber, phytochemicals, antioxidants, lignans and protein. Whole grains are a rich source of vitamin E, selenium, thiamin, riboflavin, niacin, folic acid, biotin, magnesium, zinc, chromium, iron and manganese.
- Whole grains are naturally low in sodium and have no saturated fats or cholesterol.

There seems to be an amazing “synergistic” health effect when we eat grains that have not been refined and processed. All the nutrients work together for our health benefit.

Approved Products (based on fiber, calorie, and sugar content):

Crackers

The following are good choices for crackers. They are all 100% whole grain, have at least 3 grams of fiber, 0-1 grams of sugar, and less than 120 calories:

Brand	Serving	Calories	Fiber (grams)	Sugar (grams)
Ry Krisp Natural	4 crackers	120	8	0
Wasa Fiber Rye	3 crackers	90	7	0
Finn Crisp	6 crackers	120	6	0
Ry Krisp Seasoned	4 crackers	120	6	0
Kavli 5 Grain Crispbread	2 crackers	80	6	0
Wasa Light Rye	3 crackers	90	5	0
Ryvita Flavorful Fiber	3 crackers	90	5	0
Ryvita Dark Rye	3 crackers	110	5	1
Ryvita Sesame Rye	3 crackers	110	5	1
Kavli 5 Grain Crackers	3 crackers	90	4.5	0
Kavli Hearty Thick Crackers	3 crackers	90	4.5	0
Ak-Mak 100% Whole Wheat Stone Ground Sesame	5 crackers	120	4	0
Nabisco Reduced Fat Triscuits	7 crackers	120	3	0
365 (Whole Foods) Baked Woven Wheats	8 crackers	120	3	0

Bread

The following are good choices for breads. They are all 100% whole wheat, have at least 2 grams of fiber, less than 5 grams of sugar, and less than 150 calories per slice:

Brand	Serving	Calories	Fiber (grams)	Sugar (grams)
Rubschlager 100% Whole Wheat	1 slice	70	3	2
Rubschlager European Style	1 slice	70	3	1
Orowheat Light 100% Whole Wheat	1 slices	40	7	3
Earthgrains 100% Natural Whole Wheat	1 slice	120	3	5
Pepperidge Farm 100% Whole Wheat	1 slice	90	2	3
Arnold Stoneground Whole Wheat	1 slice	70	2	2
Whole Foods Whole Wheat Bread	1 slice	60	2	0
365 Whole Wheat Bread	1 slice	130	3	0
Rudi's Organic Whole Wheat	1 slice	100	3	2
Fresh Meadow Healthy Hemp Bagel	½ bagel	130	7	1
Fresh Meadow Healthy Hemp Sprouted Bread	1 slice	90	5	1

Cold and Hot Cereals

The following are good choices for cereals. They are all 100% whole grain, have at least 5 grams of fiber, 0-5 grams of sugar, and less than 200 calories:

Brand	Serving	Calories	Fiber (grams)	Sugar (grams)
Cold Cereals				
General Mills Fiber One	½ cup	60	14	0
General Mills Fiber One, Honey Cluster	1 ¼ cup	170	14	5
Kellogg's All-Bran, Extra Fiber	½ cup	50	13	0
Kellogg's All-Bran, Original	½ cup	80	10	6
Kashi GoLean	1 cup	140	10	6
Weight Watchers Flakes'n Fiber with Oats	½ cup	90	9	1
South Beach Diet Toasted Oats	1 ¼ cup	210	8	3
Kashi 7 Whole Grain Nuggets	½ cup	210	7	3
Post Shredded Wheat	2 biscuits	160	6	0
Post Spoon Size Shredded Wheat	1 cup	170	6	0
Weetabix Organic	3 biscuits	180	6	3
Kashi 7 Whole Grain Flakes	1 cup	180	6	5
Post Grape-Nuts	½ cup	200	6	5
Kellogg's Special K, Protein Plus	¾ cup	100	5	2
Kellogg's Complete Wheat Bran Flakes	¾ cup	90	5	5
Post Bran Flakes	¾ cup	100	5	5
Kashi Heart to Heart	¾ cup	110	5	5
General Mills Wheat Chex	1 cup	180	5	5

Brand	Serving	Calories	Fiber (grams)	Sugar (grams)
Hot Cereals	Cooked			
Quaker Weight Control- Instant	1 cup	160	6	1
Uncle Sam Oatmeal- Instant	1 cup	130	5	0
Flax-Z-Snax Wheat-Free	1 cup	210	15	2
Arrowhead Mills Organic-4 Grain Plus Flax or Steel Cut Oats	1 cup	150	9	0
Bob's Red Mill Organic Cracked Rye	1 cup	110	7	1
Bob's Red Mill Soy Grits	1 cup	130	7	4
Bob's Red Mill Barley Grits	1 cup	130	6	1
Krusteaz Zoom	1 cup	140	5	0
Wheatena	1 cup	160	5	0
County Choice Organic Multigrain	1 cup	130	5	2
Bob's Red Mill 7 Grain	1 cup	140	5	1
Bob's Red Mill 5 Grain	1 cup	120	5	1
Post Bran Flakes	$\frac{3}{4}$ cup	100	5	5
Kashi Heart to Heart	$\frac{3}{4}$ cup	110	5	5
General Mills Wheat Chex	1 cup	180	5	5

Fats

Fat, an essential nutrient, provides energy, energy storage, insulation, and contour to the body.

The role of fat

Fat helps the body in many different ways:

- Fat deposits surround and protect organs, such as the kidneys, heart, and liver
- Fat balances hormones
- A layer of fat beneath the skin, known as subcutaneous fat, insulates the body from environmental temperature changes, thereby preserving body heat
- Dietary fat acts as a long-lasting fuel source for low-intensity exercise
- Dietary fat is critical for fat-soluble vitamins (vitamins A, D, E, and K) to be absorbed
- One very important type of polyunsaturated fat, **Omega-3** fatty acids, may be especially beneficial your heart. Omega-3s have been shown to decrease the risk of coronary artery disease and may also protect against irregular heartbeat and help lower blood pressure.

Healthy Fats

When choosing fats, most of the fats you eat should be unsaturated fats: polyunsaturated (PUFA) or monounsaturated (MUFA) fats. These fats can help lower your risk of heart disease by decreasing your low-density lipoprotein (LDL) cholesterol levels in your blood. Cholesterol, which your body produces for building cells, is the main substance in fatty deposits (plaques) that can develop in your arteries. Plaque build-up can reduce blood flow through your vessels, increasing your risk of heart disease.

One type of polyunsaturated fat, Omega-3 fatty acids, may be especially beneficial your heart. Omega-3s have been shown to decrease the risk of coronary artery disease and may also protect against irregular heartbeat and help lower blood pressure.

Below are differences and good food sources:

- **Polyunsaturated fat** is usually liquid at room temperature and in the refrigerator (vegetable oils—sunflower, safflower, corn, and cottonseed).
- **Monounsaturated fat** remains liquid at room temperature but may start to solidify in the refrigerator (vegetable oils—olive, peanut, canola, and many nut oils). Avocados and most nuts also have high amounts of monounsaturated fats.
- **Omega-3 fatty acids** found mostly in seafood. (fatty, cold-water fish such as tuna, mackerel, herring, and salmon, as well as nuts, soy, canola, and flaxseed oils).

Harmful Fats

Saturated and trans- fats are harmful fats. They increase your risk for heart disease by increasing your total and LDL (“bad”) cholesterol levels. Dietary cholesterol is not a fat, but a waxy substance found in food derived from animal sources. Dietary cholesterol intake increases blood cholesterol levels but not as much as saturated and trans- fats. Increased blood cholesterol (specifically LDL cholesterol) is associated with cardiovascular disease.

It is best to keep your total saturated and trans- fat intake under 7 grams per day. Although an upper limit of cholesterol intake is now debated, former guidelines recommended less than 200 mg per day. Below are a few key differences as well as common food sources:

- **Saturated fat** is usually solid or waxy-like at room temperature, typically found in animal products (red meat, butter, and whole milk). Also found in coconut, palm and other tropical oils.
- **Trans- fat**, also known as trans-fatty acids come from adding hydrogen to vegetable oils through a process called hydrogenation. This makes the fat more solid and extends the shelf life. Hydrogenated fats are commonly used in baked goods-such as crackers, cakes and cookies-and in fried foods, such as doughnuts and French fries. Shortening and some margarine also contain trans- fats. Food manufacturers are required to list trans- fats on nutrition labels. Amounts less than 0.5 grams per serving are listed as 0 grams trans- fat on food labels; therefore, you should always look for hydrogenated fats in the ingredient list.
- **Dietary cholesterol.** Your body naturally manufactures all of the cholesterol it needs. However, cholesterol also comes from animal products, such as meat, poultry, seafood, egg yolks, dairy products, lard and butter.

Alcohol

Alcohol should be avoided most of the time. Alcohol contains “empty” calories which have no nutritional value. One drink is considered 5 ounces of wine (100 calories), 12 ounces of beer (144 calories), or 1.5 ounces of 80 proof distilled spirits (96 calories). As you can see, these calories can easily add up. Alcohol can also irritate the stomach leading to ulcers after surgery.

Select food with nutritional value

After your surgery it is important to eat foods that provide high nutritional value. This means the foods you consume must have adequate protein, vitamins, and minerals with respect to the amount of calories they contain. For example, 2 ounces of cheese contains about the same amount of calories as a small 2-ounce candy bar, but cheese has protein, calcium and other vitamins and minerals compared to the candy bar, which contains no nutrients. Be sure to eat foods high in proteins and low in fat and sugar. Here are some examples of foods with good nutritional value:

- All vegetables; raw or cooked
- Fresh fruit, fruit canned in its own juice (drained), or frozen with “no added sugar”.
- Milk, cottage cheese, cheese, sugar-free yogurt (low-fat or fat-free)
- Lean meats (baked, broiled, or grilled)
- Eggs
- Bean and lentils
- Whole grains

Foods to avoid

The foods listed below should be avoided most of the time. These foods can contribute to possible weight regain if consumed often.

- Snack foods that contain added fat/sugar like crackers, chips, cookies, and buttery popcorn
- Any small foods that stimulate grazing behaviors: (again chips, pretzel’s, cookies, etc)
- Regular mayonnaise, regular salad dressing, margarine, butter, sour cream, cream cheese, olives
- Bacon, sausage, high fat meats, breaded or fried meats
- Fried foods like potatoes, vegetables, grilled sandwiches, French toast
- Junk foods that contain added fat like crackers and chips.
- Calorie beverages like regular soda, lemonade, punch, Kool-Aid, fruit juice, fruit smoothies, flavored waters, sports drinks, coffee, and tea with added sugar. Avoid all high calorie beverages.
- Sugar-sweetened cereals (more than 10 grams sugar per serving)
- Sweetened fruits and vegetables: coconut, dried fruits (especially banana chips), fruits canned in syrup
- Regular custard, pudding, Jell-O™
- Ice creams: ice cream, ice milk, frozen yogurt, sherbet
- Baked goods: cakes, cookies, pies, donuts, frosting, muffins
- Candy: candies, chewing gum, caramel corn
- Toppings: marshmallows, syrups, sugar, and ketchup.
- Alcohol: wine, beer, and hard liquor

Caffeine

After surgery, caffeine consumption needs to be limited for the following reasons:

- Large amounts of caffeine can irritate the stomach lining and lead to gastric ulcers.
- Caffeine acts as a diuretic (loss of water) which may cause you to become dehydrated.

Drinking adequate amounts of caffeine-free fluids (8 cups) a day will help prevent the risk of dehydration. Please review the table below listing common beverages and the caffeine content.

Watch for products, especially the energy drinks that contain “Guarana”. Guarana is a substance that is often put into energy drinks because of its stimulant effect. Guarana contains caffeine. See the chart below for the caffeine content of several energy drinks on the market.

Coffee and Tea

Beverage	Portion	Caffeine (milligrams)
Brewed coffee	8 oz	95
Instant coffee	8 oz	62
Espresso	1 oz (1 shot)	64
Starbucks brewed coffee	12 oz (tall)	260
Starbucks Cafe Latte	12 oz (tall)	150
Decaffeinated brewed or instant coffee	8 oz	2
Brewed black tea	8 oz	47
Decaffeinated black tea	8 oz	2
Brewed green tea	8 oz	30-50
Sobe green tea	8 oz	14
Starbucks Tazo Chai Tea	12 oz	75

Soft Drinks

Beverage	Portion	Caffeine (milligrams)
A&W Crème Soda	12 oz	29
Coca-Cola Classic	12 oz	35
Diet Pepsi	12 oz	35
Mountain Dew	12 oz	54
Sunkist Orange	12 oz	41

Sports and Energy Drinks

Beverage	Portion	Caffeine (milligrams)
AMP Tall boy	16 oz	143
Full Throttle	16 oz	144
Guru 501	8 oz	125
Hansen’s Energy	8 oz	50
Monster Energy	16 oz	160
Red Bull	8.3 oz	76
Rockstar	16 oz	160
SoBe No Fear	16 oz	174
Vault	8 oz	47

Food and Other Products

Item	Portion	Caffeine (milligrams)
Excedrin, Extra Strength	2 Tablets	130
Foosh Energy Mints	1 mint	100
Haagen-Dazs Coffee Ice Crm	½ cup	30
Hersey’s Special Dk chocolate	1.45 oz	18
Starbucks Coffee Ice cream	1 cup	50-60

Label Reading Tips- After Bariatric Surgery

Nutrition Facts

Serving Size 1 cup (240ml)

Servings Per Container 2

Amount per serving

Calories 230 Calories from Fat 70

%Daily Value*

Total Fat 8g 12%

Saturated Fat 3.5g 18%

Trans Fat 0.5g

Cholesterol 30mg 10%

Sodium 870mg 36%

Total Carbohydrate 25gm 8%

Dietary Fiber 8g 32%

Sugars 5g

Sugar Alcohol 0g

Protein 15g

Vitamin A 10% Vitamin C 2%

Calcium 4% Iron 10%

Start with the Serving size-

Look for both the serving size and the number of servings per container. All of the nutrition information on the label is for the listed serving size. If you eat more than one serving, you will get more calories and nutrients.

Calories-

Choose foods that help you get the nutrients you need without going over your total daily calorie goal.

Total fat, saturated fat and Trans fat-

- Choose foods with less than 5 grams of total fat per serving. Try to choose foods that contain heart healthy fats such as mono- and polyunsaturated.
- Depending on your calorie need, your total daily fat intake should not exceed 30-50 grams of fat per day.
- Look for foods with less than 3 grams per serving or less of combined total saturated and trans fat. Total daily intake should not exceed 10-15gm per day combined, saturated and trans fat.
- Read the ingredient list. If you see the word hydrogenated or partially hydrogenated, then it contains trans fat.

Cholesterol- Eating too much cholesterol can contribute to your risk for heart disease. Keep your total daily cholesterol to 200 mg per day.

Sodium- Some sodium is necessary for good health; however, too much sodium is not good. Total daily sodium should not exceed 2,000mg. A food is considered low sodium if there is 140mg or less per serving.

Total Carbohydrate and sugars- Carbohydrate needs vary from person to person. Try to avoid products with greater than 5gms of sugar per serving. Milk and yogurt products would be the exception. They have a naturally occurring sugar called lactose and this will be listed in the sugar grams.

Dietary Fiber- A product with 5 grams or more per serving is considered a good source of fiber. You should strive for at least 25 grams of fiber each day.

Sugar Alcohols- Many sugar free products will contain sugar alcohols which are sweetening agents. Avoid excessive use of these because they can cause diarrhea. Sugar alcohols include sorbitol, maltitol, xylitol and isomalt. Erythritol would be the exception. This sugar alcohol does not cause any gastric side effects.

Protein- You want to pay attention to protein. Protein is important for sparing your lean body tissue (muscles and organs). How much you need varies per person, however, the general goal is to reach 60-80 grams each day. Remember to choose low-fat protein sources.

Percent Daily Values-

- Percent daily values are only a reference and pertain to healthy people eating either a 2,000 or 2,500 calorie diet. You can use this information in a general way to see how a particular food fits into your daily meal plan. If a food is 5 percent or less, it is considered low. If a food is 20 percent or higher, it is considered high.
- Focus on the exact amounts of each nutrient, especially if you have been given daily intake goals/limits by your dietitian.

Ingredient list information-

- Foods with more than one ingredient must have an ingredient list on the label.
- Ingredients are listed in descending order by weight. Those in the largest amounts are listed first.
- Manufacturers are required to clearly state if a food product contains any ingredients that contain protein derived from the eight major allergenic foods. These foods are milk, eggs, fish, crustacean shellfish, tree nuts, peanuts, wheat and soybeans.

Food Label Information:

Here are some of the more common claims seen on food packages and what they mean:

- **Low Calorie-** Less than 40 calories per serving.
- **Reduced-** 25% less of the specified nutrient or calories than the usual product.
- **Good source of-** Provides at least 10% of the daily value of a particular vitamin or nutrient per serving.
- **Calorie Free-** Less than 5 calories per serving.
- **Fat free/ sugar free-** less than ½ gram of fat or sugar per serving.
- **Low fat-** 3 grams of fat per serving or less.
- **Low Sodium-** Less than 140mg sodium per serving.
- **High Fiber-** 5 or more grams of fiber per serving.
- **Lean-** (meat, poultry, seafood) 10 grams of fat or less, 4 ½ grams of saturated fat, and less than 95 mg cholesterol per 3 ounce serving.
- **Trans fat-free-** less than ½ gram per serving but can be listed on the food label as 0 (zero). Some foods may list 0 grams trans- fat on the label, but the ingredient list may include partially hydrogenated oil. This means the food has a small amount of trans- fat.

What Foods to Avoid?

The foods listed below should be avoided most of the time. These foods can contribute to possible weight regain:

- Regular mayonnaise, regular salad dressing, margarine, butter, sour cream, cream cheese, olives, nuts (limit to 3 times per week)
- Bacon, high fat meats, breaded or fried meats
- Fried foods like potatoes, vegetables, grilled sandwiches, French toast
- Junk foods that contain sugar or fat like crackers, chips or cookies
- Sugar-containing beverages like soda, lemonade, punch, Kool-Aid™, juice, flavored waters, sports drinks, chocolate milk, flavored coffee beverages or coffee and tea with added sugar
- Sugar-sweetened cereals (more than 5 grams sugar per serving)
- Sweetened fruits and vegetables: coconut, three bean salad, dried fruits, cranberry sauce, high sugar applesauce, fruits canned in syrup
- Sauces: BBQ sauce, ketchup, sweet pickles, honey mustard, sweet and sour sauce.
- Puddings: custard, pudding, Jell-O™
- Ice creams: ice cream, ice milk, frozen yogurt, sherbet, popsicles or fruit bars with sugar
- Baked goods: cakes, cookies, pies, donuts, frosting, muffins
- Candy: candies, chewing gum, caramel corn
- Toppings: marshmallows, honey, jam, jelly, syrups, sugar.
- Sugar-containing condiments: pickle relish, BBQ sauce, ketchup, honey mustard, salad dressings. Sugar content varies with brand . . . Be Careful!
- Alcohol: wine, beer, and hard liquor

Exercise after Gastric Sleeve

Before starting any exercise program please consult with your primary care practitioner.

Exercise is vital to your weight loss and maintenance success! However, before starting any exercise program please consult with your primary care practitioner or cardiologist.

You already know that surgery is merely a tool to help you with weight loss. Along with dietary and behavioral changes, exercise is one of the most important components in your weight loss success. Exercise not only helps you lose weight, it provides many physical, emotional and health benefits.

According to the American College of Sports Medicine Position Stand, 2009 and the Physical Activity Guidelines for Americans, 2008, by the U.S. Department of Health and Human Services:

- Healthy adults aged 18-65 years must participate in both aerobic and strengthening/ endurance exercise
- Aerobic activity:
 - A **minimum** of 150 minutes of moderate-intensity activity, 75 minutes of vigorous-intensity activity, or an equivalent combination of moderate and vigorous-intensity activity per week for **health benefits**. Aerobic activity should be performed in bouts of at least 10 minutes and should, preferably, be spread throughout the week on at least 3 occasions.
 - For additional health benefits, adults should participate in 300 minutes of moderate-intensity activity or 150 minutes of vigorous-intensity activity or a combination of moderate and vigorous-intensity activity per week.
 - For weight loss, 150-250 minutes of moderate intensity activity per week provides modest weight loss. Greater than 250 minutes of moderate intensity activity per week may provide more significant weight loss.
 - The most weight loss will be achieved with greater than 300 minutes (60 min/d) of moderate intensity activity per week.
- Muscular strength and endurance: A **minimum** of 8-10 exercises performed on two or more nonconsecutive days each week using the major muscle groups. Resistance should allow for 8-12 repetitions of each exercise.
- Adults 65 years of age and over and adults aged 50-64 with chronic conditions or physical function limitations that affect mobility or physical fitness should participate in aerobic and balance exercises
- Aerobic activity: A **minimum** of 150 minutes of moderate intensity activity or 75 minutes of vigorous activity per week. Increase to 300 minutes per week as tolerated.
- Muscular strength and endurance (resistance training): A minimum of 8-10 exercises performed on two or more nonconsecutive days per week using the major muscle groups. Resistance should allow for 10-15 repetitions of each exercise.
- Balance exercises to reduce risk of falls.

Aerobic exercise utilizes large muscle groups for a sustained period of time. It causes your heart, lungs and muscles to work harder than usual, thereby improving fitness, and increases the body's ability to use oxygen. Aerobic exercise burns calories enabling you to reach and maintain your weight loss goals.

Aerobic exercise utilizes large muscle groups for a sustained period of time. It causes your heart, lungs and muscles to work harder than usual, thereby improving fitness, and increases the body's ability to use oxygen. Aerobic exercise burns calories enabling you to reach and maintain your weight loss goals.

Resistance training is important to build muscle and retard bone loss. Since muscle burns more calories than fat, the more muscle you have the more calories you will burn. Your muscles need time to recover after strength training, so avoid exercising the same muscle groups two days in a row. If you plan on strength training two days in a row, train different body parts. For example, one day exercise your upper body and the next day exercise your lower body. When starting a strength-training program it may be helpful to take a class or hire a personal trainer. You will be instructed on proper form and use of equipment to help avoid injuries.

Everyone will be starting out at a different fitness level. Don't feel like you have to meet these recommendations on day one. Start slowly and build up in time and resistance as you are able. You will be surprised with what you can do! Exercise sessions can be broken down into 10-15 minute segments. You do not have to accumulate the entire 30 minutes in one bout. For example you could walk for 10-15 minutes two to three times per day to meet your recommendations. Also remember to incorporate more activity into your leisure time and activities of daily living such as: parking farther from your destination, using the stairs instead of the elevator, hop in the pool and play with your kids, or go for a walk/hike with your friends or family instead of going out to eat.

There are a variety of activities one can do to meet their exercise guidelines:

Aerobic Exercise Examples	Resistance Exercise Examples
Walking, Jogging, Running	Weight lifting
Biking	Yoga
Stair climbing	Pilates
Swimming	Push ups
Hiking	Sit ups
Dancing	Squats
Step aerobics, kickboxing, aerobics classes	Resistance tubing
Tennis	Shoveling
Elliptical trainer, rowing or treadmill	Stair climbing
Water aerobics	Jumping
Jumping exercises	Walking, jogging, running
Marching in place	Body weight exercises
Basketball, volleyball, soccer, etc	Lunges
Cross-country skiing	Kettle bells

As stated in the recommendations, exercise needs to be of moderate to vigorous intensity. This means that one needs to be working at an above normal heart rate. For example, while doing aerobic activities you should feel your heart rate increase, it should become more difficult to breathe, and you should break a sweat.

As you become more fit, activities that once seemed difficult will become easier. Use the FIT principle to improve your fitness level.

- F (Frequency): Increase the number of times you do an activity. For example if you walk 3 times a week, increase to 5 times per week
- I (Intensity): Increase how hard you are working. For example if you walk 3 miles in 45 minutes, increase how fast you are walking and walk 3 miles in 40 minutes.
- T (Time): Increase the amount of time you are active. For example if you walk 30 minutes, increase to 45 minutes.

By changing any or all of these factors you improve your fitness. It is important to change your routine so that your body is continually challenged.

In addition to promoting weight loss, physical activity has numerous benefits:

Improves cardiovascular fitness and health

- Decreases blood pressure, triglycerides, and cholesterol
- Reduces risk of heart attack, high blood pressure, and stroke
- Improves circulation
- Stronger heart
- Preserves and increases lean muscle mass

Promotes fat loss

- Reduces the decline in resting metabolic rate that accompanies calorie restriction
- Decreases intra-abdominal fat

Improves muscular strength and endurance

- Reduces risk of injury
- Improves endurance and ability to do activities of daily living

Builds and maintains healthy bones, muscles and joints

- Reduces risk for osteoporosis and hip fractures

Reduces risk of diabetes/ Improves blood glucose control

- Decreases insulin resistance
- Decreases blood sugar levels during and after exercise

Improves mood

- Relieves symptoms of depression and anxiety
- Decreases stress
- Improves sleep
- Improves self-esteem and psychological well being
- Improves quality of life
- Increases energy and endurance
- Improves overall health
- Burns calories
- Slows the effects of aging
- Extends life
- Improves immune system function

Tips:

- Start out slow and increase as tolerated
- Find activities that you enjoy doing
- Find a friend that can motivate you and vice versa
- Find an excuse to exercise instead of an excuse not to exercise-the hardest part of exercise is starting it!
- Exercise will only become a habit if it's fun! Pick something you will enjoy doing
- Vary workouts to alleviate boredom
- Set realistic and achievable goals
- Put your health first!

Many exercise/fitness books, videos, and magazines are available to provide tips on getting and staying in shape and can inspire you to stick with an exercise program. Exercising with a friend or spouse can help keep you motivated. Most importantly, plan your exercise program to suit your interests and lifestyle.

At Home Exercise Options

Videos/Apps	Description
Your Favorite TV show	Use a treadmill or stationary exercise bike
MyFitnessPal	App to help you track outdoor activity (fitbit and GPS distances) and also calorie tracking capabilities
Sit and be Fit www.sitandbefit.org Also be found on PBS (check local listings)	Variety of videos. The exercises can be done while sitting. Good for beginners, people with mobility difficulties and joint pain.
Gin Miller's Build Up Your Muscles	It shows you how to use weights, tubing, an exercise ball, and ankle weights with four different 45-minute workouts. You learn the same exercises with different resistance.
Winning Weighs (pre & post surgeries) www.gundluth.org/nutrition Go to products for healthy living link	Series of videos. Provides basic exercise instruction and modifications. Includes both seated and standing exercises. Post-bariatric surgery patients are the exercisers.
The Nia class experience workout series http://nianow.com	Nia stands for neuromuscular integrative action. It is a combination of dance, martial arts, and healing arts. It allows you to go at your own pace and is safe for any fitness level. Provides a cardiovascular and conditioning workout.
Arm Chair Fitness www.armchairfitness.com	Series of videos that can be done seated. A good start for any participant and also appropriate for those with decreased mobility or joint pain.
Biggest Loser videos www.target.com www.nbcuniversalstore.com	Variety of fitness videos including: boot camp, yoga, cardio, and sculpting.
"For Dummies" series www.dummies.com Go to store then fitness links	A variety of options (weights, pilates, yoga, etc). Provides thorough instruction for beginners
"10 minute solution" series www.exercisetv.tv Go to store link	Each video has six 10 minute workouts. Better for those at an intermediate level.
Minna Lessing's One Minute Workouts www.1minworkout.com	Choose which part of your body you want to work, your level, and duration. The DVD then selects a random workout for you
Videos by Leslie Sansone www.walkathome.com	Walking and toning videos.
Debbie rocker's Walking for Weight Loss	Basic moves for everyone's ability.
Gaiam Yoga Conditioning for Weight Loss www.gaiam.com	Allow you to choose from 4 levels of flexibility.
On Demand Tv	On demand exercise tv has a variety of workouts that change periodically. Requires subscription to On Demand Television.
TiVo/DVR	If you have subscriptions to these you can record exercise shows and participate when it is convenient for you.
Couch to 5k http://www.c25k.com/ http://www.hap.org/health/programs/healthieru/docs/calendar_C25K.pdf http://ablsilver.com/blog/wp-content/uploads/2014/04/Couch-to-5k.pdf https://itunes.apple.com/us/app/couch-to-5k-running-app-training/id448474423?mt=8	Follow the Couch to 5K running plan to go from couch to your very first 5K. Spend just 20 to 30 minutes, three times a week, for nine weeks, and you'll be ready to finish your first 5K (3.1-mile) race! Also available as a mobile phone app.

Please make your appointment with our recommended exercise physiology partners before surgery to individualize the details of your exercise prescription plan. This will account for your unique target fat loss, barriers/limitations to activity, and will produce an activity plan that works around your barriers to help you realistically achieve activity.

Summary of exercise principles:

- Schedule at least one time exercise physiology consult
- Starting goals: light cardio exercise, 30 min/d, 10-15 min divided sessions
- Long-term goals: 60 min/d (divided sessions OK), gradually increase intensity, add 2 days of resistance
- Choose enjoyable activities; exercise releases natural endorphins that make you feel good
- Minimize impact and load bearing (especially for joint or back pain)
- Make daily activity habits; commit for life to maintain your weight loss!
- If you feel pain stop and reassess (chest pain: stop and call your doctor or go to ER immediately)

Sometimes it is a challenge to fit exercise into the day. Utilize the following schedule to find blocks of time in which you can fit in exercise. It you can find three 10 minute blocks you will have achieved your minimum recommendations.

[illegible]

Dining Out after Sleeve Gastrectomy

Dining out can be a challenge after bariatric surgery. However, eating out is a reality for most people today. Why is it so difficult to stick to your low-fat, low sugar diet when you eat out? The answer is simple. Most restaurants serve large portions of moderately unhealthy foods, and prepare the dishes with fattening butter, oils, and sauces. In fact, some entrees at restaurants have more than 1,000 calories and more than 50 grams of fat per serving!

When eating out just say “no” to the value meal deals and super-sized items which will only add more calories, fat, and salt. Be aware of the sugar content when dining out as it is often higher than at home, especially in fast food establishments.

Dining out can cost you plenty of calories, fat, and weight loss frustrations. This may cause you to give up the healthy eating altogether. As difficult as it may sound, do your best not to get frustrated and let it ruin your healthy eating.

The following tips can help you make better choices when dining out and keep you on track.

Healthier Fast Food Choices

Restaurant	Menu Item	Calories	Protein (grams)	Fat (grams)
Burger King	Tender Grill Chicken Garden Salad (*hold cheese and w/light dressing)	300	33	16
	BK Veggie Burger (*hold the mayo and ask for extra veggies)	340	23	8
Chick-fil-A	Chargrilled Chicken Sandwich	270	28	3
	Chargrilled and Fruit Salad	290	22	8
KFC	Tender Roast Sandwich (*hold the sauce)	300	37	4.5
McDonald's	Premium Grilled Chicken Sandwich	370	32	4.5
	Asian Salad with Grilled Chicken	300	32	10
	Southwest Salad with Grilled Chicken	320	30	9
	Hamburger- kids	250	12	9
	Snack Wraps Grilled (Ranch, Honey, Chipotle)	260-270	18	9-10
Subway	6" Oven-Roasted Chicken Breast (*try eating only half of the bread)	310	24	5
	4" Roast Beef Sandwich-minis (*try eating only half of the bread)	190	13	3.5
	Roasted Chicken Noodle Soup	80	6	2
	Vegetable Beef Soup	100	6	2
Taco Bell	Fresco Style Ranchero Chicken Soft Taco	170	12	4
	Fresco Crunchy Taco	150	7	2.5
	Pintos 'n Cheese	160	9	6
	Ultimate Chicken Grill Sandwich	320	28	7
	Jr. Hamburger	230	13	8

Chinese Cuisine

Characteristics:

Reflects many different cooking styles, traditions, customs, ingredients and flavors from multiple regions of China. Cantonese, the most popular form in the U.S., features grilled meat, steaming and stir-frying, and flavors are not as intense as other regions, such as Szechuan or Hunan.

Common Ingredients:

High emphasis on a very wide variety of vegetables and complex carbohydrates like rice and noodles. Meat, poultry and seafood are usually sliced and served in smaller portions. Tofu is a popular ingredient in many dishes.

Hidden Dangers:

- Avoid anything fried, including spring rolls, dumplings, fried rice, crispy beef, egg foo yung and battered pork.
- One spare rib can contain 1-3 tablespoon of fat.
- Avoid the crispy noodles served in soup.
- Soy sauce is very high in sodium.
- Sweet and sour dishes are usually fried and/or high in fat and calories.
- Stir fried dishes can be oily and fatty, but can be prepared with smaller amounts of oil.
- Tangerine or orange beef isn't as healthy as it sounds.
- Walnuts can be healthy, but are often caramelized.
- Eggplant can soak up a lot of oil during preparation.
- Beef Chow Mein: 940 calories and 60 grams of fat.
- Sweet and Sour Fish: 1160 calories and 58 grams of fat.
- Chicken/Shrimp Omelet: 990 calories and 82 grams of fat.
- Lemon Chicken: 1,350 calories and 88 grams of fat.

Healthy Finds:

- Order a side of steamed vegetables to mix with your dish.
- Look for dishes that are braised, roasted, simmered or steamed.
- Moo Goo Gai Pan
- Marinated spinach salad has about 100 calories.
- Steamed vegetable dumplings (3): 115 calories and 2.5 gms of fat.
- Steamed tofu and vegetables: 293 calories and 9 gms of fat.
- Steamed vegetables and chicken: 490 calories and 12 gms of fat.
- Chicken Chop Suey: 600 calories and 20 gms of fat.
- Egg Drop Soup: 93 calories and 5 gms of fat.

Substitution Ideas:

Try This	Skip That
Wonton Soup	Velvet Clam Chowder
Black Bean Soup	Sweet & Sour Sauce
Steamed Brown Rice	Fried Rice
Steamed Dumplings	Egg Rolls
Hot Mustard	Soy Sauce
Chicken	Duck
Dishes with Water Chestnuts	Dishes with Cashews

Italian Cuisine

Characteristics:

These simple menu items have lots of flavor. Portions in the U.S. are often double those served overseas. Many dishes are very high in fat and calories, so diligence is a must.

Common Ingredients:

Entrees are often dripping with cheese and heavy with meat. A variety of pastas, breads and tomato-based and creamy sauces dominate the menu. Olive oil is used in many lighter Southern Italian dishes, while Northern Italian cooking often uses more butter.

Hidden Dangers:

- Antipasto is generally a collection of cheeses, smoked meats like salami, olives and marinated veggies, so it can be very high in calories.
- Avoid ordering “extra” pizza ingredients from the following list: sausage, pepperoni and cheese.
- Pass up dishes with lot of high-fat cheese, such as lasagna, veal parmigiana and cannelloni.
- Pesto and antipasto can be very oily.
- Sauces should be used sparingly, as they can be high in sodium and potassium.
- Olive oil, though lower in fat, is still a concentrated source of calories.
- Stuffed mushrooms sound healthy, but usually contain cheese, sausage and cream.
- Bruschetta may seem healthier if loaded with tomatoes, but 1 piece can carry 240 calories and 20 grams of fat.
- Tortellini (20 pieces): 530 calories and 20 grams of fat.
- Chicken Parmigiana: 1,000 calories.
- Fried Calamari: 1,077 calories and 53 grams of fat.
- Meat Lasagna: 625 calories and 37 grams of fat.
- Pasta Carbonara: 1,200 calories and 60 grams of fat.
- Watch for these words:
 - Alla cream (with cream)
 - Alfredo (cream sauce)
 - Fritto (fried)
 - Parmigianan (breaded and fried)
 - Scampi (drenched in garlic olive oil or butter)
 - Pan-fried
 - Crispy

Healthy Finds:

- Combine a hearty Italian soup with a garden salad for a well-balanced meal.
- It's very easy to add extra vegetables of your choice to just about any Italian dish.
- Beans are a complex carbohydrate with some protein that can be found in many dishes.
- Primavera dishes are prepared with fresh vegetables, herbs and a touch of olive oil.
- Insalata is a fresh garden salad, tossed with a variety of fresh vegetables.
- Minestrone soup is a tomato-based hearty option that's filled with beans, vegetables and pasta and only 200 calories and 5 grams of fat per serving.
- Scampi al vino blanco (shrimp sautéed in white wine).
- Dishes with tomato-based sauces.
- Chicken Marsala, if made with wine and broth rather than butter or cream.
- Veal or chicken piccata.
- Chicken Cacciatore: 300 calories.
- Chicken Risotto: 275 calories and 7 grams of fat.
- Pasta e fagioli (pasta, beans and tomatoes in broth): 300 calories and 8 grams of fat.
- Spinach Gnocchi: 300 calories and 18 grams of fat.

Substitution Ideas:

Try This	Skip That
Plain espresso	Cappuccino
Marinara	Alfredo
Italian Ice	Cannoli
Traditional Italian dressing	Creamy Italian dressing
Hamburger	Sausage
Green peppers	Olives
Onions	Anchovies

Japanese Cuisine

Characteristics:

This cuisine features smaller portions that are lower in calories and fat (if you avoid fried options) and emphasize rice and soybean products. Often highlighted by tabletop stir-fry cooking, some foods are fried, but most are grilled, broiled, braised, simmered or steamed.

Common Ingredients:

Generally meat, fish or chicken with fresh vegetables. Dishes contain lots of rice, noodles, tofu, and seafood, a limited amount of additional oils and fats, and are usually accompanied by edible garnishes, such as vegetables or seaweed.

Hidden Dangers:

- Dishes can be high in potassium, which can cause problems for kidney, liver and heart patients.
- Egg rolls are fried and usually include high-fat pork.
- Ask that your dish not be prepared with soy sauce, fish sauce or MSG, all of which are high in sodium.
- For lower sodium, also go light on miso and teriyaki sauces.
- Avoid crispy noodles and duck sauce that is often served before the main course.
- “Tempura” dishes are batter-coated and fried. Just 3 large tempura prawns with veggies will cost you 320 calories and 18 grams of fat.
- Breaded and fried dishes like Tonkatsu (pork) or Torikatsu (chicken)
- Chawan Mush (chicken and shrimp in egg custard)
- Rainbow Roll: 480 calories and 10 grams of fat.
- One servings of fried rice: 700 calories and 30 grams of fat.
- Beef Teriyaki with sauce and white rice: 1,100 calories and 37 gram of fat.
- 10-ounces of Teppan Yaki (steak, seafood and veggies): 470 calories and 30 grams of fat.
- Watch out for words:
 - Tempura (battered and fried)
 - Agemono (breaded and fried)
 - Katsu (breaded and fried)
 - Oshinko (pickled veggies)

Healthy Finds:

- Udon (wheat noodles) or Soba (buckwheat noodles) are both healthy alternatives to rice.
- Sushi and sashimi (raw fish) are low in fat.
- Simmered or grilled dishes
- Yosenabe (seafood and vegetables)
- Shabu Shabu (meat, vegetables and seafood in boiling broth)
- Yakitori (broiled chicken)
- Domburi (rice covered in vegetables, meat, poultry and egg)
- Nigiri-Zushi (fish-wrapped sushi)
- Nori-Maki-Zushi (seaweed-wrapped sushi)
- Egg omelet
- Tofu Dengaku (grilled tofu with miso)
- California roll: 180 calories and 6 grams of fat.
- Clear soups like miso (50 calories and 1 grams of fat)

Substitution Ideas:

Try This	Skip That
Steamed rice	Fried rice
Lemon slices	Miso dressing on salad
Stir-fried dishes	Deep-fried dishes
Stir-fried tofu	Deep-fried tofu
Edamame	Vegetable tempura
Fish sushi	Shrimp tempura
Vegetable roll	Eel avocado roll
Tuna sashimi	Spicy tuna roll
Salmon cucumber roll (231 calories and 4 gms fat)	Salmon, cream cheese, cucumber roll (370 calories and 19 gms fat)
Sashimi	Pickled fish
Hot mustard	Soy or teriyaki sauce
Chicken or beef teriyaki	Tonkatsu (breaded pork)

Mexican Cuisine

Characteristics:

In the United States, these dishes come in large portions. If you're not careful, you can easily consume a full day's worth of calories in a single meal. Dishes are often fried with lard and topped with cheese and sour cream. Most dishes are combined with several other items to create even larger portions.

Common Ingredients:

Mexican cuisine is loaded with potential calorie landmines, from cheese and sour cream to crispy tortillas and guacamole. Staples include sources of complex carbohydrates and protein like rice and beans, along with tomatoes, fresh fish, corn, beef and poultry.

Hidden Dangers:

- Many restaurants still make their refried beans with lard.
- Guacamole is very high in calories.
- Taco salads can carry more than 1,000 calories. Most of the ingredients inside the salad are usually healthy, but the condiments, cheese, beef and a calorie-laden tortilla shell can sabotage your meal.
- Avoid deep-fried entrees like Chile Rellenos, Chimichangas and Flautas.
- The fish in fish tacos is usually deep fried. Try to get grilled fish instead.
- Watch for these words:
 - Chorizo (Mexican sausage)
 - Con Queso (with cheese)
 - Rellenos (stuffed, usually with cheese)
 - Combination (usually a supersized portion)
 - Crispy (fried)
 - Plato Gordo(fat plate)
- Cheese Quesadilla: 900 calories
- Paella a la Valenciana: 900 calories, 42 grams of fat
- Refried Beans (frijoles): 640 calories per cup
- Nachos: 800 calories and as much as 65 grams of fat
- Cheese Enchiladas: 980 calories
- Chicken Tostada: as much as 935 calories

Healthy Finds:

- Look for baked dishes. Make sure you order with light or no cheese.
- Gazpacho is a cold soup with green peppers and cucumber. It's fat-free, full of vitamin C and beta carotene, and only has 60 calories.
- Salsa is packed with vitamin A and C, no fat, and is low in calories.
- Fajitas (stir-fried meat and lots of veggies, limit cheese/sour cream)
- Ceviche (fish or shrimp cocktail marinated in citrus, sometimes with tomato and avocado)
- Mole sauce
- Chile Verde (pork simmered with green chilies and vegetables)
 - Chicken Fajitas: 200 calories and 7 g fat
 - Tortilla Soup: 240 calories
 - Black Bean Soup: 180 calories, 5 g fat
 - Ceviche: 150 calories, 5g fat
 - Grilled Shrimp Taco: 320 calories, 19 g fat
 - Clams Marinera: 330 calories, 16 g fat
 - Arroz Abanda: 340 calories, 8g fat

Tips:

Keep it simple and order a la carte from the menu. Pass up the combination platters, which are usually more than one person, can eat, and piled with sour cream, guacamole, fried foods and cheese. You can make an entire meal out of healthy side items, such as beans, rice, vegetables and salsa.

Substitution Ideas:

Try This	Skip That
Whole beans (black or pinto)	Refried beans
Steamed "soft" shell	Fried "hard" shell
Salsa	Sour cream
Whole-wheat tortillas	Flour tortillas
Picante sauce	Cheese sauce
Fajita	Chimichanga
Chicken fajita salad (don't eat the tortilla shell)	Quesadillas
Chicken or beef enchilada with light cheese	Flautas (fried tortilla with meat)
Guava, papaya or mango	Ice cream

Thai Cuisine

Characteristics:

Dishes are usually packed with lots of fresh ingredients, and have many hot, spicy flavorful, along with some sweet and sour options.

Common Ingredients:

These foods feature chili peppers, rice, noodles, sugar, citrus fruits, fish, chicken, and fresh vegetables. They're often light in fats and meats, and heavier in noodles and vegetables.

Hidden Dangers:

- Pad Thai noodles are stir-fried with a lot of oil, and often include eggs and peanuts.
- Nam Prik (spicy peanut sauce) and Sao Nam (coconut sauce) are very high in fat and calories.
- Watch out for peanuts, cashews, coconut, and any nut oils or sauces, which can be high in fat.
- Avoid deep fried noodles and entrees.
- Say "no" to the heavy sauce.
- Avoid anything with full-fat coconut milk.
- Tom Ka Gai (chicken in coconut milk soup)
- Gaeng Keow Wan Gai (curry chicken with eggplant)
- Gaeng Ped Gai (red curry chicken)
- Gluay Kaeg (fried banana slices)

Healthy Finds:

- You can find a sweet, fat-free chili sauce.
- Try sauces that are made with basil, chilies and lime juice.
- Ask for more veggies and less meat or nuts in a dish.
- Make sure meat is sautéed, stir fried (with vegetable oil) or grilled.
- Thai chicken (sautéed chicken with lots of vegetables and pineapple).
- Poy Sian (sautéed seafood with cabbage, beans, and mushrooms)
- Gai Yang (grilled chicken on cabbage or rice)
- Tom Yam Goong (hot and sour shrimp soup)
- Nuea Pad Prik (pepper steak)

Substitution Ideas:

Try This	Skip That
Request vegetable oil	Foods made in lard or coconut oil
Chicken	Duck
Fresh spring rolls	Fried spring rolls
Steamed rice	Fried rice
Hot & sour soup	Coconut-based soup
Steamed rice noodles	Fried noodles

Steakhouse

Characteristics:

A Steakhouse serves extra-large portions of hearty, filling heartland foods without much spice or variety. Plain side dishes and a smaller number of sauces and toppings make it easier to control calories with smart choices and special preparation requests.

Common Ingredients:

Menus are dominated by meat, pastas, various potatoes slathered with gravy or toppings, and deep-fried appetizers. Vegetables are few and far between, except for potatoes, which are often fried in some form. Most offer salads, but many have only starch and pasta-based side dishes. Many restaurants are offering healthier chicken and fish alternatives.

Hidden Dangers:

- Steakhouse cheeseburgers can pack nearly 1,000 calories.
- Shrimp scampi is often drowning in butter and packs nearly 1,000 calories.
- Fried chicken has 910 calories and 54 grams of fat. To make it healthier, choose breast meat and remove the skin.
- Two potato skins can have almost 500 calories- before adding sour cream.
- Jalapeno poppers (2): 660 calories and 36 grams of fat.
- 6 Buffalo wings with blue cheese dressing: 1,000 calories and 68 grams of fat.
- 16 oz Porterhouse: 1,300 calories and 104 grams of fat.
- Au Gratin Potatoes: 400 calories and 22 grams of fat.
- BBQ ribs: 1,680 calories.
- Nachos: 800 calories
- Crab cakes (2): 240 calories and 15 grams of fat.
- Watch for these words:
 - Breaded
 - Crispy
 - Country-Style
 - Encrusted
 - Béarnaise (sauce made with butter and egg yolks)

Healthy Finds:

- 6 oysters on the half shell carry less than 150 calories.
- Most steakhouses offer steamed vegetables as a side dish. Make sure they are not soaked in butter.
- 5 peel and eat shrimp: 114 calories and 1 gram of fat.
- BBQ pork chops: 400 calories and 25 grams of fat
- Broiled salmon: 353 calories and 21 grams of fat.
- Steamed Broccoli: 50 calories
- Look for words:
 - Baked, steamed
 - Grilled, blackened
 - Broiled, charbroiled
 - Roasted, rotisserie
 - Brochette (meat, fish, poultry or veggies on a skewer)

Substitute Ideas:

Try This	Skip That
Manhattan clam chowder	New England clam chowder
Peel & Eat shrimp	Fried shrimp
Spinach salad	Creamed spinach
Baked potato	Mashed potatoes
Steamed lobster tail	Crab cakes
Poached fish	Fried fish
Veggie burger	Bacon cheeseburger
Sirloin or Tenderloin	T-bone or Ribeye
Rice	French fries
Garden salad	Caesar salad

Keeping on Track

Morbid obesity is a chronic, lifelong condition. The sleeve gastrectomy is not a cure for obesity; rather, it is a powerful tool to help keep morbid obesity in remission. You must use your tool correctly.

Sometimes, people regain weight some time after surgery because they have not quite followed the rules given to them. The following are suggestions to stay successful!

Follow-up is Key

During the first six months after surgery, weight loss is rapid. It is crucial to your success to implement the recommended lifestyle changes during this time. Eating a healthy diet, exercising and learning ways to manage emotional eating are key to maximizing success. The Team at The Bariatric and Metabolic Center of Colorado is always here to support you.

You should also make an appointment with your dietitian at 6 weeks, 3 months and 6 months after surgery to go over your eating habits and keep you on track. After you had gastric sleeve surgery, you entered a long-term relationship with your bariatric surgeon that will last many years. You will see your surgeon very often the first year of surgery, you may reduce your appointments to annually later on (or more often, if needed). Do not forget your primary care physician (PCP). If you suffer or suffered from any other co-morbidities (medical problems associated with being overweight), you will need monitoring by your PCP, as these may go into remission. Some medications may be discontinued or dosage decreased.

Support Groups Help

Since morbid obesity is a lifelong condition, you will need continued support from your bariatric team and other weight loss surgery patients. Support groups will be held once a month. These meetings are a way for you to share your successes and struggles with others. You can also receive good advice from other patients. You must be careful with information on the internet, misinformed people may lead you in the wrong direction. For the best advice, please contact the staff at The Bariatric and Metabolic Center of Colorado.

Keep Yourself Accountable

In one way or another, we all must hold ourselves accountable. To be successful and stay successful, you must set up a system of accountability. Schedule regular appointments with your surgeon, dietitian, and social worker. Attend support groups. Weigh yourself regularly, but not every day. Keep food and exercise logs. Our staff is always available to help you with these activities.

Seek Medical Attention As Needed

Although the gastric sleeve is a safe surgery, there are long-term complications that can occur years after surgery. If you experience any gastrointestinal problems, please contact your surgeon. Symptoms include: abdominal pain, frequent vomiting, tolerating larger meals, loss of satiety, and unexplained weight gain.

Finally...

Congratulations on deciding to pursue a new and healthy lifestyle. Nothing is more gratifying for us than seeing our patients succeed. We are committed to providing you with all the necessary support throughout your journey.

Psychological Aspects of Bariatric Surgery

Congratulations on making the decision to proceed with bariatric surgery! Just like any other major life change, bariatric surgery can be an emotional time in your life for both you and members of your support system. This life-changing, and potentially life-saving, operation is a decision that you have decided to pursue after much time, thought, and consideration.

There are many things for which to prepare, both in getting ready for the surgery itself and for making all of the necessary post-operative changes in order to be successful. If you are feeling slightly anxious or overwhelmed about this lifestyle change, it is completely normal. Anticipating any type of operation can be anxiety provoking. In order to help manage these anxieties, now is a good time to begin discussing your fears with the important people in your life; including your bariatric support team. Remember, we are here to help guide you through this process.

As with any other major life adjustment, there are significant behavioral changes that are required to take place to ensure that you are safe and successful with your journey. Remember that bariatric surgery is a tool to aid you in your success. Behavioral and lifestyle changes are necessary in order to create sustainable, and lasting, results. Remember, this is a major life transition, and at times, it may be trying.

You have a goal in mind for the reason you wanted to pursue bariatric surgery. Whether it is to feel better, live an increased healthier lifestyle, or take back control of your health; a good first step is to write down all of your goals on a sheet of paper. Keep these goals visible, such as posted on the refrigerator or with you during the initial months following surgery. Revisit these goals often to help you stay motivated. Share them with your support network if you feel comfortable enough to do so. When times get tough, your goals will serve as a clear reminder of why you decided to pursue bariatric surgery in the first place.

While adapting to all the changes involved in bariatric surgery requires ongoing determination and resilience, success is an absolutely achievable goal. Understanding the psychological aspects of this process will empower you to take more control of your weight loss and ultimate outcome.

What to Expect Immediately Before and After Surgery

Doubt and anxiety prior to surgery can be common. You are about to pursue a major life change. You may find yourself caught up in worrying about all the necessary behavioral change requirements that are needed in order to be successful. You may wonder whether or not you chose the right procedure. There will be questions that you have about the operation and procedure. These thoughts are often times very normal and expected. If these anxieties persist and/or intensify, please reach out to your health care team so that we can connect you with an external counselor to provide you with ongoing support.

In order to diminish additional stress, now is not the time to make any major life decisions. Pursuing bariatric surgery is intense enough. Focus your pre-surgery energies on how hard you have worked to get to this point and how excited you were when you found out you were able to pursue surgery. Remind yourself of the intentions of this operation; how it will change your life, your lifestyle, your health, your relationships, and your livelihood. As the surgery date approaches, engage in pleasant activities. Read a good book, go to the movies, and spend time with people you love. Recovery will be here before you know it.

In the first few weeks after surgery, you may find that you feel exhausted, overwhelmed, anxious or sad. You are adjusting to nutritional changes, your energy level feels off, and you may begin wondering if you made a mistake. Do not get too caught up in this time frame, it is short-lived. Rarely do bariatric surgery patients talk

about this period because it passes so quickly that they seem to have forgotten it happened to them. Don't panic, this post-operative transition is normal and it will pass before long. However, if at any point you feel that these anxious or sad feelings have intensified or worsened following the immediate weeks of surgery, please reach out to your health care team so that we can connect you with an external counselor to help support you.

Remember, you just had a major operation. With any surgery procedure your body is spending a lot of energy recovering, and sometimes it takes some time for your mind to catch up with the changes that are occurring in your body. Take comfort in knowing that your body will begin the healing process on its own. In time you will adjust to the nutritional changes, and the food will get easier, both because you will be able to eat more "regular" foods, and because it will become a habit. Remember, bariatric surgery is not a diet, but a life change. Give yourself time to adjust and do not expect that you will be off and running with the recovery process immediately. Exercise patience, kindness and compassion with yourself and allow others to help care for you. If you are a primary "caregiver" or natural helper, it is often difficult to ask for help. During this time, it is important to remember that at some point in time, every person in the world will need help with something, no matter how big or small. You will not be able to go back to caring for others if you do not take this time to care for yourself. Give yourself permission to take this time for you so that you can continue to care for others after your recovery. Discuss with your support group and family how roles may need to change during this initial recovery time. Again, remember your goal list that you created at the beginning of this section. Remind yourself that you had this surgery for a very good reason. Take out your list of goals and read it again. All of those values shall soon become reality. This timeframe is just the first step toward living the life that you want and deserve.

Not All Bariatric Procedures (or patients) are the same

It just can't be said enough. There are so many major differences between the various bariatric procedures, that in many ways they are completely different operations, with different risk factors and post-operative experiences. It is not helpful to compare your weight loss experience with anybody who has had a different, or even the same, procedure. Just as everyone has different experiences and outcomes with dieting and exercise, people have different courses of weight loss post-operatively. Even more so, those differences are unique between procedures. We are all unique individuals, with different genetic makeups and are part of different environments. This weight loss journey is specific and special to you. Keep your focus on yourself and the progress you have made rather than comparing yourself to others who may have had a different, or even the same, procedure.

In other words, focus on what **you** need to do to be successful: follow your nutrition plan, exercise, and begin utilizing your coping skills.

As you begin to lose weight (and you will lose weight!) it is important to recognize that there will be times when you are dropping significant pounds, and times when it seems you are working extremely hard and not seeing results. At the beginning you may see results happening quickly. Although this is an exciting time, do not focus on the numbers you are seeing on the scale, as the scale does not tell the whole story and will cause an adversarial relationship with your body. Instead, focus on how you are feeling, on how your clothes fit, and everything that you are now able to accomplish. Focus on how far you have come and the amazing life-altering changes that you have already accomplished.

Plateaus are a normal part of the weight loss journey. Use plateaus as information and feedback, not as personal failure, lack of effort, or a major crisis. Plateau feedback is a time to review your nutrition, eating

habits and exercise routine. If you are really struggling, make an appointment to come in and see a member of your health care team. We are happy to help you.

CELEBRATE THE SMALL VICTORIES

Of course you sought surgery to make major life changes. Those major changes will come. Along the way it is important to recognize and celebrate the small victories that you achieve every day. Walking up and down a flight of stairs with less difficulty; being able to get in and out of your car with greater ease; feeling more energized throughout the day; all of these changes are reminders that you are on your way to achieving those larger goals. Frustration can often set in if you lose sight of these smaller, daily changes and are only focusing on getting to the finish line. Recognizing these smaller victories can also help with ‘plateau busting.’ As the recovery weeks turn to months, look back and celebrate the small victories that you achieved each day. You will be surprised to see how many things you have accomplished.

STRESS? ANXIETY? DEPRESSION?

From the time that you begin preparing for your surgery, through the first year and beyond, you may experience a roller coaster of emotions. You may find yourself experiencing completely new emotions, or a different intensity of emotions in a way you have never felt before. You may find that old issues or concerns are surfacing. All of this is completely natural, and a part of the recovery process. Trying to convince yourself that you will not experience any emotional hiccups along the way is simply unrealistic.

Just as you are vigilantly adhering to new lifestyle choices with your nutrition and exercise regime, you need to be just as concerned and observant of your emotional world. Start by recognizing important signs of stress, anxiety, and /or depression. Signs of stress include but are not limited to:

- Irritability
- Sleeping Problems
- Headaches/muscle tension
- Concentration Problems
- Anger/Emotional Over-reaction
- Fidgeting and other Nervous Habits
- Apathy
- Withdrawal
- Feeling Overwhelmed
- Desiring to eat ‘emotionally’
- Decreasing self-care (sudden change in follow-through with bariatric diet and exercise plan and/or poor hygiene)

Depression

Patients often express surprise when the issue of depression after surgery is broached. Conventional wisdom and wishful thinking encourage the view that mood improves following bariatric surgery, especially for those who suffered from depression previously. In reality, things are more complicated. While studies indicate a general trend of improvements in mood *long-term*, depressive symptoms often increase immediately after surgery. In fact, one study found that one-third of a sample of non-depressed patients developed prolonged postoperative sadness/depression. Reasons for these symptoms include the following:

- Loss of serotonin and endorphin boosts from sugars and starches
- Hormonal imbalances due to hormones released from fat stores
- Stress of lifestyle changes
- Discomfort, fatigue and physical limitations following surgery
- Inability to use food for comfort or mood regulation

This *does not* mean that patients with a history of depression are not good surgical candidates, and it does not mean that you will absolutely experience depressive symptoms. Rather, it means that all patients need to be on the lookout for changes in mood, and patients with a history of depression need to have a plan in mind for what to do if things worsen. Patients taking antidepressants should avoid discontinuing their medications immediately before or after surgery, unless directed to do so by their prescribing doctor. If you are in therapy or counseling, absolutely continue. All patients need to report significant changes in mood to the bariatric counselor so that we can connect you to an external provider to support you long-term.

Some symptoms of depression include the following:

- Persistent sad or irritable mood
- Concentration problems
- Lack of interest in formerly enjoyable activities
- Low level, constant fatigue
- Sleep disturbances (too much or too little)
- Feelings of worthlessness
- Thoughts of harming self/suicide
- Isolating/Withdrawing from family, friends, and activities
- Inappropriate feelings of guilt

If you are experiencing any of these symptoms, please call and make an appointment with your counselor. If you are experiencing thoughts of harming yourself, suicidal/homicidal thoughts, or a psychiatric emergency/crisis go to your nearest emergency room or call 911 immediately. Colorado Crisis Services is also available 24/7/365. Their phone number is 1-844-493-8255. For additional information on Colorado Crisis Services, please visit <http://coloradocrisiservices.org/>

Self-Care and Coping with Emotions

Now, more than ever, is a time of critical importance for you to take time to care of yourself. Not only does this include watching your diet, exercise and attending follow-up appointments, but also for developing coping skills and finding stress reduction activities that work for you. There are many ways to take care of your emotional world on a daily basis. Some examples include yoga, meditation, journaling, deep breathing or just taking 30 minutes to unwind. The idea is to find something that is effective, meaningful for you, and is easily worked into your daily routine. If your ideas for coping are not feasible, they will not work. Making time to attend a support group is another self-care strategy. Be sure you are getting adequate sleep and paying attention to other areas of your health (including taking care of other physical illnesses such as colds, etc). You will find that bringing awareness to your emotions and monitoring your stress level will greatly enhance your ability to achieve your overall goals. Now is a great time to develop new coping skills. If you are someone who previously used food as a coping skill, this will no longer be available to you after surgery. A good idea is to create a coping skills box or drawer that you can utilize if any desire to engage in emotional eating arises. Fill that box with movies, books, crafts, or ideas written on paper of activities you can engage in to help manage your emotions.

Let's face it: some people are simply uncomfortable with change. While others may support your decision to have bariatric surgery, and understand that your lifestyle will change, they may have difficulty accepting the fact that you need more time for self-care; and, thus, are interacting with them in new ways. An employer who expects you to work through lunch, or a child who wants help with a school project at bedtime are not going to be happy that that way of living is no longer functional for you. Stand firm with your values: you know that self-care is a critical component to your success through the recovery process. And recognize that these individuals are not necessarily upset with you, but that they are upset that their lives have been altered and can no longer access you in the same old ways. Find a way to explain the change to them, and compromise when necessary. Eventually, they too will get used to the new limits. Remember, it is not only your right to minimize the stress in your life, it is your responsibility. No one else is going to do this for you.

Eating When You Aren't Hungry

If you think about it, food is our fuel for life. The main purpose of food is to give us the strength and energy so that we can live our lives. Unfortunately, we often eat for reasons other than physical bodily hunger. We can categorize this type of eating into two groups: eating for emotions/thoughts and eating due to situation/habit. Eating for emotions/thoughts involves consuming food in order to soothe or distract from unpleasant feelings or cognitions. We have all experienced this. We have a rough day at work and come home to reach for the ice cream. We begin a negative pattern of thinking and begin eating a bag of chips to numb the spiraling thoughts. Or you are bored, depressed, or anxious and without realizing it, you begin to graze, often on non-nutritious foods. Situational/habitually eating is eating which is done because it has become associated with a specific time, place or activity. The most common form of habitually eating involves holidays. Thanksgiving turkey and mashed potatoes anyone? Other examples - You *always* snack in front of the television; *everyone* gets popcorn at the movies; it's *time* for lunch; your *friends* are having a burger so...

Both types of eating have nothing to do with providing your body with the essential elements it needs to survive. Both often occur without awareness. Essentially you are not eating for your body, but rather you are eating for your emotions, your thoughts, your situation. Eating in these ways can have devastating results for weight-loss goals and overall health.

Prior to surgery, learn to ask yourself "am I eating for my body, or am I eating for my mind, emotions, stress or the situation?" If the answer is that you are hungry, ask yourself how you know that you are hungry. Signs of true internal hunger include:

- Hunger pangs (rumbling stomach)
- A feeling of emptiness in the stomach
- Lightheadedness, dizziness or shakiness
- Headache
- Irritability and or Difficulty Concentrating
- Recognizing it's been a while since your last meal

If you are internally hungry, then eat while following the appropriate bariatric nutrition guidelines.

If the answer to the question above is "I don't know," then take a minute to check in with yourself. Notice if you are stressed, anxious or dealing with some other intense emotion. Are you engaging in a situation in which food consumption is expected? Are you bored or involved in an unpleasant activity? Are you caught

up in certain thoughts? If the answer to any of these questions is yes, then food is not really what you are craving, but rather you are utilizing food to deal with an unpleasant experience.

This is where behavioral change begins. Try to use another coping strategy. Take a break from unpleasant activities. Make a connection with other people you care about. Go for a walk or do some deep relaxation breathing. Imagine filling yourself with positive, pleasant experiences instead of food. If you have trouble identifying techniques to use instead of eating, contact the dietitian or counselor in the office so that we can help you come up with solutions that will work. We will also be teaching a variety of behavioral strategies to combat emotional and situational eating in our support groups. As a good rule of thumb when making food choices, ask yourself if your meal will move you towards or away from your goals that you have written down for bariatric surgery. For example, if your goal is to have an increased healthier lifestyle, which food option will move you towards this goal?

Internal and External Satiety Cues

Perhaps you are following true internal hunger cues, and that you eat for your body, rather than your emotions, thoughts, or situation; yet you often find yourself overeating. It is common to follow external satiety (i.e. fullness) cues rather than listening to when our body tells us we are full. For example, we often believe that we are full when our plate is cleared, our bowl is empty, and there is no more liquid in our glass. We often bypass the point of physically feeling full to reach the goal of clearing our plates. It is important to recognize when external satiety cues are dictating eating behavior. Now is the time to start listening to your body.

One way to think of your satiety is to imagine that your level of fullness is like the gas gauge in your car, and that this particular hunger gauge has a 0 – 10 rating scale. A score of 0 = extreme hunger, you are famished. A score of 10 = extremely full, past the point of comfort. A good rule of thumb is to maintain, at all times, a satiety level somewhere between 3 – 7. You can check in with yourself throughout the day, and during every meal. While eating, when you reach the point of a 6 or 7, it is time to stop, even if this means that food remains on your plate.

Mindfulness Skills

Mindfulness is a crucial skill in your recovery. Mindfulness means paying attention, in the present moment, on purpose in a non-judgmental way. Essentially, mindfulness equates to bringing full awareness (notice: not necessarily acceptance) to your current experience; in thoughts, emotions, physical sensations, and the situation. For example, as you read this bring full attention to the physical sensation of your body. Notice where it makes contact with whatever it is that you are sitting on. Key into your breathing, paying attention to the breath as it enters and leaves your body. Examine the thoughts and emotions that you are currently experiencing.

You may have experienced being disconnected from your emotions and thoughts at one time, and this may have led to an unwanted behavior. An important piece of mindfulness is to acknowledge that some experiences, including thoughts and feelings, in our lives are unpleasant. This does not necessarily mean that these experiences need to lead to unwanted behaviors. Give yourself a little flexibility and freedom to find acceptance. This is a very exciting time in which you are able to reconnect with your body both physically and mentally. This is your second chance, a chance that many people do not get. Enjoy this time as you establish a new relationship with food, with yourself, and with your body. One very interesting and exciting attribute of bariatric surgery is that your taste buds may change. What was delicious to you prior to surgery

might be unbearable after. Explore your new taste buds. Slow down your eating and take a deep breath. This will really allow you to experience and savor each new bite of food.

There will be mindfulness training during support groups, so please be on the lookout for that information in the future. In the meantime, some tips for practicing mindfulness:

- **Pinky Toe.** It's not often that you give your pinky toe much attention. Spend just a moment connecting to the physical sensations of your pinky toe. Notice the sensation of it rubbing against your sock, shoe or sandal. Bring a gentle awareness to whatever feelings are present. During the day focus on bringing your awareness to your pinky toe during times of stress. Are there other body parts that you can utilize to focus attention?
- **Routine activity.** Practice one daily routine activity with full attention and awareness. Mindfully brush your teeth or wash the dishes for example. Discover an activity, any activity, and whatever it is that you choose, immerse yourself fully into the experience.
- **Breathing.** You breathe all day, every day. A day without breathing is not possible. We often fail to even recognize our breath, yet it is always present as a way for us to anchor ourselves back to the present moment. Spend a moment noticing your breath enter and exit your body.
- **Mindful Eating Exercise:** <http://hfhc.ext.wvu.edu/r/download/114469>

Addiction Following Bariatric Surgery

Growing awareness exists about the phenomenon in which bariatric patients have a predisposition to develop addictive behaviors such as drinking, gambling, or sexual indiscretion anywhere from 6 months to several years following their operations. Five to 30% of postsurgical bariatric patients are affected, so this is a potential area of concern about which all potential patients need to be aware.

Two main mechanisms exist that appear to contribute to an increased risk of developing addictive behaviors. The first is a physiological predisposition that some people simply have for engaging in compulsive behavior. For example, individuals who have a compulsive or addictive history with eating are at increased risk for addiction transfer. Addiction transfer simply means trading one compulsive behavior for another. The key component of addiction transfer is a common trigger. When one compulsive behavior is substituted for another, it is usually in the context of being exposed to a continued stressful trigger. The original addictive behavior is no longer available in your repertoire; however, you need to find a way to deal with the stressful trigger. Alas, a new addictive behavior begins. In the case of a bariatric patient, eating, which may have been used to dull painful emotions or distract from negative thought spiraling, is no longer an option. Needing something to fill the gap, patients may turn to alcohol, tobacco or other substances, as well as engage in activities such as shopping, illicit sex, or gambling.

The second mechanism of addictive behavior requires acknowledgement of our American culture's relationship with food. Food has taken on many new meanings in our lives. It is not simply to fuel our body for strength and energy. Food is everywhere, and we use it in many ways. We use food to socialize, self-soothe, unwind at the end of the day, and to distract ourselves when we are bored, or anxious. Food is used in family traditions, holidays, and celebrations. Following surgery, food is no longer available to meet emotional and cognitive needs. Patients are required to find alternatives, where there has typically been limited experience in developing other coping mechanisms. If a plan has not been developed for coping with stressful circumstances, difficult emotions, intense thoughts etc., patients may find themselves susceptible to less healthy ways of coping.

Risk Factors for Addiction Transfer

(Remember, these are only markers of increased risk, not predictions of whether or not you will have difficulties)

- History of substance abuse, dependence, or addictive behaviors
- Family history of addiction
- History of using food for emotional comfort
- Eating Disorder history (especially Binge Eating Disorder)
- Poor stress management skills
- Limited coping skills

Being proactive in determining underlying causes and finding means to deal with those causes with new, healthier behaviors is the best prevention of addiction transfer. You can remember this action plan with the acronym, “**A DIET.**”

- **Awareness.** Utilizing awareness techniques in identifying triggers and root causes of emotional/cognitive eating.
- **Determine** if there are alternative coping strategies to help you deal with the current situation. Determine what coping skill makes sense based on the situation.
- **Implement** the coping skill.
- **Evaluate** if it worked or did not. Was your implementation successful? Was your effort 100% genuine? Is there room for improvement?
- **Try** something new. If you continue to do what you have always done, you will continue to get the results that you have always gotten. Try out new behaviors and continually look for new solutions.

Body Image

Our own perception of our body and the subsequent meaning that we place on that perception defines body image, rather than the physical size, shape or weight that we all uniquely have. We are a culture obsessed with body image, and we are inundated with messages each day about how we “should” look. These messages often do not help. It is true, many people struggle with body image concerns, and this is certainly true for the bariatric surgery population.

Interestingly enough, many bariatric patients *overestimate* their size and continue to perceive themselves as large, even after their bodies have returned to an average weight. One of the most important factors in connecting to your body image is to begin recognizing the messages that you give yourself. Here are some ways to begin working on body image concerns.

- Begin paying attention to all of the messages you tell yourself. We have a constant level of self-talk in our minds, and often this self-talk contains messages about our respective bodies. All people engage in self-talk, and it often exists as our own “inner critic.” Tune into the messages (both positive and negative) you tell yourself about your body. What are those messages? Are you overly critical and negative? Do you focus in on particular parts or aspects of your body? Are there similar messages that are conveyed regardless of the situation? How much comparison exists between others?
- Once you begin noticing the statements, you can start to recognize if they are harmful or helpful. Then you can start to catch these negative thoughts in the moment and work on reframing negative comments into statements that are less punitive. Once you really hear the negative thoughts, begin to gently question

whether they are realistic or not. Is any aspect of that thought an exaggeration? Is there evidence (pure observable data) that confirms that thought? Could the judgment be made in a nicer, gentler way? One potential question to ask yourself is, “would I put up with somebody saying this to my spouse/friend/child?” If the answer is no, then why are you saying it to yourself? Reframe your thoughts to find a way to be nicer to yourself.

- Learn to connect with your body. Recognize that the most important part of your body is its utility. Bodies are meant to be used in many different ways. The main purpose of a body is not to look at it, judge it, label it, or criticize it. Begin to see your body as a vehicle for activity rather than an obstacle requiring labels. Once you develop a less abusive language for your body, you can spend more time really getting to know it. Become accustomed to the changing nature of your body. Become comfortable with the change. Spend some time in front of the mirror watching changes as they happen. Be concrete in what you say about your body, rather than zeroing in on judgments. Use your body for any and all activity and really connect to the physical sensations of stretching, moving and strengthening. Staying in tune with your body will help you feel more comfortable with changes. Examine what your body has allowed you to do. For example, maybe you absolutely love your eyes because they have allowed you to watch your children grow. Or maybe you love your strong legs because they allow you to walk around the park. Maybe you love your ears because they allow you to hear beautiful music.
- Watch out for the tendency to obsess about numbers. Do not get attached to a target weight, size, BMI, waist line, or any other arbitrary number. Number chasing can be a significant problem during recovery. It happens when you believe that reaching X weight will equal happiness. When you get to X weight you continue to have the same relationship with your body, so you reformulate and say, once I reach Y weight, then I'll be happy. Guess what? Once you get to Y weight you realize that those same issues continue. The number chasing continues until you truly connect with your body in a healthier, nonjudgmental way.
- Recognize that those arbitrary numbers truly do not matter in your overall level of well-being. Remind yourself of the intention of surgery in the first place--it was not to reach a certain weight (although you certainly have weight goals), but rather to regain health and happiness. Reaching a specific weight does not automatically equal finding true health or happiness. The latter will come when, and only when, you are able to accept your body just as it is. Your body knows what it is doing; when it is done losing weight, it will stop. It is up to you to work with your body by following your diet, taking your supplements and engaging in daily exercise. Daily weigh-ins will not help, and will only encourage an adversarial relationship with your body.

A Note to Trauma Survivors

If you are a survivor of sexual abuse or physical trauma, you are not alone. Approximately 25% of patients undergoing bariatric surgery acknowledge a history of sexual abuse. Since not all patients disclose this painful part of their history, it is expected that the actual percentage may be even higher. While there are no concrete numbers for survivors of physical abuse, certain considerations and care plans remain the same.

It is important for survivors to remember that trauma creates significant psychological changes. For anyone, even a minimally invasive laparoscopic surgery may feel anxiety-provoking and uncomfortable. For the trauma survivor, having one's body vulnerable to inspection and intrusion by others can be terrifying. Be aware of changes in your anxiety level and be prepared to use self-soothing techniques which calm you and make you feel safe in order to separate this experience from past trauma. Make sure to communicate your needs to your providers so that they may be sensitive to things which may trigger unpleasant memories. Note

– this does not mean that you have to fully disclose your entire trauma history. In fact, this is not recommended. Digging up painful memories when you are not fully engaged in counseling or therapy can lead to more intense problems. But it will be an important bit of information for you to share with your primary treatment team. ***Remember this is a decision you have made about what happens to your body. You are in charge and in control of this situation.***

Sexual abuse survivors can encounter a variety of post-operative concerns. Often this does not occur until long after the surgery has become a distant memory. As weight loss becomes a reality, others will begin to notice changes. Some people will comment on these changes, others will ask questions, others will treat you like a completely different person. For a survivor who has learned to use obesity as a shield, this new attention can feel overwhelming and bring up negative memories of the past. Some patients find this so uncomfortable that they begin to wish they never underwent surgery, and they may begin sabotaging their recovery efforts and/or actively begin to regain weight. Some find themselves gaining weight, but are not conscious of the reason why. If this happens to you, or you think your abuse history may be having an impact on your progress, seek help. **Please reach out to the bariatric counselor so that we can connect you to an external counselor who can help work with you on trauma recovery.** Gaining the empowerment to have the healthy body you want and deserve is a big part of your recovery process.

Building a Support System

The need to establish a strong system of support to help you adjust and adhere to your new lifestyle cannot be overstated. Your recovery process will proceed smoothly if you have people around you who can encourage you and remind you of your goals. This does not mean that you have to publicize your decision to pursue bariatric surgery to the entire world if you are uncomfortable in doing so. It is important, however, to have a system of people to support you throughout this journey. Members of your support system are the people who will help you celebrate your small victories, help you pick up the pieces when times get tough, and remind you to work on developing new coping skills. Here are some ideas for building a strong support system:

- You need multiple individuals. You do not need fifty people to help you out, but it helps to have more than one person with whom you can connect when needed.
- Inform your supporters. Not everyone in your support system needs to know all of the details of what you are experiencing. Individuals relate to people in different ways, but ensure that you have at least one person with whom you can connect with for any and all difficulties experienced.
- Communicate. Your needs are going to ebb and flow. People will not be able to read your mind and they will not automatically know what it is that you need. Let them know. Be clear, specific, and do not be afraid to ask for help. That is why they are there.

The Power of Positive Thinking

Positive thinking is a powerful tool and change agent, but only if you maintain realistic thoughts that are attainable. We want you to maintain a positive outlook on your current situation, your plan, your lifestyle adjustments, and your long term goals. No one is perfect, however, and there will likely be times when mistakes and slip-ups occur. Be prepared to make a few mistakes along the way, and start planning now for how you can proactively address these times. Learning from your slip-ups is vital to ensuring lasting weight loss success. Take notice how your slip-ups made you feel. Again, remember if your food choices will move you towards or away from your goals.

Black or white thinking (aka “all-or-nothing” thinking) can be a huge threat to success in any endeavor. An example of black or white thinking is telling yourself that your diet for the day is completely tarnished because you cheated and ate one cookie. You use this mantra to then sabotage your diet for the day and skip working out because your day was ruined. This type of thinking happens with everyone in some way, shape, or form. Use these moments to reframe a more reasonable outlook on the situation. More important than whether you fall off the wagon is how long it takes you to get back on. There is a huge difference between one minor slip-up and a whole day (or week, or month) of not following your diet. Black and white thinking is a type of “automatic negative thought” (aka: Cognitive Distortion). Below is a list of additional automatic negative thoughts, as well as an activity of how to reframe negative thoughts as they arise.

Practice putting one foot in front of the other with each step of this process. There is no need to get ahead of yourself, and there is no need to get wrapped up in guilt about past mistakes. If you can practice doing what is right for your body, your nutrition, your emotions, your mind and your health in this moment (the only moment you actually have any power in controlling) the better your overall outcomes will be. You will soon find that this moment of healthy living leads to the next moment of healthy living, to the next, and then, ultimately, to a brand new life.

Evaluating Automatic Negative Thoughts (Cognitive Distortions)

1. **All or Nothing Thinking:** You view a situation in only two categories instead of a continuum. *Example: "Either I'm perfect on my diet, or I've completely failed."*
2. **Catastrophizing (Fortune Telling):** You predict the future negatively without considering other, more likely outcomes. *Example: "I won't be able to resist the desserts at the party."*
3. **Discounting the Positive:** You unreasonably tell yourself that positive experiences, deeds, or qualities do not count. *Example: "It doesn't matter if I've lost a few pounds. I only deserve credit after I've lost all the weight I need to lose."*
4. **Emotional Reasoning:** You think that something must be true because you "feel" (actually believe) it so strongly, ignoring or discounting evidence to the contrary. *Example: "I know I do a lot of things okay at work, but I still feel like I'm a failure."*
5. **Labeling:** You put a fixed, global label on yourself or others without considering that the evidence might more reasonably lead to a less disastrous conclusion. *Example: "I'm bad for overeating today."*
6. **Magnification/Minimization:** When you evaluate yourself, another person, or a situation, you unreasonably magnify the negative and/or minimize the positive. *Example: "Although I ate very healthy the entire day, I had a bite of a cookie after dinner which means I ate unhealthy overall."*
7. **Mind Reading:** You believe you know what others are thinking, failing to consider other more likely possibilities. *Example: "I can tell by the expression on his face that he thinks I look awful."*
8. **Overgeneralization:** You make sweeping negative conclusions that go far beyond the current situation. *Example: "Because I felt uncomfortable at the support group meeting, I don't have what it takes to make friends."*
9. **Personification:** You believe others are behaving negatively because of you, without considering more plausible explanations for their behavior. *Example: "The repair man was rude to me today because of the way I look."*
10. **Tunnel Vision:** You only see the negative aspects of a situation. *Example: "I can't do anything right because I had one piece of chocolate. I'm such a failure."*

Replacing Negative Thoughts Exercise

Directions:

1. Record your thought
2. Rationalize your automatic negative thought (using key as a guide—above)
3. Replace your thought with a more reasonable/true thought

Record	Rationalize	Replace
<i>I ate one cookie today which goes against my nutritional goals. I'm going to gain all of my weight back! I'm a failure!</i>	<i>Jumping to conclusions; Catastrophizing; Labeling</i>	<i>Just because I ate one cookie today does not mean my entire day of nutritional success is ruined. I've come a long way and I have seen great results so far. One slip up is not going to make me gain all of my weight back.</i>

Tips to Stay Motivated

Staying motivated when difficult times arise can be challenging in any given situation. However, staying motivated to comply with bariatric protocols is vital to your safety, as well as a way to ensure that you are successful in achieving your goals. If you are ever feeling a sense of de-motivation, remember to go back to your initial goal sheet. Ask yourself if the decision you make (in any given situation or scenario) will move you towards or away from your goal. This will allow you a platform to make an informed and educated decision about choices you make.

Additionally, you can ask yourself the following questions to help enhance motivation.

- Why do I want to change in the first place?
- How important is it to me that I change/stick with my plan?
- What values are most important to me?
- How do my actions fit my values?
- What is my plan to change?
- How confident am I in my ability to make these changes?
- What may happen if I do not change my past behaviors?
- In the next year, how would I like things to be different then they are today?
- On a scale of 1-10, how important is it for me to make changes/stick with my plan?
- I've already begun to lose weight. What were the main things that I did to achieve this success? How do I feel about it?

We wish you great success on this life changing journey. Please feel free to reach out to your care team should you have any questions or concerns. We are here to support you through this exciting time!

Additional Resources/Websites

Monthly Support group with the Dietitian and Social Worker:

Our clinic offers support groups available to all patients (pre-and post-op), friends and family members. For distance patients, it is also available via internet website. Support group is offered once per month. Please contact our clinic for the latest schedule. Hope to see you there!

For Additional information about weight loss surgery, please check out these websites:

American Society for Metabolic and Bariatric Surgery

Organized in 1983 as an association of bariatric surgeons and allied health professionals dedicated to the safe surgical treatment of morbid obesity.

<http://www.asmb.org/>

American Obesity Association (AOA)

Founded in 1995 to publicize obesity as a disease. The AOA was also established to support and urge further funding for research and treatment.

<http://www.americanobesityassociation>

Statistics Related to Obesity

<http://www.niddk.nih.gov/health/nutrit/pubs/statobes.htm>

Obesity Action Coalition

The Obesity Action Coalition (OAC) is the ONLY non-profit organization whose sole focus is representing individuals affected by obesity. This website is full of patient resources and education.

<http://www.obesityaction.org/>

American Dietetic Association

<http://www.eatright.org/nfs/>

Shape Up American

<http://www.shapeup.org>

Obesityhelp.com

A resource for patients to learn more about bariatric surgery. This website provides a forum for patients to describe their bariatric surgery experiences.

<http://www.obesityhelp.com/>

Bariatric Eating

A resource for healthy recipes, products and support.

<http://www.bariatriceating.com>

Bariware

The BariBowl® is made in the USA and is BPA Free, is microwave and dishwasher safe, holds up to 8 oz of food and is Portable. This is a great product to purchase when returning to work after surgery. They also sale a protein shake container called the Shake 'n Take Baricup. Check it out! <http://www.bariware.com>

Beyond Change—Information regarding obesity. A professionally printed newsletter providing information about obesity and obesity surgery. Each issue addresses medical and psychological issues surrounding obesity, nutrition, exercise and many other topics.
www.beyondchange-obesity.com

National Association for Weight Loss Surgery
<http://www.nawls.com/public/main.cfm>

Vertical Sleeve Talk

Forum to share discussions related to Gastric Sleeve surgeons, hospitals and patients.
<http://www.verticalsleevetalk.com>

Healthful Meal Planning

Chef Dave
www.chefdave.org

ChooseMyPlate
<http://www.choosemyplate.org>

Interactive Meal Planner
<http://hp2010.nhlbin.net/menuplanner/menu.cgi>

Dietary Approaches to Stop Hypertension (DASH)
<http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/>

Diabetes Meal Planning Tutorial
MEDLINEPlus
<http://www.nlm.nih.gov/medlineplus/tutorials/diabetesmealplanning/htm/index.htm>

Cooking with Google
Allows you to provide a list of ingredient (what's in the fridge?) and get back a list of recipes that Google finds for you. Vegetarian, diabetic and gluten-free options available.
http://www.researchbuzz.org/r/?page_id=28

Trackers (on-line) and Smart phone Apps

SparkPeople
Tracks calories, exercise and provides healthy recipes
www.sparkpeople.com

My Fitness Pal (smart phone app)
Lose It! (smart phone app)
Fooducate (smart phone app)* provides additional nutritional information about products

American Dietetic Association (ADA) publications

ADA Cooking Healthy Across America

<http://www.eatright.org/Shop/Product.aspx?id=4947>

ADA 365 Days of Healthy Living

<http://www.eatright.org/shop/product.aspx?id=5048>

Good Nutrition Reading List

<http://www.eatright.org/shop/product.aspx?id=4863>

Bariatric Vitamin and Mineral Supplement Companies

Bariatric Advantage

www.bariatricadvantage.com

Bariatric Support- Basic Essentials

www.twinlab.com or Sprouts

Opurity

<http://www.opurity.com>

Celebrate

<http://www.celebratevitamins.com>

Recommended Readings

Mood & Nutrition

Adrenal Fatigue – James Wilson

The Thyroid Solution - Ridha Arem

Food & Mood - Elizabeth Somer

Sugar Blues – William Duffy

The Anti-Aging Zone - Barry Sears

Your Body's Many Cries for Water - F. Batmanghelidj

General Wellbeing

When Food is Love – Geneen Roth

I'm Still Hungry – Carnie Wilson & Cindy Pearlman

Breathe! You Are Alive - Thich Nhat Hanh

Wherever You Go, There You Are – Jon Kabat-Zinn

Adult Children of Alcoholics - Janet Geringer Woititz

The 5 Love Languages - Gary Chapman

Anger - Thich Nhat Hanh

The Four Agreements - Don Miguel Ruiz

The Tao of Pooh - Benjamin Hoff

Power vs. Force – David Hawkins

The Tao of Physics – Fritjof Capra

Bariatric Cookbooks

Title	Author	Available at
90 Ways to Ditch Your Diet	Chef David Fouts	amazon.com
Before & After. Living & Eating Well After Weight Loss Surgery	Susan Maria Leach	bariatriceating.com
Cook Wise with Chef Dave	Chef David Fouts	amazon.com
Cooking for Weight Loss Surgery Patients	Dick Stucki	amazon.com
Culinary Classics: Essentials of Cooking for the Gastric sleeve Patient	Chef David Fouts	amazon.com
Eating Well After Weight Loss Surgery	Patt Levine	amazon.com
Extraordinary Taste: A Festive Guide for Life After Weight Loss Surgery	Shannon Owens-Malett, RD	bariatricadvantage.com
Hungry Girl 1-2-3	Lisa Lillien	amazon.com
Recipes for Life After Weight Loss Surgery	Margaret M. Furtado, RD	amazon.com
Shakin' It Up	Chef David Fouts	amazon.com
Smooth Foods	Chef David Fouts	amazon.com
Soft Foods	Chef David Fouts	amazon.com
The Complete Idiots Guide to Eating Well After Weight Loss Surgery	Margaret Furtado, RD	amazon.com
The Everything Post Weight Loss Surgery Cookbook	Jennifer Heisler	amazon.com
The Volumetrics Eating Plan	Barbara Rolls, Ph.D	amazon.com
Weight Loss Surgery Cookbook for Dummies	Brian K Davidson, David Fouts	amazon.com bariatricadvantage.com

Glossary

Medical Terms

Adhesion—A condition in which bodily tissues that are normally separate grow together. You may have adhesions in your abdomen if you have had previous abdominal surgery. Multiple adhesions may interfere with the surgeon’s ability to perform the gastric sleeve surgery laparoscopically.

Albumin—Protein found in blood plasma. We can monitor this blood level following your surgery to insure that you are consuming adequate amounts of protein.

Anastomosis—A sewn or stapled connection of two adjoining parts. For example: the connection created between the pouch and the roux limb, which attaches your pouch to your small intestine.

Arthralgia—Joint pain. Osteoarthritis can cause joint pain, which can be aggravated or caused by the pressure placed on joints from the stress of being overweight or obese.

Bariatric—The branch of medicine that deals with the causes, prevention, and treatment of obesity.

Blood Panels—Laboratory analysis of blood samples taken from a patient that can help detect and diagnosis blood abnormalities. This will be monitored preoperatively and routinely postoperatively to ensure your optimal health and nutrition.

Comorbidity—Comorbid conditions are those which occur at the same time as another medical problem, often as a result of the initial disorder. Comorbidities associated with morbid obesity include type II diabetes, hypertension, sleep apnea, shortness of breath, asthma, joint pain, high cholesterol and depression. Many of these disorders will improve or even resolve as a result of surgery and subsequent weight loss.

Diabetes—A disease associated with the absence or reduced levels of insulin, a hormone essential for the transport of glucose to cells. In type I diabetes (or insulin dependent diabetes), there is a failure of the body to produce insulin. In type II diabetes (or non-insulin dependent) an insulin resistance occurs as the amount of insulin produced is “inadequate” for the amount of glucose that is taken in. Type II diabetes is a common co-morbidity associated with obesity. This condition resolves 95% of the time following gastric sleeve surgery as a patient’s calorie intake is greatly reduced.

Diuretic—Any substance that tends to decrease water percentage in the body. A diuretic can be a medication or other substance such as caffeine. Diuretics are often given to help decrease high blood pressure. Caffeine should be avoided following gastric sleeve surgery as it can lead to dehydration.

Duodenum—The beginning portion of the small intestine, starting at the lower end of the stomach and extending to the jejunum. This is the portion of the intestine that normally absorbs calcium folate and iron. The duodenum is bypassed following gastric sleeve surgery.

Gallbladder—The pear shaped organ that sits below the liver. Bile is concentrated and stored in the gallbladder. Rapid weight loss can cause formation of gallstones. However, there is no hard evidence that proves that removing the gallbladder at the time of gastric sleeve is beneficial, as many patients will never experience gallbladder disease following surgery.

Gastroenterologist—The branch of medicine dealing with the study of disorders affecting the stomach, intestines, and associated organs. You may be referred to a gastroenterologist if there is suspicion that you may have a stricture or an ulcer.

Hypertension—Hypertension occurs when the blood flows through the vessels at a greater than normal force. High blood pressure strains the heart, harms the arteries, and increases the risk of heart attack, stroke, and kidney problems. It is one of the more serious co-morbidities seen in the morbidly obese patients. It often resolves or improves significantly following gastric sleeve surgery.

Ketone—A breakdown product of fat that accumulates in the blood as a result of inadequate insulin or inadequate calorie intake. When the body does not have the help of insulin, the ketones build up in the blood and then “spill” over into the urine so that the body can get rid of them. The body can also rid itself of one type of ketone, called acetone, through the lungs. This gives the breath a fruity odor.

Ketosis—is a stage of metabolism occurring when the liver converts fat into fatty acids and ketone bodies which can be used by the body for energy.

Laparoscopic—A surgical procedure that is performed using a laparoscope—a thin fiber optic scope introduced into a body cavity for diagnostic and surgical purposes. The laparoscopic approach is used frequently and successfully for the Roux-En-Y gastric sleeve. Patients benefit from lower incidence of wound infection, decreased postoperative pain, shortened hospital stay, and faster recovery.

Leak—The passage of gastrointestinal contents into the abdominal cavity. This can be a complication following gastric sleeve surgery. It is most likely to occur along a staple line or anywhere where the bowel has been sewn together. Medical literature reports that leak occurs in approximately 3% of the Roux-En-Y gastric sleeve population. If we are suspicious that you have a leak postoperatively, we may take you back to surgery. Sometimes, however, a leak can be resolved fairly easily without major intervention, but it can also lead to a prolonged hospital stay and recovery.

National Institutes of Health (NIH)—A federal focal point for medical research in the US. The goal of the NIH is to acquire new knowledge to help prevent, detect, diagnose, and treat disease and disability. The NIH developed the Consensus Panel that set the guidelines for patient selection for gastric sleeve surgery.

Nausea—A feeling of sickness in the stomach characterized by an urge to vomit. Nausea is one of the number one complaints experienced by patients in the early postoperative time period following the gastric sleeve surgery. It does resolve with time.

Paniclectomy—Surgical removal of a “pannus” (excess or hanging abdominal skin). Often times this is necessary following weight loss as the hanging skin can cause back pain, imbalance and/or skin irritation. This procedure is performed by a plastic surgeon.

Pulmonary embolism (PE)—A PE is the passage of a blood clot, originating in large veins, into the pulmonary arteries, the major blood vessels supplying oxygen-depleted blood to the lungs. A clot may form in an extremity (leg) that travels through the blood supply and becomes lodged in the lung. This can be a complication following any surgery, including gastric sleeve surgery. It occurs in approximately 1-2% of the Roux-En-Y gastric sleeve population. Special measures are implemented in order to avoid this complication, such as early ambulation, administration of blood thinner medications, and the use of anti-embolism stockings that will be worn during surgery and at times of rest.

Sleep Apnea—This is a disorder where an individual repeatedly stops breathing during sleep. These episodes of not breathing may be so brief that the individual never wakes, but experiences daytime sleepiness. Often the individual will snore. This is a comorbidity that is often seen in obese patients. Sleep apnea is very serious and can lead to other illnesses such as pulmonary hypertension and heart complications. It generally improves or even resolves following gastric sleeve surgery.

Stoma—An opening such as the connection between the pouch and roux limb. See anastomosis.

Support group—The bariatric support group meets for two hours on the third Wednesday of each month. The first hour is a presentation about some aspect of life following bariatric surgery. The following hour is discussion. Patients find attending support group to be very helpful and those who attend regularly tend to have positive outcomes.

TMAO (Trimethylamine N-Oxide)— Recently discovered highly toxic compounds to your cardiovascular system which accelerate cardiovascular disease and heart attacks. These compounds are produced by your intestinal bacteria only when digesting animal proteins found in meats, eggs, milk, yogurt, cheese (and also compounds such as carnitine found in many energy drinks).

Insurance/Billing Terms

Coinsurance—A provision stating that the insured and the insurer will share all losses covered by the policy in a proportion agreed upon in advance (i.e., 80-20 would mean that the insurer would pay 80% and the insured would pay 20%).

Co-pay—A specific dollar amount you must pay for healthcare services at each visit. Not everyone has a co-pay, as some people have coinsurance (see coinsurance), and some people have both.

Exclusion—This is a term insurance companies use in some of their policies when they specifically will not pay for a surgery, despite it being medically necessary. Unfortunately, bariatric surgery is an exclusion in some policies.

Medically necessary—A condition that requires treatment and could adversely affect the patient’s condition if it were omitted. Medical necessity must be proved in order to get authorization by insurance companies. Note that not all insurance companies will grant approval even if your condition warrants it (see exclusion).

Pre-admission authorization—We get in touch with your insurance company after your initial consultation and based upon their criteria we compile the documents needed to receive authorization. Authorization is needed prior to your surgery date. This process usually takes about 4-6 weeks.

Pre-existing condition—A physical condition that existed prior to the effective date of a policy. A few health insurance policies do not cover these conditions until a stated period has elapsed. If you have had “credible coverage” (12 months of solid insurance) prior to the effective date of your new policy, you can usually get around this clause.