

UTAH VALLEY SURGICAL WEIGHT LOSS PROGRAM

A LIFESTYLE GUIDE



Intermountain[®]
Utah Valley Surgical
Weight Loss Program

DEAR PATIENT,

Thank you for selecting the Utah Valley Surgical Weight Loss Program as your long-term weight loss health partner. Inside this booklet you'll find all the information you will need prior to your surgery, as well as information regarding post-operative lifestyle adjustments.

We understand the relationship you have with your surgeon and primary care physician is important for your long-term success. We plan to communicate your progress with your primary care physician so we can all work together toward your good health. Know that we are happy to answer any questions you may have. We want you to be proactive and responsible for your health and encourage you to participate in any educational opportunities that present themselves. Education is a key component to continued success.

A great way to share your progress and personal experiences is by attending support groups. These groups serve as a forum where you can receive suggestions and encouragement in areas where you may be experiencing difficulty, as well as share your insights and experiences with others. This participation will help you solidify your lifestyle changes—turning what are now conscious decisions into consistent habits. Our online Facebook support group Healthy Strides is a great way to stay connected even when you live too far away to attend support group often. Ask about how to join. Studies have shown patients who participate in support groups lose more weight and keep it off better. Take advantage of this opportunity and encourage others to do the same.

We wish you the best as you embark on this adventure. Please remember we are always here and willing to help. Surgery is the tool, but your dedication is the key to finding a new *weigh* of life!

Sincerely,

Utah Valley Surgical Weight Loss Program



PRE-SURGERY



BARIATRIC SURGERY PRE-OPERATIVE RECOMMENDATIONS FOR HIGH-PROTEIN LIQUID DIET

OPTIONS FOR LIQUID DIET:

BEVERAGE	AMOUNT	CALORIES	PROTEIN (g)
Slim-Fast High Protein Shake	6 cans/day	1200 calories/day (190-200 cal/can)	15 grams/can, 90 grams/6 cans
Ensure High Protein	5 cans/day	1140 calories/day (228 cal/can)	12 grams/can, 60 grams/5 cans
Equate Brand Weight Loss Shakes	6 cans/day	1350 calories/day (220 cal/can)	10 grams/can, 60 grams 5/cans
Boost High Protein	5 cans/day	1200 calories/day (240 cal/can)	15 grams/can, 75 grams/day
Atkins Advantage	7 cans/day	1160 calories/day (160 cal/can)	15 grams/can 105 grams/day

**Items are lactose free*

TIPS

- The goals for the pre-op diet are 900-1200 calories/day and 70-100 grams of protein/day.
- You may want to try more than one brand and/or flavor to increase the variety in your pre-operative diet.
- It is also good to put in the blender with ice and blend it into a shake consistency.
- Non-fat dry milk powder can be added to increase protein: 2 Tbsp provides additional 45 calories and 4.5 grams of protein.

Patients need to be on the High-Protein Liquid diet for 2-3 weeks prior to surgery depending on your BMI. The doctor will let you know how long you will be on the liquid diet.

QUESTIONS

If you have any questions, please feel free to call **801.357.2294**.

YOUR ROLE

The information provided in this booklet has been planned around the nutritional, psychological, and fitness lifestyle factors that will assist you in long-term success.

However, the consequences of not following them could result in:

- Slower weight loss
- Failure to maintain weight loss
- Vitamin and mineral deficiencies
- Weight gain

YOU PLAY A CRITICAL ROLE IN THE LONG-TERM SUCCESS OF SURGERY

To be successful you will need to:

- Commit to improving your health
- Discuss your health history with your surgeon
- Learn all you can about the surgery before making your decision and discuss any questions and concerns with your physician
- Follow all instructions on preparing for surgery
- Commit to following all of the Bariatric Surgery Guide instructions on nutrition, activity, and other care after surgery (given to you by your surgeon, nurse coordinator, and dietitian before surgery)
- Both you and the bariatric team must commit to honesty, responsibility, and cooperation

WHAT IS OBESITY?

Obesity results from the excessive accumulation of fat that exceeds the body's skeletal and physical standards.

According to the National Institutes of Health (NIH), an increase of 20 percent or more above your "ideal body weight" is the point at which excess weight becomes a health risk.

Today, approximately two-thirds of the adult population suffers from weight-related health conditions. Obesity increases the likelihood of certain diseases and other related health problems.

An individual weighting 100 pounds over their ideal body weight (IBW), or having a body mass index (BMI) of 40 or higher is considered morbidly obese and is qualified for consideration of weight loss surgery. The American Society for Metabolic and Bariatric Surgery states that morbid obesity is a serious disease and must be treated as such.

HOW TO MEASURE OBESITY

Body Mass Index (BMI)

Obesity is most commonly calculated using body mass index (BMI). BMI is calculated by dividing a person's weight in kilograms by his or her height in square meters. However, there are many online calculators available. Just search "BMI calculator" or go to our website at uvweightloss.org to access a calculator and find your BMI.

Please do not hesitate to contact your physician or nursing staff if you have any questions or concerns along the way. We are here to support you and help you be successful.

YOUR ROLE



Body Mass Index (BMI) 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	Body Weight (pounds)																																			
4'10"	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
4'11"	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
5'	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
5'1"	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
5'2"	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
5'3"	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
5'4"	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
5'5"	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
5'6"	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
5'7"	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
5'8"	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
5'9"	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
5'10"	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
5'11"	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
6'	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
6'1"	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
6'2"	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
6'3"	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
6'4"	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

To use the BMI table, find your height in the left-hand column, and then move across to your weight. The number at the top of the column is your BMI.

You can also calculate your BMI using the formula below:

$$\text{BMI} = \left(\frac{\text{Weight in pounds}}{(\text{Height in inches}) \times (\text{Height in inches})} \right) \times 703$$

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RISK AND COMORBID CONDITIONS

Weight loss surgery can significantly decrease your chances of acquiring health problems related to obesity.

Dedicating yourself to effective treatment is necessary for better health. Finding that treatment begins with learning how weight affects you.

The most prevalent morbid obesity-related diseases

- High blood pressure
- High cholesterol
- Diabetes
- Heart disease
- Stroke
- Gallbladder disease
- Osteoarthritis
- Sleep apnea and respiratory problems
- Some cancers (endometrial, breast, and colon)
- Gastro Esophageal Reflux Disease
- Psychological depression

WEIGHT LOSS SURGERY

Surgery to promote weight loss by restricting food intake or interrupting digestive processes is an option for clinically severe obese people. If you have health conditions related to obesity, bariatric surgery could be right for you. However, successful results depend mainly on motivation and close adherence to program guidelines.

SURGERY IS ONLY A TOOL

If you choose to have bariatric surgery, your choice should be based on discussions between you and your doctor, including goals and strategy for long-term care.

For nearly all people with clinically severe obesity bariatric surgery is the standard of care. When other medically supervised methods have failed, bariatric surgery offers the best option for long-term weight control for those with clinically severe obesity.

Gastric Bypass

One of the most popular and successful surgical approaches is the Roux-en-Y gastric-bypass. Gastric-bypass surgery is a time-tested operation. Sleeve Gastrectomy is quickly becoming very popular and has shown weight loss potential very close to that of the Gastric Bypass. Lap-Band[®] demonstrates much slower and lower percentage of body weight loss. In a 1991 consensus panel convened by the National Institute of Health (NIH), bariatric surgery was designated as the only effective means of inducing significant long-term weight loss for the vast majority of patients with clinically severe obesity.

WEIGHT LOSS SURGERY QUESTIONS AND ANSWERS

Can I take Over-the-Counter pain killers after surgery?

Non-steroidal anti-inflammatory drugs (NSAIDS) such as ibuprofen, Aleve, Celebrex and many arthritis drugs may not be taken after Roux-en-Y Gastric Bypass surgery. Under the guidance of your surgeon, these drugs may be used occasionally after Sleeve Gastrectomy or Lap-Band[®].

Can I smoke after surgery?

Smoking after weight-loss surgery may cause ulcers in addition to other known health risks. If you use tobacco you will be asked to quit for at least three months prior to surgery.

Can weight-loss surgery be reversed?

Though gastric bypass can be reversed if medically necessary, it is fairly difficult and patients should carefully consider all of the bariatric surgery risks and benefits before electing to have this surgery. Lap-Band surgery can be reversed with difficulty; however the Sleeve Gastrectomy is not reversible.

HEALTH BENEFITS

Weight Loss Surgery is a Serious Surgery

Surgery is safe and effective when the benefits outweigh the risk of weight and weight gain. Surgery should be viewed first and foremost as a method for alleviating this debilitating, chronic disease. In most cases, the minimum qualification for consideration as a candidate for the procedure

is 100 pounds above ideal body weight, with a BMI of 40 or greater. Patients need to demonstrate serious motivation, and a clear understanding of the extensive dietary, exercise and medical guidelines. These guidelines must be followed for the remainder of their lives after having weight loss surgery.

RESULTS OF WEIGHT LOSS SURGERY

The National Institutes of Health statement from 1991 states: *"Weight loss surgery is the only way to obtain consistent, permanent weight loss in morbidly obese individuals."*

The benefits of weight loss surgery are striking and undeniable:

An Improvement of Obesity-Related Conditions

Studies show bariatric surgery can effectively improve and resolve many weight-related health conditions.

Improvements in Quality of Life

After bariatric surgery, your overall quality of life is

improved. Many weight-loss surgery patients express elation on being able to do things that may seem trivial to the non-obese person; such as going to the store, playing with their children, getting in and out of a car, riding a roller coaster, shopping for regular-sized clothes, and so on. The list is endless.

Effectively Maintaining Long-Term Weight Loss

Most weight-loss surgery patients will lose about 60 to 80 percent of their excess body weight with the bariatric surgery procedures. Substantial weight loss occurs 18 to 24 months after surgery. Some weight regain is normal, and can be expected two to five years after surgery.

RESOLUTION OF COMORBIDITIES

N=104 1 year post-op	# Prior to surgery	% Worse	% No Change	% Improved	% Resolved
Osteoarthritis	64	2	10	47	41
Hypercholesteremia	62	0	4	33	63
GERD	58	0	4	24	72
Hypertension	57	0	12	18	70
Sleep Apnea	44	2	5	19	74
Hypertriglyceridemia	43	0	14	29	57
Peripheral Edema	31	0	4	55	41
Stress Incontinence	18	6	11	39	44
Asthma	18	6	12	69	13
Diabetes	18	0	0	18	82
Average		1.6%	7.8%	35.1%	55.7%

90.8% Improved or Resolved

SURGICAL PROCEDURES

For many people who have spent years suffering from morbid obesity, surgery sounds like a lifesaver. After surgery, the amount of food you eat is less than what you could eat pre-surgery. At the same time, a feeling of satisfaction, or satiety, is achieved with these small quantities of food. The combination of restrictive and metabolic

mechanisms allow for significant weight loss. Although results of the operations using these procedures are more predictable and manageable, side effects persist for some patients. It is important to be prepared for all aspects of the treatment and to be aware of the risks involved.

TWO WAYS SURGICAL PROCEDURES PROMOTE WEIGHT LOSS	
Restrictive	Gastric Bypass, Sleeve Gastrectomy and Gastric Banding are all restrictive surgeries that limit the amount of food the stomach can hold.
Metabolic	Gastric Bypass also has a metabolic benefit, because the surgery actually alters the way our body processes food. There is no protein, carbohydrate or fat malabsorption. Sleeve Gastrectomy also has some metabolic benefit, but it is less and slower than the Roux-en Y Gastric Bypass.

Roux-en-Y Gastric Bypass surgery is the most frequently performed bariatric procedure in the United States. It's also considered the "Gold Standard" by which all bariatric surgeries are judged. During the gastric bypass procedure, the surgeon creates a small stomach pouch to restrict food intake (15-20 cc) which is about the size of your thumb. Next, a Y-shaped section of the small intestine is attached to the pouch to allow food to bypass the majority of the stomach, the duodenum (the first segment of the small intestine), and the first portion of the jejunum (the second segment of the small intestine). The small pouch releases food slowly, creating the sensation of fullness.

This digestive process allows fewer calories and nutrients to be absorbed by the body. If you eat a large meal or foods high in fat and/or sugar, you may experience a painful bout of dumping syndrome. This physical reaction provides a deterrent to large meals and unhealthy foods.

The complications of Gastric Bypass are much less severe than those of earlier bypass procedures. The most serious early complications include leaks and gastric dilatation. Complications which occur later on after the incision is healed include: narrowing of the stoma, vomiting, internal hernias, anemia (most common in women), vitamin and mineral deficiency and dumping.

Vitamin and mineral supplements and high protein intake are required for life to prevent the problem of nutritional deficiencies. Supplements are ordered on an as-needed-basis so regular follow-up is essential.

SURGICAL PROCEDURES

In a sleeve gastrectomy the stomach is turned into a long tube, thus limiting the amount of food which is able to be eaten comfortably. The majority of patients report feeling full and satisfied after a small amount of food, and not feeling excessively hungry most of the time. Early risks include staple line leak, nausea, and vomiting. Later risks can be narrowing, vitamin and mineral deficiency, or weight regain.

With a Lap Band there is no cutting. Since there is no cutting, stapling, or stomach rerouting involved, it's considered the least traumatic of all weight loss surgeries. This procedure is done on an outpatient or same day basis. A silicone band is placed around the upper part of the stomach; this band actually slows down the food making the entire digestion process slower. The slower process makes you feel full or satisfied with a smaller amount of food, so you eat less and therefore lose weight. The most

frequently occurring complications associated with the gastric banding include gastric prolapse, stoma obstruction, esophageal and gastric pouch dilatation, erosion, and access port problems. This surgery causes slower weight loss than gastric bypass, generally 1 to 2 pounds per week.

The laparoscopic approach to the surgery also offers the advantages of reduced post-operative pain, shortened hospital stay and quicker recovery. If, for any reason, the LAP-BAND® System needs to be removed, the stomach generally returns to its original form. The sleeve procedure is not reversible.

The immediate result of bariatric surgery is restriction of food intake due to the smaller stomach size; this assists the initial weight loss. Because of the greatly diminished amount of food, patients are at greater risk for nutritional deficiencies.

If much more than a quarter cup of food is eaten at once, the patient will feel uncomfortable and may vomit.

COPING WITH FEAR OF SURGERY AND PHYSICAL CHANGE

Weight loss surgery reshapes your stomach and may change the digestive process of your body for life. It's a major surgery, performed while the patient is under general anesthesia. For many people, the idea of "rebuilding" their stomach sounds good—a small stomach that can help you control how much you eat sounds like a great idea too.

For other people, the idea of surgery and anesthesia can cause anxiety and fear. The fear of surgery is not irrational or abnormal; in fact, it's very common. The potential for complications can be a little frightening. This is perfectly normal. Before letting these fears prevent you from having this surgery, you may want to examine them. It can be quite helpful to attend a support group to find out how other patients handle their fears for surgery. You can also speak with a psychologist who will be happy to help you work through your fears and concerns.

Weight Loss Surgery is Only a Tool

When utilized correctly, weight loss surgery is an effective means of losing weight and keeping it off. Even after surgery you need to be aware of what you are eating, drinking, as well as exercise to maintain long-term weight loss. By tracking progress with frequent weighing and measuring, it will help increase the awareness of your actual success.

As a tool, bariatric surgery has impressive long-term weight loss results and benefits patients with the reversal or improvement of co-morbid conditions. However, the achievement is not completely due to surgery. The medical community views morbid obesity as a lifelong disease. Individuals suffering from morbid obesity generally are genetically predisposed to the condition, and they face environmental, social, and psychological factors that can increase the likelihood of morbid obesity. Gastric Bypass surgery has a history of helping patients effectively manage their disease.

SURGICAL PROCEDURES

The actual weight a patient will lose after the procedure is dependent on several factors. These include:

- Patient's age
- Weight before surgery
- Ability to exercise
- Surgical procedure
- Overall condition of patient's health
- Commitment to maintaining dietary guidelines and other follow-up care
- Motivation of patient and cooperation of family, friends, and associates

Clinical studies show, following surgery, most patients lose weight rapidly and continue to do so until 18-24 months after the procedure. Patients may lose 30-50 percent of their excess weight in their first six months, and 77 percent of excess weight as early as 12 months after surgery. Another study showed patients can maintain 50 to 60 percent loss of excess weight 10 to 14 years after surgery. Patients with higher initial BMI's tend to lose more total weight. Patients with lower initial BMI's will lose a great percentage of their excess weight and will more likely come closer to their ideal body weight.

PREPARING FOR SURGERY

Bariatric surgery is like other major surgeries. There is no way to eliminate the possible complications and risks of weight loss surgery. You can best prepare by knowing the benefits and risks of surgery and by closely following your doctor's instructions. With a little planning and effort on your part, you may be able to decrease the likelihood that complications will occur. You may have a few weeks before you undergo surgery. Utilize this time to prepare your body physically as well as mentally. It is essential your family, friends, and extended support system be prepared as well.

If You Smoke, Quit

Stop smoking for 3 months prior to surgery. You can significantly reduce post-operative risk of pulmonary complications and infections by quitting smoking before surgery, and not starting again. Avoid second-hand smoke. Smokers who quit smoking for surgery and then resume again report more frequent episodes of vomiting, narrowing of the anastomosis, and increased scar tissue.

To Mentally Prepare Yourself:

- Understand the surgical process and what to expect afterward.
- Keep in mind that you'll never be able to eat the way you did before, and that you'll have to watch the way you eat the rest of your life.
- Talk to people who have had bariatric surgery. Attend a support group before surgery.
- Start a journal, include pictures. Record how you feel now, the challenges you face, and the things you hope to be able to do after bariatric surgery.
- Get a letter of support from your family. It helps to know you have people behind you, waiting to help.

Start Lifestyle Changes Now

Begin taking vitamins and calcium supplements, and start regular physical activity. These lifestyle changes contribute to your overall health and can be embraced before surgery, with your doctor's approval, to prepare you for the changes ahead. It is important to remember to view weight loss surgery as a tool that can help transform your health.

SURGERY



SURGERY PREP

PLAN AHEAD

Think about the items you will need after surgery for when you return home. Planning ahead will help reduce stress and help you have a better transition to being home.

- Look at the nutrition section in this book and stock up on some liquids you can eat for the first 2 weeks after surgery. Remember, you will not be eating much.
- Make sure you have the necessary measuring cups and spoons to assist you in eating the appropriate amounts of food. Make sure you measure all foods before you eat them. Food should fit loosely in measuring devices; take note to not over-pack it into the measuring cup. Overeating may cause nausea, vomiting, blockage, and discomfort.
- Eating on small plates and with small forks and spoons will help remind you to take smaller bites and eat the appropriate amounts.
- Sometimes, bending after surgery, especially if you had an open surgical approach, can be difficult. Long-handled shower attachments can assist you in proper hygiene during the healing period.
- It's advisable to have someone stay with you for the first few days following surgery, particularly while you are on narcotic pain medicine.

WHAT TO TAKE TO THE HOSPITAL

Pack light, you will not need much at the hospital.

- Slippers and a robe
- Personal hygiene items will be provided, but you may bring your own
- The hospital will provide a gown that they prefer you wear because of easy accessibility for IV therapy
- Underwear if desired (you may not be able to wear them)
- Chapstick
- Loose-fitting clothing to wear home (sweats or nightdress that does not bind around your waist)
- Leave money, jewelry, and other valuables at home
- Leave contact lenses at home, or bring a case
- Bring current list of medications you are taking to the hospital, but leave **all** your medications at home (including over-the-counter medications)
- If you use CPAP, bring your machine to the hospital. You may or may not need it.

Scheduling Your Procedure

The pre-screen nurses will contact you a few days before your scheduled procedure. A link to the site where you will enter your personal history, including medications, will be provided. They will have you come in to the hospital where labs will be drawn in preparation for your surgery. You will also be advised which medications to take the morning of your surgery. Be sure to **follow their directions exactly or your surgery may be canceled.**

SURGERY PREP

THE DAY BEFORE SURGERY

- The hospital will call you the afternoon before your scheduled day of surgery to tell you what time to be there. If your surgery is on Monday, they will call Friday evening.
- Do not eat or drink anything after 12 o'clock (midnight).
- Do not chew gum or suck on lozenges, etc. If you eat or drink anything after midnight, except for a small sip of water to take necessary medications, your surgery may be postponed (taking medication by inhaler or nasal spray is fine).
- Please be accessible by phone at all times on the day of your surgery. In some circumstances, your surgery time may be either moved up or delayed. In such a case, we need to be able to contact you immediately. Also, for this reason, please do not make any other major plans for your day of surgery.

Please feel free to ask any questions or voice any concerns to the clinic and hospital staff. We understand your fears and apprehensions when facing surgery and we are all here to help you succeed and have the best experience possible.

THE MORNING OF SURGERY

When you arrive at the hospital, you will be admitted to the same day surgery area. The nursing staff will manage the paperwork, get your weight, vital signs, and perform blood draws as needed. An intravenous line (IV) will be started in order to give you fluids and antibiotics. Special compression devices will be applied to your legs and feet to help prevent blood clots.

You will meet with your anesthesiologist shortly before your surgery. This is a good time for you to ask questions and express any concerns about anesthesia.

When you go to the operating room, your family, or those who have accompanied you, will go to the surgery waiting area. You will be taken to the operating room and given some medication to put you to sleep.

The laparoscopic bariatric surgery requires five or six small incisions. The surgery is then performed through these incisions using a camera and long, narrow instruments. Significant bleeding is unusual. Our philosophy is to use blood products only when absolutely necessary. With a Gastric Bypass you will have a tube that comes out of the left side of your abdomen, which is attached to a drain. This drain will be left in place for a week or so after discharge from the hospital and you will be instructed on how to empty it prior to discharge.

Gastric Bypass surgery takes approximately two to three hours. Sleeve Gastrectomy takes approximately 1.5 hours and the Lap-Band® takes about one hour. A liaison nurse will be in contact with your family to inform them of the surgery process. Following the surgery you will be moved to the recovery room until you are awake and your vital signs are stable. You will then be moved to your patient room. The surgeon will go to the surgery waiting area to talk with your family after the surgery is over.

HOSPITAL STAY

PAIN MANAGEMENT

Generally, you will be given pain medicine through your IV. When your pain begins to increase, ask your nurse to bring you something for pain. She will check to see if enough time has passed for you to have another dose of medicine. If you need to increase the amount of pain medicine, the nurse can contact your surgeon.

On some occasions, the surgeon may use a Patient Controlled Analgesia (PCA) pump, which is placed in your IV tubing after surgery. The pain pump allows you to receive frequent, small doses of pain medicine through the IV. You merely push a button to deliver a predetermined amount of pain medicine into the IV tubing. This allows you to control the amount of pain medicine you receive.

Once you are able to tolerate fluids, you will be placed on a liquid pain medication to help control the pain. Remember, you heal faster when your pain is under control. You are able to get up and walk sooner, take deeper breaths and feel better.

ACTIVITY

Walking is started the afternoon of surgery to prevent Deep Vein Thrombosis (DVTs or blood clots). We will encourage you to walk at least 4 times each day (more if you can) while you are in the hospital. The more active you are, the less risk you have for complications.

BREATHING EXERCISES

The Incentive Spirometer (a breathing apparatus to assist you in taking deep breaths), should be used after surgery. You will be instructed to take 10 deep breaths into the Incentive Spirometer every hour you are awake to prevent breathing problems and lung infections.

Studies

Gastric Bypass patients will have testing done during surgery for leaks and may possibly have a swallow study done the next day as well. Gastric

Sleeve patients will have testing for leaks done during surgery. For Lap-Band® patients, an X-ray of your abdomen to determine band placement will be done. Following a normal study, a clear liquid diet is started.

DISCHARGE

PROCEDURE	AVG STAY
Lap-Band®	0-1 days
Gastric Sleeve	~1-2 days
Gastric Bypass Roux-en Y laparoscopic bariatric surgery	~1-2 days
Open bariatric surgery	~3-4 days

If You Have Sleep Apnea

You may or may not need your CPAP or BIPAP machine after surgery. After surgery, you may sleep with the head of the bed raised, use wedge pillows, or sleep in a recliner. You may be sent home on oxygen for a period of time.

Recovery

At home, we encourage you to walk frequently. Avoid lifting more than 20 pounds and straining for stool for 4 weeks. Full activity can generally be anticipated at 4-6 weeks. Walking, jogging easily, and taking stairs are all OK. Walk at least 4 times daily as far as you can. Wear an abdominal binder for comfort, if needed. If you have laparoscopic surgery, you may resume normal non-strenuous activity as soon as you are up to it. Your doctor will guide you on increasing your activity level. Two weeks after your discharge from the hospital, we need to see you in the office. Please feel free to call any time you have any questions or concerns.

Going Back to Work

Returning to work is dependent on many factors. Your ability to resume pre-surgery levels of activity will vary according to your physical condition, the nature of activity, and the type of weight loss surgery you had. Typically, patients may be able to return to work in 1-3 weeks, after a discussion with the surgeon.

Fluid Guidelines

The initial goal is 32-64 ounces every day. 32 ounces is equal to 1 liter, 64 ounces is equal to 2 liters.

Eventually, the goal will be a minimum of 64 ounces, but that will be several weeks away

For now, work for 32 (minimum)-64 ounces. I want you to aim for 4-6 ounces sipped over an hour, **every hour while awake**.

When you are tolerating that well (not having nausea, vomiting, or pain) you can start to increase the amount.

So instead of 4-6 ounces an hour, try for 7-8 ounces an hour. As you begin an exercise program try to increase water intake even more.

TIME	AMOUNT: GOAL OF 4-6 OZ/HR
7:00 am	
8:00 am	
9:00 am	
10:00 am	
11:00 am	
12:00 pm	
1:00 pm	
2:00 pm	
3:00 pm	
4:00 pm	
5:00 pm	
6:00 pm	
7:00 pm	
8:00 pm	
9:00 pm	
10:00 pm	

POST-OPERATIVE COMPLICATIONS

Immediately after going home from the hospital, there is a small chance you could have a post-operative complication. This could be any of the following: bleeding, blood clots, leaks from the anastomosis, strictures, infection, or dehydration. **You need to call the surgeon if you experience any of the following in the first two weeks after going home from the hospital:**

- Leg pain
- Bright red bleeding from incision
- Shortness of breath
- Fast or rapid heart rate (anything above 120 beats/min.)
- Fever
- Inability to keep any fluids or meals down
- Vomiting with every meal
- Unexplained pain

Dehydration

Dehydration is the most common early post-operative complication. It is very important that you are drinking as much as you can every day. The goal is minimum 64oz. a day. You will not reach this goal the first few weeks of surgery, but you do need to be sipping water all day long and increase the amount as tolerated.

Water should be the beverage of choice, but you can have calorie-free, caffeine-free, and carbonation-free drinks as well. Crystal Light would be an example of an accepted non-water beverage, but only occasional use is preferred.

Signs and symptoms of dehydration include thirst, dry lips, and dry mouth. As dehydration worsens, the signs and symptoms include very dry mouth, skin that doesn't bounce back quickly when pinched, and sunken eyes. These first stages of dehydration can be managed at home with **more water**.

If your signs and symptoms include all of the above mentioned symptoms and you are experiencing confusion, lethargy, rapid breathing or rapid pulse, discolored lips, or cold hands and feet, call your surgeon. This could be severe dehydration and may require IV fluids or possible re-admission to the hospital.

NUTRITION



DIETARY GUIDELINES

The goal with meals is to eat every 2-3 hours. Each meal can be up to ¼ cup, this is equal to 2 oz. in volume, not weight. If you are feeling full before the ¼ cup is eaten, stop when full. If the full ¼ cup is consumed and you are still hungry you need to be done eating. Never more than ¼ cup of food at each meal.

Make sure you are eating slowly. Each meal should take 20-30 minutes. Set a timer, it helps! Eating slowly helps you feel full and will help prevent dumping syndrome, nausea, and vomiting.

Meals up to 2 weeks post operative should be full liquids. Examples of appropriate foods are:

- Light yogurt
- Creamy soups that are strained, such as cream of mushroom/chicken (make with dry milk powder to increase protein content)
- Protein powders (note more than 20 grams protein per serving) mixed with skim or 1% milk
- Sugar-free Jello
- Sugar-free pudding
- Broths
- Low or non-fat cottage cheese blended until smooth. You can mix in powdered Crystal Light, taco flavoring, or ranch flavoring for variety.

You need to be eating high protein, low fat, no sugar (sugar free), full liquid foods until two weeks post operative.

At two weeks, when you see your doctor, we will talk about transitioning you to soft, moist proteins, such as canned tuna or chicken, deli meats, and soft-canned veggies. You will no longer need to do protein shakes at this point, unless instructed by your doctor.

TIME	1/4 CUP FULL LIQUID
7:00 am	
10:00 am	
1:00 pm	
4:00 pm	
7:00 pm	
10:00 pm	

NUTRITION GUIDELINES AFTER ROUX-EN-Y GASTRIC BYPASS OR SLEEVE GASTRECTOMY*

DIET STAGE	BEGIN	FLUIDS/FOOD	GUIDELINES
	Day of surgery	Nothing to eat or drink.	
STAGE 1	Post-op day 1 & 2	Clear liquids <ul style="list-style-type: none"> Noncarbonated No calories No sugar No caffeine Sip 2-3 oz. water an hour 	Post-operatively, patient will have a contrast swallow test for leaks; once tested and no leak present, start clear liquids, no straws.
STAGE 2	Approximately post-op day 3 (discharge diet) Begin supplementation: Chewable multivitamin with minerals 2x a day Chewable or liquid calcium citrate with Vitamin D	Clear liquids <ul style="list-style-type: none"> Variety of no-sugar liquids or artificially sweetened liquids Salty fluids are encouraged at home Solid liquids: sugar-free ice pops Plus full liquids <ul style="list-style-type: none"> ≤25g of carbohydrate per serving Protein-rich liquids (limit 20g protein/serving of added powders) Sip 3-4 oz. water per hour 	Patients should consume a minimum of 48-64 fluid ounces of total fluids per day: clear liquids and some full liquid Nonfat milk mixed with whey or soy protein powder (limit 20g protein per serving): <ul style="list-style-type: none"> Lactaid milk or soy milk mixed with soy protein powder Light yogurt, blended (no fruit chunks) Plain nonfat yogurt; Greek yogurt Strained creamy soups (cream of chicken and mushroom) Sugar-free pudding/Jello
STAGE 3	Approximately 2 weeks post-op	Increase clear liquids, including water. (Total liquid 48-64+ oz. per day and replace full liquids with soft, moist, diced, ground or pureed protein sources as tolerated) Eggs, deli meats, soft moist fish, added gravy, bouillon, light mayonnaise to moisten, cooked beans, hearty bean soups, cottage cheese, low-fat cheese, yogurt	Protein food choices are encouraged for 3-6 small meals a day; patients may be able to tolerate only a couple of tablespoons at each meal/snack. Chew foods thoroughly prior to swallowing (to applesauce consistency) Do not drink liquids with meals. Wait approximately 30 minutes after each meal before resuming fluids. Eat from a small plate and use small utensils to help control portions. Set utensils down between bites.
	Approximately 4 weeks post-op	Advance diet as tolerated; if protein foods tolerated, add well-cooked, soft vegetables. Always eat protein first.	Adequate hydration is essential and a priority for all patients during the rapid weight-loss phase.
	Approximately 5-6 weeks post-op until goal weight achieved	Continue to consume protein and vegetable at each meal; some people tolerate salads at 1 month post-op	Consume 60g protein per day, plus vegetables until weight goal is reached.
STAGE 4	When goal weight is reached and as hunger increases, and more foods are tolerated	Healthy, solid food diet	Vitamin and mineral supplementation daily Healthy, balanced diet consisting of adequate protein, vegetables, and small quantities of fruit and whole grains (when goal weight is reached). Eat from small plates and use small utensils to help control portions. Calorie needs based on height, weight and age.

*Adapted from the American Association of Clinical Endocrinologists (AACE), The Obesity Society (TOS) and American Society for Metabolic & Bariatric Surgery (ASMBS) Nutritional Guidelines

GENERAL NUTRITION GUIDELINES

LIQUIDS

You should continue to sip at least 4-6 ounces of liquids during a 5 to 15 minute time period. This amount of 4-6 ounces should total 48-64 ounces a day. If you feel full, or experience pain or nausea, stop sipping until the feeling passes.

Water is the ideal beverage choice. It can be especially appealing with a lemon, orange, or lime slice. Other liquids included in your food plan would be vegetable juices such as V-8, tomato, and carrot juice. Warm drinks like chicken and beef broth are also allowed. Juices are high in calories, can cause diarrhea, contribute to weight gain, and can induce dumping syndrome. For this reason, we recommend not drinking them.

You need to drink 48-64 ounces of water each day. It is essential for good health, proper weight loss, and to improve your energy level. You should not drink fluids during your meal or for 30 minutes before or after your meal.

Because your stomach size has drastically reduced, consistent fluid intake is vital to avoid dehydration. Always have recommended liquids with you and take small sips frequently, letting it remain in your mouth for a while before swallowing. If you experience any symptoms of dehydration such as dry skin, dry mouth, dark urine, or very little urine output, increase your liquid intake and contact your physician.

Carbonated beverages should be eliminated.

Carbonation in beverages causes belching and bloating, which may exert stress on your tiny stomach, resulting in dilation or enlargement. Successful weight loss and long-term maintenance is directly dependent upon the kinds of foods and beverages consumed. Since carbonated beverages offer no advantages and present significant potential disadvantages, they should be avoided.

Alcoholic beverages should also be avoided. Alcoholic beverages (including beer, wine, and liquor) are high in calories, often carbonated, and extremely hard on your stomach. Some over-the-counter medications, such as NyQuil and certain cough syrups, contain alcohol. Make sure you read over-the-counter medication labels in full and avoid taking any medications where alcohol is listed as an ingredient.

Caffeine is a known diuretic. Tannic acid is also found in caffeine-containing beverages and is known to cause ulcers in normal stomachs as well as the sensitive gastric pouch. Therefore, to maintain proper hydration and to decrease your risk of developing stomach ulcers, it is recommended that you avoid caffeine-containing beverages (i.e. coffee, tea, etc).

BEVERAGE SUGGESTIONS			
Water	Skim or 1% milk	Chicken broth	Carrot juice
Crystal Light	1% buttermilk	Beef broth	V-8 juice
Powerade Zero	Herbal teas	Tomato juice	

GENERAL NUTRITION GUIDELINES

FOOD

During the first 12 weeks, limit your meal portions to 2 ounces, or 4 tablespoons. You will need to eat 3 to 6 small meals each day consisting of **70% protein and 30% vegetable**. Because you need to chew your food until it is smooth in your mouth, it should take you approximately 20 to 30 minutes to eat each meal. If you have not finished eating a meal within 30 minutes, stop.

- Take 20 to 30 minutes to eat every meal.
- Do not skip meals or eat on the run. You may eat too quickly and forget to chew your food well. Your body needs food on a regular basis to maintain an appropriate blood sugar level.
- Use a small spoon to help you eat smaller bites and control the speed of your eating.
- Use a small plate.
- Learn to savor the flavor and texture of each bite of food.

PROTEIN

Your stomach can more easily digest moist meat that is sliced very thin. Therefore, we recommend the only meats eaten in the first 3-4 weeks are deli meats. Start with chicken or turkey, and add other deli meats as tolerated. You may also try canned chicken, turkey, and tuna during this time (canned in water only).

Protein helps maintain good health, aiding in healing and repair during your recovery. Protein gives you energy, helps you develop new cells, prevents muscle loss, and prevents hair loss. Meats provide iron, which is necessary for red blood cell production and to prevent anemia.

It is important for you to eat enough protein, as it must be replenished daily. The limited capacity of your stomach pouch makes it difficult to eat enough high protein food at any one time to fulfill this

need; this why it's important to eat protein-based foods at every meal. It's strongly recommended that you eat all of the protein items in your meal first, and then proceed to the vegetables. About 70 grams of protein a day during weight loss is recommended.

Protein Needs

- Your entire diet should consist of 70% protein and 30% vegetables. You must strictly adhere to this formula and make appropriate food choices during your weight loss phase.
- Eat protein-based meals 3 to 6 times daily.
- Add a protein/vegetable snack between meals only if you feel hungry, dizzy, tired, or weak.
- Non-milk based protein supplement drinks like Boost and Ensure should be used only when advised by your physician.

INCREASING PROTEIN IN YOUR DIET

- Think of meals in terms of which proteins and vegetables you can eat.
- Melt low-fat cheese on refried beans, meat, or any kind of vegetables.
- Eat an omelet, scrambled egg, slice of meat, or nonfat/low-sugar yogurt for breakfast.
- Mix nonfat cottage cheese with hard-cooked diced eggs, tuna, turkey, or chicken.
- Eat tuna or chicken salad, made with light mayonnaise, on a bed of lettuce.
- Add nonfat cottage cheese and small pieces of meat to tossed salad.
- Use legumes such as lentils, pintos, and kidney beans.
- A few nuts (no more than 4) on occasion.
- Add tofu to soups.
- Dry milk powder.

GENERAL NUTRITION GUIDELINES

PROTEIN SUGGESTIONS

Any meat or cheese is a protein and may be eaten.

***items are high fat**, contain 2-3 times the calories of low-fat options

Cod	Edam*	Trout	Venison
Eggs	Swiss*	Monterey Jack*	Canned turkey
Ham	String cheese	Skim milk	Yogurt (low sugar)
Pork	Cheddar*	Mussels	Deli meat (low fat)
Tofu	Ricotta	Lobster	Refried beans with cheese
Feta	Chicken	Canned chicken	Veal
Fish	Clams	Haddock	Beef jerky
Lamb	Salmon	Turkey	Red snapper
Beef	Muenster*	Crab	Halibut
Parmesan	Oysters	Scallops	Orange Roughy
Gouda*	Canned tuna	Catfish	Cottage cheese (nonfat)
Provolone*	Mozzarella	Shrimp	

VEGETABLES

Vegetables contain vitamins and minerals such as vitamins A and C, folic acid, and potassium, that help regulate all body processes and promote good health. Vitamin C increases the body's resistance to infection and aids in healing. Potassium regulates heart function. Plan your meals to include 30% vegetables. There are many varieties to choose from.

Initially, vegetables eaten need to be moist and very soft. Canned vegetables are best to begin with. You may also try well-cooked, steamed, or frozen vegetables. Suggested vegetables at this time are green beans, carrots, yams, diced beets, tomatoes, and squash.

After 4-6 weeks, you may begin adding raw vegetables, as tolerated. Make a little salad using

a variety of vegetables. You may want to blanch them at first. Add the more fibrous vegetables last and chew, chew, chew. Be sure to eat green and yellow vegetables daily. Most vegetables are easy to prepare, can be eaten raw or cooked, and are inexpensive compared to most foods. Be creative in your choices. Try a new variety. Use condiments, seasonings, flavored vinegar, herbs, and spices to add great flavor without adding fat. You are getting the most out of the calories you consume when you emphasize vegetables in your diet.

Be careful with lettuce as it may be difficult to digest and may cause a temporary obstruction. You may use low-fat/low-calorie dressing options with your salads.

VEGETABLE SUGGESTIONS

Okra	Fennel	Brussel sprouts	Beans (shelled)	Cucumbers
Corn	Garlic	Tomatoes	Peppers	Greens (salad)
Peas	Sprouts	Scallions	Celery	Greens (cooking)
Beets	Jicama	Mushrooms	Carrots	Turnips & Rutabaga
Leeks	Cabbage	Artichokes	Hearts of Palm	Beans (edible pod)
Asparagus	Sweet potatoes	Cauliflower	Spinach	Bamboo shoots

GENERAL NUTRITION GUIDELINES

FOOD

Fruit is not recommended until you reach goal weight. Once you are at goal weight, you may consider including it in your plan once or twice a week; it helps regulate your bowels. Fruit contains natural sugar and may cause diarrhea and dumping syndrome. It can also contribute to slowed weight loss. Therefore, you may choose to not include fruit in your food plan. The vitamins you receive from fruit are supplied in vegetables and your daily vitamin supplement.

MILK AND DAIRY PRODUCTS

Skim milk is an excellent source of calcium and Vitamin D, which help keep your bones and teeth healthy. Following gastric surgery, you may experience intolerance to milk and milk products. To combat this intolerance, you may try eating yogurt in varying amounts, then advance to skim milk. If problems persist, try taking Lactaid or Dairy Ease, enzymes which help digest milk. You will also need to take a calcium supplement every day to fully meet your body's needs.

GRAINS

Carbohydrates such as grains and starches are high in fiber. They are also high in calories. Surgical weight loss patients receive their fiber through eating vegetables. During weight loss, bread, pasta, rice, cereals, crackers, chips, tortillas, and potatoes are not allowed. After the weight loss phase, the healthy versions of whole grain breads, tortillas, and pastas, as well as brown rice and steel cut oats can be added to your diet occasionally in small amounts. Crackers and chips should be avoided permanently.

A Note About Snacks

A protein-based snack is recommended if you feel hungry, dizzy, tired, or weak between your meals. Other types of snacks are discouraged as they lead to old habits of constant eating (grazing) and foods that are not in your food plan.

Options

These do not take place of your main meals.

- V-8 juice
- Deli meat
- Tomato juice
- Hard-boiled egg
- Beef or turkey jerky
- Yogurt (nonfat / low sugar)
- Veggies w/ low-fat cheese
- Cottage cheese (nonfat)

OTHER

SOUPS	
<i>Drain off all liquid (minimize pasta and potatoes)</i>	
Bean	Vegetable
Bean & Ham	Chicken vegetable
Lentil	Turkey vegetable
Broccoli	Chili
Minestrone	
<i>All soups like beef bouillon, beef broth, tomatoes, etc. would be eaten as liquids.</i>	

CONDIMENTS	
<i>Use sparingly</i>	
Salsa	Vinegar
Mustard	Mayo (nonfat)
Lemon	Sauces
Ketchup	Sour cream (nonfat)
Lime juice	Margarine (reduced fat)
Pickle relish	Salad dressing (nonfat)

Dining Out Tips

Eating in restaurants with family and friends is an important social experience you shouldn't avoid. The following guidelines will help you make it an enjoyable experience while maintaining your new eating habits.

- Have a meal plan in mind before you go out to eat. Planning ahead will make you more likely to select appropriate foods.
- Have in mind certain eating establishments that serve appropriate food items (i.e. deli meats, fresh vegetables).
- Select foods you know you can tolerate. Many menu items have names that do not specify ingredients. Always ask if you are not sure. Experimenting with new foods could ruin what should be an enjoyable experience. Don't be afraid to ask them to delete or add additional ingredients (i.e. add extra vegetables, leave out the croutons). You are paying for that kind of service.
- Order a child-size portion.
- Order dishes without sauces or dressings, or have it served on the side so you can control the amount you eat. You may want to take your own low-calorie/low-fat salad dressing because you are familiar with its taste and content.
- Order pasta dishes without the pasta. For example, spaghetti and meatball with only the meatball and marinara sauce.
- Avoid fried foods. You may request to have your food baked, broiled, or steamed instead.
- Share a meal. Ask for a small plate and share a meal with your dining companion.
- Ask the waitress to bring a take-home container at the time she serves your meal. Ask for a small meal before you even start to eat. If you find you are full before you have cleaned your plate, do not continue eating. Simply ask the waitress to remove your plate.

LIFETIME STRATEGIES

CONSTIPATION & DIARRHEA

It is normal to have some constipation, with bowel movements only once every two to three days. If your stools are hard, try to include some of the following high fiber foods in your meal plan. Make sure your fluid intake between meals is adequate and you are sipping 64 oz. per day.

HIGH FIBER FOODS FOR CONSTIPATION

1 oz. Kellogg's All Bran

1 oz. Nabisco 100% Bran

¼ cup pinto beans, kidney beans, etc.

¼ cup prune or grape juice (diluted per instructions)

1 serving peas (permitted after the first 4 weeks), parsnips, okra, kale, cauliflower, carrots, cabbage, brussel sprouts, broccoli, beets, artichoke

1 serving figs, prunes, dates (all chewed to applesauce-consistency) or avocado

If fiber foods do not work, try Metamucil Sunrise Smooth (sugar free)—1 teaspoon in 2 oz. of water, morning and night. You may try other bulk laxatives as prescribed by your physician. If you do not produce a bowel movement after trying stool softeners or laxatives, please call the office and speak to your doctor's nurse. It is wise to add some high fiber foods to your diet if you tend to have constipation problems.

Diarrhea

Diarrhea often occurs when guidelines are not being followed:

- Check your sugar intake, including the amount of fruits you are eating if you are at your goal weight.
- Make sure your fluid intake is high (to avoid dehydration).
- Artificial sweeteners such as NutraSweet or Equal may have the same effects as natural sugar.
- If diarrhea persists longer than two days, call the office and speak to your doctor's nurse. One teaspoon of Metamucil Smooth in 2 oz. of water morning and night may help. For constipation this provides fiber to help loosen the stool. For diarrhea it helps to retain the moisture for stool solidification.

LIFETIME STRATEGIES

NAUSEA AND VOMITING

Following the recommended dietary guidelines generally prevents nausea and vomiting. Remember to progress from liquids to soft foods, and finally to solid foods. Follow appropriate eating methods. Adding new foods one at a time is helpful in case a certain food disagrees with your system. If a particular food seems to upset you, discontinue it from your diet for 2-3 weeks, but don't be afraid to try it again in the future.

Hints for Nausea:

- Use an antacid, like Tums or chewable Maalox before eating.
- Drink your liquids at room temperature.
- Return to only a liquid and soft liquid diet for a day or two.

Pay close attention to your body's signals for fullness and stop eating when full. You may feel nausea, pressure, or fullness in the center of your abdomen. **One extra bite** can cause pain or discomfort. If you do not have signs of fullness, continue to measure your servings.

If you experience problems with discomfort, nausea, or vomiting, ask yourself the following questions to

help you identify the problems and correct it at your next meal:

- Are you stressed? Strong emotions, including happiness and frustration, can cause indigestion. Use relaxation methods such as a warm bath, hot pad, deep breathing or soft music before a meal.
- Did you eat too fast or not chew your food well enough?
- Did you eat too much?
- Did you drink fluids with the meal or too soon after the meal?
- Did you lie down too soon after the meal?
- Did you eat foods such as tough meat or fresh bread?

If you vomit after a meal, the outlet emptying your pouch may be narrowed. Avoid solid foods and sip clear liquids such as broth. Gradually work back to a more solid diet. If vomiting continues for more than 24 hours, contact your physician. Continued vomiting and/or reflux can be very hard on tooth enamel. Teeth can be strengthened by use of topical prescriptive fluoride. Contact your dentist for advice and treatment.

DUMPING SYNDROME

Eating refined sugar may cause nausea, stomach cramps, weakness, diarrhea, cold sweats, rapid heart rate, and light-headedness. This is called "dumping syndrome" which can be eliminated by avoiding all food with sugar as one of the first three ingredients on the label such as glucose, dextrose, fructose, sucrose, etc. Other items include honey, corn syrup, and molasses.

You may use Equal, Sweet and Low, Sugar Twin, Splenda, Truvia, and Sweet One sugar substitutes. Sorbitol and Mannitol may also cause dumping problems. Some people experience dumping with fruits. You will have to assess your tolerance.

FOODS HIGH IN SUGAR		
Barbecue sauce	Granola	Regular soda
Cookies	Jam/jelly	Syrup
Fruit punch/drink	Muffins	Chocolate milk
Ice cream /bars	Pudding	Fudgesicles
Kool-Aid	Sweetened tea	Hot cocoa
Pop Tarts	Candy	Juice bar
Sweetened cereal	Frozen yogurt	Popsicles
Tapioca	Gum	Sweetened lemonade
Cake	Jell-O	
Doughnuts	Pies	Table sugar

LIFETIME STRATEGIES

Weight Gain

Eating foods with added sugars, drinking high-calorie drinks, high-fat foods and snacking can add to weight gain. To prevent or end weight gain, try following these tips:

- Avoid foods that are fried.
- Read foods labels carefully. The terms "sugar-free" and "fat-free" can be misleading. While foods may have reduced fats or sugars, they still contain calories, which add up even if eaten in small amounts.
- Pay attention to portion sizes listed on labels. Some labels list a tiny amount as one portion.
- Avoid all foods and liquids with added sugar, or sugar as one of the first three ingredients. "Sugars" include any compound ending with "ose." Glucose, dextrose, sucrose, fructose or maltose. Sugars also include corn syrup, high fructose corn syrup, evaporated cane juice, and hydrolyzed starch.

PORTION CONTROL & MEASURING

Americans in general experience difficulties with portion distortion. "Less is best" for long-term weight control. Monitoring portion sizes by measuring food quantities is essential for continued success.

Some companies make disposable containers: 2 ounce, 4 ounce, and 8 ounce sizes. The containers are freezable and microwaveable. Having pre-made portion control meals on hand ensures you are getting the proper types and appropriate amounts of food. Never put more on your plate than you are supposed to eat (2-4 oz. during weight loss, 6-8 oz. when you are at goal). Large portions will tempt you to over-eat and eat beyond the appropriate portion size.

HEAD HUNGER

Culture and environment has conditioned us to eat for a variety of reasons. We eat during holidays. We eat when we are happy, depressed, angry, bored, anxious, and in many types of social settings.

Eating for nutrition plays only a small part in the reasons individuals eat. "Head Hunger" results when an individual wants to eat for any reason other than being hungry. When you experience "head hunger" drink water, go for a walk, read a book, learn a new hobby or clean your house instead. Do anything that will divert you from old patterns of eating that have no relation to nutrition.

TEMPORARY HAIR THINNING

Temporary hair thinning is occasionally experienced four to six months following surgery. Hair loss may be decreased by an adequate intake of protein food and by taking vitamin/mineral supplements.

MEAL SUGGESTIONS (STAGE 3)

Remember these are sample menus

Adapt them as needed, but remember to focus on your meals being approximately 70% protein and 30% vegetables. All meals should consist of about 2 ounces or about 3-4 tablespoons.

BREAKFAST

- 1 slice deli meat with 2 Tablespoons melted low-fat cheese on top
- 2 Tablespoons scrambled egg with 1 Tablespoon grated low-fat cheese
- 2 Tablespoons scrambled egg with 1 Tablespoon mild tomato salsa or diced deli ham
- 3 Tablespoons yogurt with 1 Tablespoon cottage cheese
- 3 Tablespoons cottage cheese with 1 tablespoon diced tomato

LUNCH & DINNER

- 3 Tablespoons cottage cheese, 1 Tablespoon soft cooked beans or carrots
- 3 Tablespoons ricotta cheese with milk tomato salsa, 1 Tablespoons cooked zucchini
- 2 Tablespoons tuna fish mixed with 1 Tablespoon low-fat cottage cheese and 1 Tablespoon cooked green beans
- 2 Tablespoons low-fat refried beans with 1 Tablespoon cheese and 1 Tablespoon salsa
- 2 Tablespoons deli meat stewed with 2 Tablespoons seasoned stewed tomatoes, sprinkled with Parmesan
- 2 Tablespoons boiled chicken breast with 1 Tablespoon broth to soften chicken and 1 Tablespoon summer squash
- 2 Tablespoons deli meat stewed with 2 Tablespoons cooked vegetables with low-fat cheese

EXERCISE



EXERCISE PROGRAM FOR BARIATRIC SURGERY

Developing an individualized exercise and physical activity plan is one of the most important steps of obesity surgery preparation. This exercise plan should begin well before and should be resumed as soon as possible after surgery. Even a small increase in exercise before surgery can improve a patient's flexibility, range of motion, and balance as well as decrease the chance of injury and soreness. Although bariatric surgery has been identified as an effective treatment for weight loss in the morbidly obese, some patients regain weight post-operatively. A pre-treatment program focused on changing **lifestyle behaviors** could facilitate improved post-surgical outcomes.

Studies have shown patients that start an exercise program and have increased cardiopulmonary activity are less likely to have primary complications, including death, unstable angina, deep vein thrombosis, pulmonary embolism, renal failure, and/or stroke.

THREE PHASES OF EXERCISE

Phase I: Pre-Bariatric Surgery Exercise

All new fitness and diet plans should begin well before bariatric surgery and be closely supervised by a doctor. The exercise physiologist in cooperation with the surgeon will provide the patient with a set of guidelines.

This phase of exercise will prepare you for the behavioral change that will need to occur for your surgery to be a success.

We will start on a 3-5 day exercise program that will focus on your specific ability to do exercise. It is recommended you start with a **minimum** of 3 days a week for cardio exercise (ideally 4-5 days a week). Your goal duration for cardio exercise should be 45 minutes.

In addition, incorporate 3 days of strength training on non-consecutive days.

You should incorporate the following lifestyle changes in this phase:

- Drink at least 64 oz. of water each day
- Stop smoking at least three months before obesity surgery
- Cease consumption of caffeinated beverages
- Take a multi-vitamin each day
- Begin a walking program
- Write down your feelings every day to remind yourself of your commitment to begin a new and healthier lifestyle
- Attend support group
- Follow your surgeon's instructions regarding any medications you may be taking to control other health conditions

EXERCISE PROGRAM FOR BARIATRIC SURGERY

Have Questions About Your Exercise Program?

Feel free to contact the **Wellness Center Staff** with any questions about your exercise program at **801.357-7270**. The Wellness Center may be reached Monday-Friday, from 11 a.m. to 5 p.m.

Benefits of Regular Exercise

- Weight management/maintenance
- Builds muscle
- Prevents muscle loss
- Boosts immune system
- Prevents injury
- Increases energy
- Improves metabolism
- Reduces stress
- Promotes digestion
- Prevents bone loss
- Improves sleep
- Reduces risk of chronic diseases

Phase II: Post-Bariatric Surgery Exercise

Recovery time in this phase depends mainly on the type of operation and your body's healing timetable.

At this point, we will still want you to maintain your cardio exercise routine of a minimum of 3 days a week. You will be at less intensity and duration than you were Phase I to allow a proper recovery of the body. You will be recovering from surgery and will need to not push it too hard for the first few days and weeks, but it will be important that you continue your cardio exercise program.

Some restrictions on weight training do apply. Pause your strength training routine in this phase. In your follow up visit with your doctor he will let you know of specific weight-lifting restrictions and activities you should not do. You'll have to gently ease back into strength training 6 weeks after your surgery.

Phase III: Post-Bariatric Surgery Exercise (6 weeks after surgery)

Several weeks after surgery it will be extremely important for you to continue your exercise program. This is the phase where you will be able to be the healthiest and ready to do exercise.

At this point you should be exercising 4-6 days a week and you should also be able to do a cardio workout for 45 minutes, accompanied with some strength training 3 times a week on non-consecutive days. Strength training should target the eight major muscle groups in your body.

Use bariatric surgery as a tool to jump start yourself to get to the place you want to be mentally, physically, and emotionally in life. The surgery itself is not the whole solution, rather your personal discipline in following the program as it is outlined.

TYPES OF EXERCISE

AEROBIC

This is exercise that gets your heart pumping and increases your oxygen intake. This is where your major calorie burn happens. The intensity can range from low to high and we want it to be sustained over a period of time. Examples are things like brisk walking, dancing, hiking, biking, swimming, jogging, tennis, or water aerobics. Your goal post surgery is 4-6 days a week. The benefit is that exercise burns calories, challenges your heart and lungs, improves your immune system, improves your physical and mental health, and increases your lifespan.

RESISTANCE TRAINING

This exercise is designed to strengthen your muscles and bones, either with weights or something that provides a load on your muscles. Examples of how you can work major and minor muscle groups include: weight machines, hand weights, resistive bands, kettle bells, medicine balls, bodyweight, and water.

You should start resistance training **6 weeks after surgery**. Aim for 20-30 minutes a day 2-3 times a week. Start at a level where you can comfortably repeat an exercise 10 times, then work up to 1-3 sets of 10-15 repetitions. Resistance training builds and retains strength, increases your metabolic rate, improves bone density and muscle mass, and improves balance and coordination.

FLEXIBILITY

This exercise is designed to stretch and lengthen muscle. Examples are simple stretches at home or work, mat work, yoga, Pilates, and Tai chi. For the most benefit, you should spend 10-30 minutes every day on flexibility, and the best time is right after you exercise while your muscles are warm. You should hold your stretches for 30-60 seconds. Stretching improves balance, prevents injuries, and can help relieve pain from tight muscles.

Starting an Exercise Program

- Start with small daily movement (take the stairs, park as far away as you can)
- Have short and long-term goals
- Develop a plan
- Determine your motivation for exercising and give yourself reminders
- List your barriers and ways to overcome them
- Track your work
- Measure and reward progress

Tips for Success

- Consider your interests
- Find a buddy
- Make it a family affair
- Remember your reasons for getting fit
- Schedule it
- Mix it up
- Think progress, not perfection
- Notice small successes as well as big ones

THE FITT APPROACH TO EXERCISE

FITT stands for **F**requency, **I**ntensity, **T**ime, and **T**ype of exercise. FITT can be modified to meet your exercise goals and is a good backbone for an exercise program.

Frequency

- **Aerobic:** exercise most days of the week.
- **Resistance:** exercise 2-3 days a week, with a day of rest in between.
- **Flexibility:** most, if not all, days of the week.

Intensity

Exercise in your Target Heart Rate zone (60-80% of your max heart rate for moderate intensity). Figure your Max Heart Rate: $220 - \text{age} = \text{max beats per minute}$. Multiply your max heart rate by 0.6 and 0.8 to find your low and high heart rate.

Time

- **Aerobic:** exercise for a minimum of 30 minutes a day for heart health. Exercise 60 minutes a day for weight maintenance. Exercise 90 minutes a day for weight loss.
- **Resistance:** exercise for 20-30 minutes: Do 1-3 sets with 10-15 repetitions of each exercise.
- **Flexibility:** exercise for about 10-30 minutes each exercise session. Hold stretches for 30-60 seconds.

Type

Include a warm-up and cool-down in your exercise. Include aerobic, resistance, and flexibility exercises. Pick exercises that you like and will do. Know your limits and personalize it to your needs and goals.

Your Frequency Goals

Aerobic: _____ days a week

Resistance: _____ days a week

Flexibility: _____ days a week

Your Intensity Goals

Maximum heart rate: $220 - \text{age} = \underline{\hspace{2cm}}$

Target Heart Rate

Low rate (max) $\times 0.6 = \underline{\hspace{2cm}}$

High rate (max) $\times 0.8 = \underline{\hspace{2cm}}$

Your heart rate zone is ____ to ____ beats/min.

Your Daily Time Goals

Aerobic: _____ minutes

Resistance: _____ minutes

Flexibility: _____ minutes

Your Types of Exercise

Warm-up: _____

Aerobic: _____

Resistance: _____

Flexibility: _____

Cool-Down: _____

PHARMACY



VITAMIN & MINERAL SUPPLEMENTS

Your physician will monitor your need to take vitamin and mineral supplements to ensure all your body's nutrient needs are met. Your reduced stomach size will not accommodate enough food to provide your body with its daily requirements for many vitamins, calcium, and iron. It's advisable to take a multi-vitamin daily for the rest of your life. Make sure the vitamin is water-soluble, chewable, or in liquid form.

Brand name vitamins are usually of higher quality. Most multi-vitamin preparations will need to be taken at least twice a day to get the necessary amounts of the different nutrients. Limited over-the-counter options are available. Bariatric-specific preparations are available both over-the-counter and online and tend to be more complete formulations. Calcium and iron supplements are taken separately and in addition to the multi-vitamin.

When choosing a multi-vitamin/mineral supplement look for a high-potency vitamin containing 100% of daily value for at least 2/3 of nutrients. Choose a complete multi-vitamin that contains at least 18 mg iron, 400 (µg) micrograms folic acid and contains selenium and zinc.

MULTI-VITAMIN OPTIONS TO CONSIDER

MULTI-VITAMIN	PRICE	WHERE TO FIND IT
Nature Made Multi-Complete: <i>softgel</i> (this is a large capsule)	\$6.95-\$11.99 for 60 softgels Serving: 2 tablets	Walmart, Target, Walgreens
Optisource Post-Bariatric Surgery Formula: <i>chewable</i>	\$27.99 for 120 tablets Serving: 4 tablets	Walgreens
Bariatric Advantage: <i>chewable</i>	\$17.25 for 60 tablets Serving: 2 tablets	Online
Celebrate Multi-Complete: <i>chewable</i>	\$19.95 for 60 tablets Serving: 2 tablets	Online
Bariatric Fusion: <i>chewable</i>	\$24.99 for 120 tablets Serving: 2-4 tablets	Online
OPURITY® BYPASS & SLEEVE Optimized: <i>chewable</i>	\$35.95 for 90 tablets Serving: 1 tablet	Online

CALCIUM

Calcium sources are dairy products, particularly milk, yogurt, and cheeses. Non-dairy sources of calcium include leafy green vegetables such as turnip greens and broccoli, and canned salmon or sardines eaten with the bones.

Calcium during rapid weight loss is important to help prevent bone loss. Therefore, your doctor will recommend a daily calcium supplement of 1500-2000 mg per day. Preferably choose a

calcium supplement that contains calcium citrate. Studies suggest calcium citrate is more effectively absorbed than calcium carbonate. Choose a calcium supplement that also contains Vitamin D. No more than 500 mg of calcium should be taken at a time. Your body does not absorb more than this amount. You should crush the calcium tablet or use a chewable form. Do not swallow the tablet whole as it may get stuck or pass through the body whole (not absorbing).

VITAMIN & MINERAL SUPPLEMENTS

Do not take calcium with iron-containing supplements. You should wait at least 2 hours after taking a multi-vitamin that contains iron or an iron supplement.

VITAMIN B-1 (THIAMINE)

Weight loss surgery increases the risk of Vitamin B-1 (thiamine) deficiency due to preexisting deficiency, low nutrient intake, malabsorption and/or nausea or vomiting. The body's storage capacity is limited to 30 mg.

Thiamine depletion can develop over a short period of time with persistent vomiting, dietary deficiency, or the body's excess utilization. Thiamine is found in foods such as meat – especially pork – vegetables, sunflower seeds, and grains. Drinking coffee or tea can deplete thiamine stores. Thiamine is poorly absorbed if a protein or folate deficiency exists. We recommend you get 20-30 mg of Vitamin B-1 daily. If you are deficient in Vitamin B-1, your surgeon will recommend additional supplementation.

VITAMIN B-12 (COBALAMIN)

As a result of a restricted stomach capacity and a reduction in production of stomach acid, Vitamin B-12 (Cobalamin) deficiency can develop without appropriate supplementation. A patient who is eating meat, poultry, shellfish, cheese, eggs, and milk on a daily basis is getting B-12 in their diet. To help prevent a deficiency, we suggest you take one 250-500 mcg of Vitamin B-12 daily. Several different forms of Vitamin B-12 are available, including sublingual (under the tongue), lozenges, liquid, or gummies.

IRON SUPPLEMENTATION

Iron deficiency anemia (low-iron level) occurs in some patients, especially menstruating women. If your blood test indicates your iron levels are low, your physician may prescribe an additional iron supplement.

Do not take iron supplement the same time as you take your calcium supplement. Calcium and iron compete for absorption in your body. This also means you should not take your iron pill with milk, yogurt, or cheese. Vitamin C helps your body absorb iron. Tomatoes, red bell peppers, and dark green vegetables are high in Vitamin C. Also avoid taking iron supplements with antacids. Liquid iron should be added to water and given through a straw (the only time you can use a straw) to prevent tooth stains.

MICRONUTRIENTS

Micronutrients are elements we require in small amounts, but are essential nutrients. Micronutrient deficiencies are common in obese patients both before and after weight loss surgery. These include Vitamins D, thiamine, and folate. These levels of nutrients will be monitored and supplementation may be prescribed by your physician.

LABORATORY STUDIES

Laboratory studies will be performed routinely to monitor your health and nutritional status. The following blood tests will be checked at **six months** and **annually** thereafter:

- Complete blood count
- Electrolytes
- Glucose
- Iron studies, ferritin
- Vitamin B-12
- Aminotransferases, alkaline phosphatase, bilirubin
- Albumin
- Lipid profile
- 25-hydroxyvitamin D, parathyroid hormone (PTH)
- Thiamine
- Folate
- Hbg Alc

MEDICATION

MEDICATION FACTS

Always contact your surgeon and/or primary care physician regarding his or her views about medications that you should or should not take. The list below is a compilation from many patients' post-operative instructions, and not specific to one particular surgical practice. However, the overwhelming consensus is that those who've had bariatric surgery should watch the intake of the following medications:

MEDICATIONS TO AVOID

- Advil/ibuprofen
- Motrin/ibuprofen
- Alka-Seltzer (some preparations have aspirin)
- Vanquish (some have aspirin, caffeine, and acetaminophen)
- Anacin, Bufferin, Ecotrin (or any formulation with aspirin)
- Coricidin/chlorpheniramine and acetaminophen (some have as aspirin)
- Excedrin/aspirin
- Fiorinal/aspirin and butalbital
- Pepto-Bismol/bismuth subsalicylate (aspirin like drug)
- Orudis/ketoprofen
- Aleve/naproxen

MEDICATIONS USUALLY WELL TOLERATED

- Senekot-S/extract of senna and docusate
- Panadol/acetaminophen
- Tylenol/acetaminophen 325 mg
- Tylenol Extra Strength/acetaminophen 500 mg
- Gas-X/simethicone
- Phazyme/simethicone
- Colace/docusate
- Dulcolax Suppositories/bisacodyl
- Fleet Enemas/sodium phosphate
- Glycerin Suppositories/glycerin
- Phillips/milk of magnesia

MEDICATIONS RECOMMENDED FOR COLDS

- Benadryl/diphenhydramine
- Dimetapp/brompheniramine
- Robitussin/guaifenesin
- Sudafed/pseudoephedrine
- Triaminics/pseudoephedrine, chlorpheniramine, dextromethorphan
- Tylenol Cold Products/acetaminophen, diphenhydramine, dextromethorphan

MEDICATION

MEDICATIONS THAT MAY CAUSE WEIGHT GAIN

The following are medications that commonly cause weight gain in patients. It is recommended that you avoid or switch to an alternate if possible.

ANTIDEPRESSANTS/ ANTIPSYCHOTICS	SEIZURE MEDICATIONS	BLOOD PRESSURE MEDICATIONS
<ul style="list-style-type: none">• Zoloft (Sertraline)• Clozaril (Clozapine)• Lithobid (Lithium)• Elavil (Amitriptyline)• Zyprexa (Olanzapine)• Paxil (Paroxetine)• Risperdal (Risperidone)• Remeron (Mirtazapine)• Seroquel (Quetiapine)	<ul style="list-style-type: none">• Depakene (Valproic Acid)• Tegretol (Carbamazepine)• Depakote (Divalproex)• Neurontin (Gabapentin)	<ul style="list-style-type: none">• Lopressor (Metoprolol)• Tenormin (Atenolol)• Inderal (Propranolol)• Norvasc (Amlodipine)
DIABETES MEDICATIONS	ANTIHISTAMINES	CORTICOSTEROIDS
<ul style="list-style-type: none">• Actos (Pioglitazone)• Lantus (Insulin)• Avandia (Rosiglitazone)• Amaryl (Glimepiride)• Diabeta (Glyburide)• Novo log (Insulin)• Glucotrol (Glipizide)	<ul style="list-style-type: none">• Allegra (Fexofenadine)• Zyrtec (Cetirizine)	<ul style="list-style-type: none">• Deltasone (oral prednisone)• Medrol (oral methylprednisolone)• Solu-Cortef (hydrocortisone)

FOLLOW-UP



FOLLOW-UP GUIDELINES

We want to keep a close eye on our patients to help recognize any potential problems. Below is our general guideline for follow up. We will see patients more frequently as needed. If this creates a financial hardship, please talk to us and we will address it. Follow up is important.

GASTRIC BYPASS & SLEEVE GASTRECTOMY	
1 Week	MD/NP; remove drain (bypass pts); check incisions; diabetes and blood pressure medications
1 Month	MD/NP; check incisions; weight loss; diet advancement; diabetes and blood pressure medications
2 Months	MD/NP; weight loss; diabetes and blood pressure medications; exercise
3 Months	MD/NP; weight loss; diabetes and blood pressure medications; exercise
6 Months	MD/NP; labs; weight loss; diabetes and blood pressure medications; exercise
9 Months	MD/NP; weight loss; exercise
12 Months	MD/NP; labs; weight loss; exercise
18 Months	MD/NP; weight loss; exercise
24 Months and Yearly	MD/NP; labs; weight loss; exercise; weight regain

LAP BAND	
2 Weeks	MD/NP; check incisions; diabetes and blood pressure medications
6 Weeks	1st adjustment; weight loss; exercise
Every 2-4 Weeks	Adjustments every 2-4 weeks until in the "green zone"
Every 6 Weeks	Weight and blood pressure measurements every 6 weeks for first year (nurse only if doesn't coincide with MD visit)
3 Months	MD/NP; weight loss; diabetes and blood pressure medications; exercise
6 Months	MD/NP; labs; weight loss; diabetes and blood pressure medications; exercise
9 Months	MD/NP; weight loss; exercise
12 Months	MD/NP; labs; weight loss; exercise
18 Months	MD/NP; weight loss; exercise
24 Months and Yearly	MD/NP; labs; weight loss; exercise; weight regain

Blood Work (6 months & annually)

- CBC
- CMP
- Vitamin B12
- Thiamine
- Folate
- Vitamin D, parathyroid hormone (PTH)
- Iron, Iron binding capacity, Iron saturation, Ferritin
- Lipid profile
- HgbA1c

Lifetime Follow-up

Lifetime follow-up is critical! Following up with your surgeon, primary care provider and your surgical weight loss team will help identify any nutritional deficiencies and problems that you might develop. Issues that are caught early are usually easily corrected. It is important to remember that your anatomy may be altered and you need to be followed by a surgeon that is familiar with the intricacies of the procedure.

FOLLOW-UP GUIDELINES

LIFE AFTER SURGERY

Weight loss will occur in the months following bariatric surgery. After surgery is where your motivation, commitment, and dedication play an important role in the long-term success of the weight loss surgery. There is no way to adequately prepare you for how you will feel when you wake up to a stomach that will only hold 2 ounces. You will have a sensation of fullness after taking a few sips of liquid or a few bites of food.

One of the greatest benefits of bariatric surgery is feeling good about you. Improved self image and confidence help in fighting the depression that often accompanies obesity. Losing weight increases social acceptance and opens new doors for better work opportunities, friendships, and even sexual relations.

You must also keep in mind that strained relationships and even divorce may occur. This dramatic weight loss changes lives! Your relationship to family, friends, and coworkers may change, sometimes not as positively as you wish.

Bariatric surgery will help you lose weight, but you must continue to work through proper diet and exercise to obtain the maximum benefit of the procedure. **Consider the procedure as a tool** to help you achieve a healthier and more fulfilling life.

COSMETIC SURGERY

Each patient has a unique body structure. Some will lose weight without the need for cosmetic reconstructive surgery. Cosmetic surgery can improve stretched out skin, both in function and in appearance (around the abdomen, thighs, breasts, arms, and face). Consult with your surgeon about the risks and benefits of such surgery. In most cases, you should wait at least two years after weight loss surgery before reconstruction takes place.

HAIR LOSS

Many patients develop hair loss for a period of time after the operation. Hair loss is reported most commonly by patients 3 to 4 months after surgery. Hair re-growth is seen around 7 to 9 months after surgery. Hair loss is usually not a permanent condition. People rarely lose more than 1/3 of their hair.

BIRTH CONTROL & PREGNANCY

Patients should not get pregnant for 18 months after surgery. It's strongly advised that any sexually active woman in child bearing years should use birth control for 18 months following bariatric surgery, even if she has never been able to become pregnant before. Pregnancy is safe following the stabilization of weight for 18 months, because your meal portions should become normalized and your nutritional status adequate to sustain health for a growing fetus.

Women who become pregnant after weight loss surgery should receive specific attention from the surgical care team along with their obstetrician. Many clinically severely obese patients also have fertility problems, but after weight loss surgery they will frequently be able to become pregnant.

GASTRIC BYPASS MATURITY

The gastric bypass pouch matures over time, allowing it to hold a little more food. The pouch becomes less sensitive and develops a stronger tolerance to both healthy and unhealthy food choices. You must always remain aware of the food choices you are making to ensure long-term weight loss. The opportune time to learn and develop the eating, drinking, and fitness patterns that must stay with you for your life is before your pouch develops its tolerance.

MENTAL HEALTH



EMOTIONAL AND PSYCHOLOGICAL CHANGES

Weight loss surgery not only changes the physical appearance of your body but also affects the emotional, social, and spiritual aspects of your life. Every area of your life will change. Please do not take these changes lightly. All patients need to consider these changes before their surgery. You may experience a variety of emotions, including depression, frustration, anxiety, anger, disappointment, helplessness, excitement, euphoria, and joy. These are normal reactions to the changes in your body image. Feeling the blues after major surgery is a common side effect. As weight loss

progresses, some patients may experience increased anxiety about their body image and interactions with others.

If you are experiencing ongoing difficulties with any of these problems, schedule an appointment with your primary care physician, surgeon or psychologist/counselor. You visited with one before surgery, at your psychological evaluation, and they can be a resource after surgery as well. If any medications are prescribed, be sure your doctor does not prescribe the type that can cause weight gain.

RELATIONSHIPS

Relationships with Others

Remember, this surgery will **not** fix your everyday problems with spouses, significant others, children, or family members. This surgery **will** allow you to gain control over one aspect of your life: your weight. Be ready to hear positive and negative comments from people close to you. Some of your immediate family members will also be affected by your surgery. You may have family or friends that have difficulties with your weight loss. It is important to try and resolve these issues, but the most important thing is you and your well-being. Your relationships may change due to the weight loss.

Some people may be threatened by your weight loss or become insecure. You will go through ups and downs in the months after your surgery. You may even have libido changes, either increased or decreased. There may even be times when you ask yourself, "What did I do?!"

Relationship with Food

You may miss eating favorite foods or eating large meals. It will be difficult adjusting to no longer having the emotional comfort that food has provided you in the past. Stay away from the

trap of negative self-talk. It serves no purpose. Implementing a lifestyle of health in combination with the surgery has put you in the position to be successful. Celebrate that fact and be proud of yourself.

As a society, we don't realize the effect food has or the role it plays in our everyday lives. One of the keys to the success of this surgery is for you to learn to replace those comforts with healthy activities. It will be harder to take smaller portions of food and for your mind to realize the smaller portions are satisfying. Try to use a smaller-sized plate to give yourself the illusion that your plate is fuller than if you had a larger plate. It is sometimes difficult for patients to see themselves as smaller-sized people even one year after surgery. They still may go to the large size section of the store to buy clothing.

Support Team

It is important to discuss these issues with your support team and come up with good coping mechanisms to deal with the issues as they come up. Only you know yourself and it's important to share with your support team how you're feeling and what you think may help you through the rough times. The important lesson to gain from this is to

be prepared for these times. Just knowing these changes may happen isn't always enough. You need to have a goal or plan ahead of time to prepare for these changes. You may find you will have to redefine how you look at and feel about the world around you and about yourself.

Relationship with Yourself

Other people may criticize you about taking the easy way out in having surgery. There is nothing about surgery that is easy. It is important for you to recognize and acknowledge the bravery it took for you to make and follow through on your decision. You should be proud of yourself.

Take a lot of pictures during weight loss. Recognize that not everyone looks like a super model. Focus on physical features you like about yourself. This will help you accept those areas you consider to be liabilities. We're all unique and possess beauty of some type. Recognize and acknowledge your own personal beauty.

Weight loss surgery will result in some very pleasant changes in your life. Imagine having more energy, more choices in clothes, more compliments on how you look. If you have been severely overweight for as far back as you can remember, weight loss surgery will give you a totally new outlook on life. Your self-esteem will improve and you will be able to do more.

Keep a Journal

It helps to keep a journal or diary, make connections with other patients, talk or cry with family or friends, and most importantly to set **goals** for yourself. Set goals for where you want to be in a month, three months, six months, nine months, and a year after surgery. Reward yourself with something of value, that motivates you, for each goal you meet. Avoid using clothing or food-related rewards.

Clothing

Clothing rewards will be short-lived, as you will be dropping several clothing sizes each month. The weight loss stage is not a time to invest in expensive clothing. Purchase used or inexpensive clothing, borrow or alter clothing, and define the clothing styles you like. Your style preferences are likely to change several times during your weight loss. Check with your support group as many patients share clothing during different stages of weight loss. When these rough periods arrive, focus on your goal and try not to get stuck in emotional lows.

Setting Realistic Goals

The goal of surgery is to help lose over half of your excess weight. This can reduce or prevent health problems. It's not cosmetic surgery. Keep in mind:

- Other medically managed weight loss methods must be tried first and documented. Surgery is only an option if other methods haven't been successful.
- Surgery is meant to be permanent. You will need to make lifestyle changes for the rest of your life.
- You must commit to making good food choices and being more active after surgery. Otherwise, you will not maximize your weight loss.
- You will not reach a healthy weight right away. Most of the weight loss will steadily occur over 1 to 1½ years after surgery.
- Surgery is a tool, which will help you lose weight. However, by being diligent with exercise and attending support groups and workshops, your chances of losing more weight will dramatically increase.

Long-Term Commitment

Remember this surgery is only a **tool**. It is a tool to help you win the battle against morbid obesity. How effectively you use this tool will affect your weight loss and overall quality of life.

Rewards

Do not use food as a reward for your weight loss rewards or to sooth yourself if you've had a hard day. Food is only to be consumed for nutrition.

SUPPORT GROUP



DEFINING YOUR SUPPORT GROUP

Our support group "**Healthy Strides**" meets on the second Wednesday of each month in the Northwest Plaza, Classroom 8 (1134 N 500 W, Provo) at 6:30 p.m. Please join us.

Many successful surgical weight loss patients say their support network helped them immensely in maintaining their new, healthy lifestyle changes. From family and friends, to bariatric program support group, there is a wealth of options available for people interested in bariatric surgery.

Support of Family and Friends

The first step in getting support is talking to your family and friends about weight loss surgery and your interest in it. You might find that they are completely supportive. While this is always ideal, you might find that some family members and friends are against your decision. Often, this is because your loved ones are concerned about you or have preconceived notions about gastric bypass surgery. Explaining the advantages, benefits, and risks of bariatric surgery may open their minds to its importance.

Healthy Strides Support Group

If you find that family and friends are unsupportive, it doesn't mean you are alone. Many people have had weight loss surgery and have been very successful with the care they received from the healthcare professionals on their bariatric program team. Our support group, Healthy Strides, is a forum for celebrating successes, such as the improvement or resolution of co-morbidities. The support group is devoted to people who have common experiences and share your goals of health and wellness.

We have a support group on Facebook as well. It is a closed group so you must be invited, but that means that you can freely discuss your personal issues with your peers.

This fulfills the need for people to communicate with each other, share feelings and experiences in a safe environment, and develop relationships that can contribute to improved physical and emotional health and support.

Discussions are not only therapeutic, but are often lively and filled with helpful information. Support group teaches you how to cope with changes that you may encounter, not just physically but emotionally as well. If you are thinking about bariatric surgery and you want to learn more about the patient's perspective or help reluctant family and friends understand, attending a support group meeting can be invaluable.

Make Time to Attend Support Group

We consider support group meetings **mandatory**. We know realistically we cannot make you attend these meetings, but they are for you — for education, support, and nutritional and medical advice. Studies have shown that patients who regularly attend group meetings seem to have more long-term weight loss success.

MAINTENANCE



MAINTENANCE

Now that you are near or at your goal weight, you may think you are done and weight loss surgery was a success. This is **not** the case. Maintenance will be a life-long commitment and you must stay the course. You are not alone in this. Your surgeon and the Utah Valley Surgical Weight Loss Program are here to help.

DIET

Moving into maintenance can be a little frightening. After so long with only proteins and vegetables as your diet staples, it can be intimidating and scary when beginning to add in small amounts of other foods such as fruits and complex carbohydrates like whole grains. The main source of your diet will continue to be 70% protein and 25% veggies. Then you may slowly add complex carbohydrates to make up the final 5%. You should not be eating more than 6-8 ounces per meal, or you will overfill your pouch.

Example 6oz Meal

- ½ cup ground turkey taco meat
- 3 tablespoons fresh tomato salsa
- 1 tablespoon mango

WEIGHT

It's normal for your weight to change in small amounts both up and down, and that some weight regain is typical 2-5 years after your surgery. Your sustainable long-term weight loss is dependent on many factors such as starting weight, following the dietary guidelines, exercising regularly (if able), and participation in support group. Gastric bypass patients will usually be able to maintain 50-60% of total excess weight loss long term. Set reasonable expectations that are attainable.

In an effort to help you make the weight loss permanent, we want you to come see us if you gain more than 10 pounds. Often this gain is due to behavioral, nutritional, or physical issues that should be addressed quickly. Not seeking solutions to small weight regain early is a big reason large weight regain occurs. Let us address it while it is easier to manage.

Getting Back on Track

If you find that you are slipping off track, go back to the beginning. Ask yourself if you are following these rules:

- Eat 3 small meals each day (4-5 oz.)
- Eat protein and vegetables
- Don't skip meals
- Measure your food, always!
- Only eat when hungry – don't give in to head hunger
- If physically hungry between meals, drink water first. If that doesn't help, add in a protein snack (no more than two a day)
- No grazing
- Avoid foods containing high amounts of sugar
- Limit amount of complex carbs and starches
- Drink your 64 oz. of water daily
- Never drink caffeinated beverages
- Never drink carbonated beverages
- Exercise 60 minutes a day, 5 days a week

MAINTENANCE

EXERCISE

Now that you are adding in small amounts of complex carbohydrates, exercise is even more important. The patients with the most success are those who **exercise regularly**. Pick activities you like, set goals, try something new, pick an exercise buddy, or get competitive. Your body is changing and you may surprise yourself with what you can now accomplish. You may even enjoy activities you didn't before your weight loss. Aim for five days a week and one hour each time. Starting is often the most challenging, but **start you must**.

OLD HABITS

It is important during maintenance that you don't return to old habits. Make sure that you aren't grazing, drinking fluids with calories, being sedentary, eating out excessively, not planning and preparing healthy high-protein meals, or resuming chaotic eating patterns. Recommit to your new healthy behaviors. Make sure you are using correct portion control and preparing ahead to help keep old habits at bay.

Warning signs of old habits returning can be things such as craving sugar, drinking carbonation, grazing, weight regain, loss of desire to exercise, and not using your support system.

SELF-MAINTENANCE

Participating in self-maintenance behaviors is one way to keep yourself on track. Self-maintenance includes things like: weighing yourself weekly, keeping a food journal, tracking exercise, and making connections between emotions and eating behaviors. Journaling these connections and redirecting behaviors are great ways to resolve emotional eating. Make sure you are committing to all the required follow up.

EMOTIONAL HEALTH

Losing your excess weight will not magically solve all of your problems. Relationship issues, addictions, old wounds, and intimacy issues weren't fixed with your surgery. You must actively work on resolving these types of issues or they will not go away. Don't let these issues lead to the sabotage of your weight loss. Attendance in support group offers a place for you to share your ups and downs with peers who are going through the same things.

Those who attend support group have greater long-term weight loss success. If face-to-face support group is not an option for you, try something online. Participate in Healthy Strides, our Facebook group, or another online forum of your choice. Sometimes this type of support is still not enough. Seeking professional help is OK. There are even options available specific to surgical weight loss patients.

MISCELLANEOUS



INTERNET RESOURCES

AMERICAN SOCIETY FOR METABOLIC & BARIATRIC SURGERY (ASMBS)

www.asbs.org. This site includes extensive information about bariatric surgery, its history, and process. It also includes a BMI calculator and database of member surgeons.

ASSOCIATION FOR MORBID OBESITY SUPPORT

www.obesityhelp.com. This site provides information on morbid obesity resources by state, information, and patients' comments on individual surgeons, message boards, chats, and surveys.

BEYOND CHANGE

www.beyondchange-obesity.com. This site provides a monthly publication dedicated to inform, educate, support, and encourage obese individuals who are considering or have had bariatric surgery.

FIT DAY

www.fitday.com. This site provides a free online diet journal to help you track your foods, exercises, weight loss, and goals.

OBESITY LAW AND ADVOCACY CENTER

www.obesitylaw.com. Here you can find helpful information about insurance coverage and claims processing for weight loss surgery.

THE OBESITY SOCIETY

www.obesity.org. This Obesity Society promotes research, education, and advocacy to better understand, prevent, and treat obesity and improve the lives of those affected.