



The ultimate goal of bariatric surgery is to succeed in healthy weight loss for resolution of obesity associated conditions and to maintain that weight loss.

Bariatric surgery is a tool to obtain the goals of weight loss and a healthier lifestyle. Our team is committed to helping you succeed and maintain your success for lifelong improvement in health and quality of life.

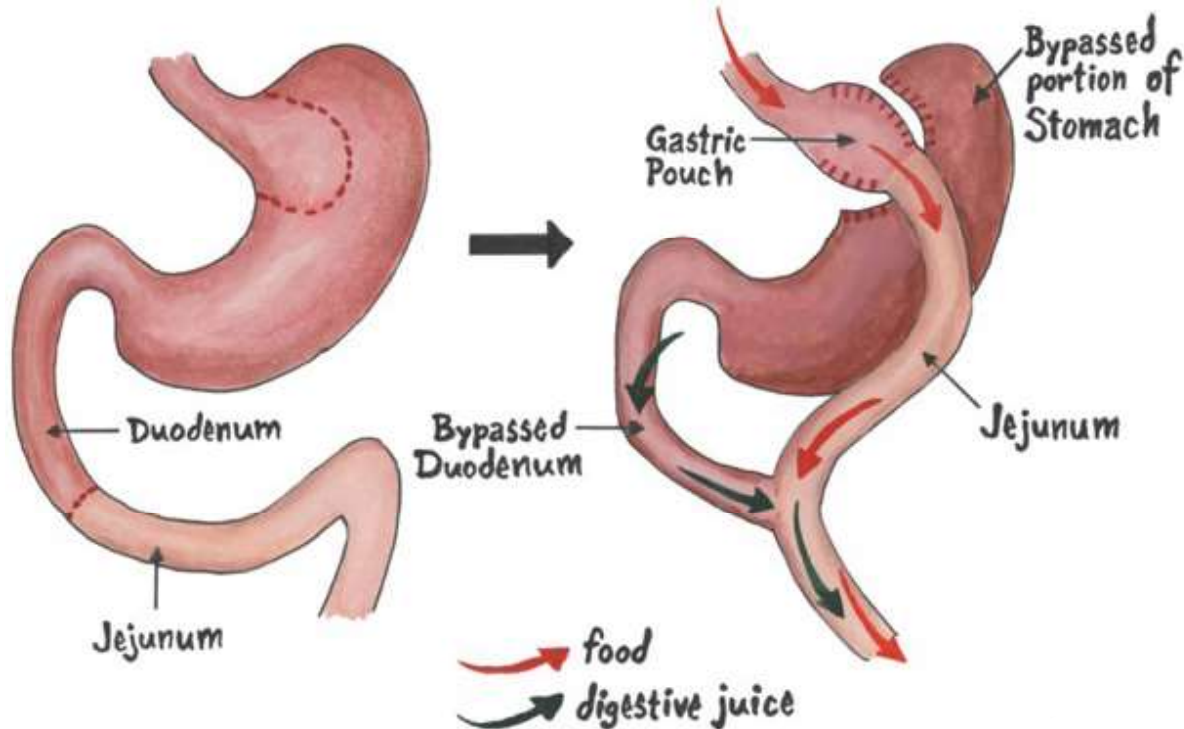
Studies show that 90% of patients can maintain a 50% excess body weight loss. Not only will this improve your overall health, but some studies show this will also lower your risk of mortality over a five-year period. Your commitment, along with bariatric surgery, will lower your risk of death from diabetes and heart disease.

Risks of surgery are similar to those risks associated with all intestinal surgeries. Overall, bariatric surgery is very safe. The mortality rate of bariatric surgery is comparable to that of gallbladder surgery. The morbidity, or risk of complication with surgery, is less than one percent. Risks include: bleeding, infection, damage to surrounding structures, needing another procedure, heart and lung complications, blood clots, death, malnutrition, a leak from a staple line and needing an open procedure.

The benefits of bariatric surgery far outweigh a change in appearance and weight. Patients can also expect to resolve or improve health conditions and risks associated with obesity.

Alternatives to surgery include diet, exercise and lifestyle changes or medically supervised weight loss. Studies show that most patients who diet are likely to fail or have fluctuating weight changes. If you are not interested in surgery, or you want to try an alternative to surgery, we can help! Weight loss is a difficult and frustrating process. Our team can help you achieve your goals without surgery, if you prefer. Please discuss with us ways to improve your success, or meet with our medical weight loss specialist.

We encourage your family members or supportive friends or colleagues to come to your appointments. The more support you get, the more likely you are to succeed!



A roux-en-Y gastric bypass is both a restrictive and a malabsorptive procedure. First the stomach is divided, creating a very small gastric pouch. This limits the amount of food that can be eaten. The rest of the stomach is left in the abdomen and attached to the first part of the intestine. Then a new connection is made between the small stomach pouch and the intestine. This allows food to bypass part of the intestine and therefore limit the absorption of food by the body.

Advantages

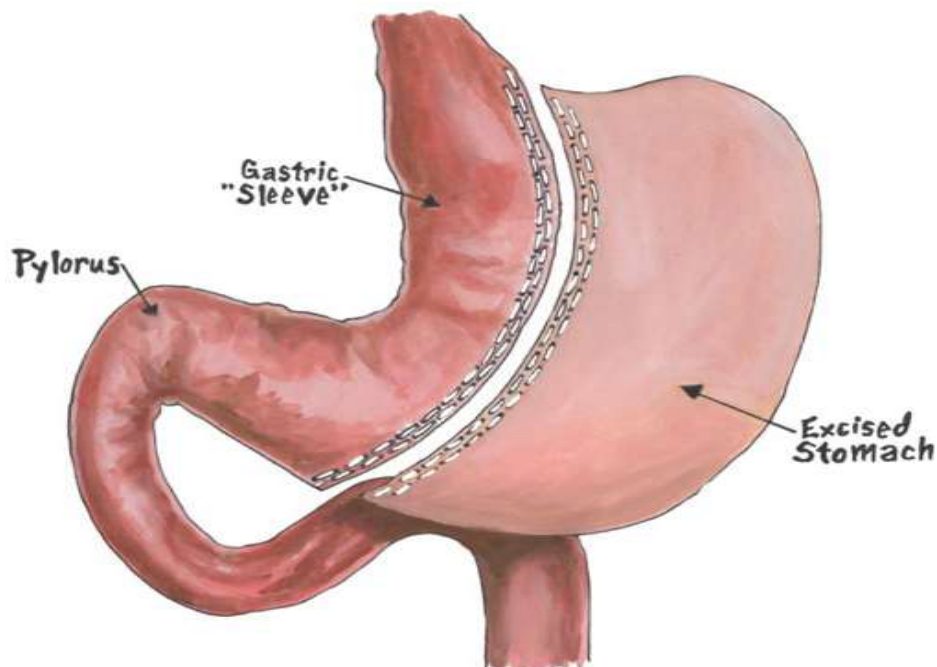
- 60% excess body weight loss
- Decreases the amount of food that can be eaten
- Resolution of obesity related illness
- Good result for maintenance of weight loss
- No foreign bodies inserted into abdomen
- Can treat obesity associated reflux
- Can be done in patients with gastroparesis

Disadvantages

- Vitamin deficiencies
- Non-reversible
- Life-long compliance is necessary
- Potential for obstruction of the intestines
- Potential for internal hernia of the intestines

Risks

- Bleeding
- Infection
- Damage to surrounding structures
- Need for further surgery
- Conversion to an open procedure
- Heart and lung complications
- Blood clots
- Leak
- Malnutrition
- Internal hernia
- Pain
- Dumping syndrome



A sleeve gastrectomy is a surgical weight loss procedure that involves resection of the greater curve of the stomach. This results in restrictive and neurohormonal effects on the body. The detached stomach is removed from the body. There are no new connections between the stomach and the intestines. Food still moves from the esophagus to the stomach to the small intestine in a normal fashion.

The mean percent of excess body weight loss is 55%. Multiple studies have shown an improvement in diabetes, heart disease and other obesity-related co-morbidities. Several studies show a type II diabetes remission rate between 60–80%. This depends on how severe and how long a patient has had diabetes.

Advantages

- Decreases the amount of food that can be eaten
- Affects the neurohormonal response to hunger
- Induces weight loss comparable to the roux-en-Y gastric bypass
- No foreign bodies are placed in the abdomen
- No new connections are made between the stomach and the intestines
- Short hospital stay of two days

Disadvantages

- Non-reversible
- Potential for vitamin deficiencies

Risks

- Bleeding
- Infection
- Damage to surrounding structures
- Need for further surgery
- Conversion to an open procedure
- Heart and lung complications
- Blood clots
- Leak
- Pain



THE UTAH CENTER FOR MINIMALLY INVASIVE & BARIATRIC SURGERY

BARIATRIC PRE-OPERATIVE LIQUID DIET

It is recommended by your surgeon and dietitian to follow a low calorie, low-fat, low-sugar and high-protein liquid diet for 28 days prior to having bariatric surgery.

The purpose of the liquid diet is to reduce the size of the liver, reduce the risk of bleeding during the surgery and to show commitment to the program. Below are the nutritional guidelines for the pre-op liquid diet. You will need to measure your intake (how much you eat or drink) and keep a food journal. Depending on which items you choose to eat or drink throughout the day, your intake should be approximately 1000 calories and 60–80 grams of protein. You will be expected to lose five pounds per week on this plan for a total of 20 pounds of weight loss prior to surgery. The nutritional guidelines are as follows:

We do not recommend using this diet for anything except the pre-operative process as directed by your surgeon.

UNLIMITED SECTION

These liquids can be taken in any amount since they do not contain sugar.

1. **Sugar free, diet, non-carbonated beverages**, such as Crystal Light, Sugar Free Kool-Aid, Sugar Free Tang, Diet Snapple, FUZE, Powerade Zero, Diet V8 Splash, Propel, Fruit₂O, coffee without milk or sugar, tea and water.
2. **Low sodium broth soups** (chicken, vegetable, or beef—tomato soup is not a broth soup). It needs to be a clear liquid and can NOT contain bits and pieces of meat, tofu, noodles or vegetables. Each eight ounce serving should have no more than 140 milligrams of sodium. Bouillon cubes are not acceptable as they are too high in sodium (salt). The best places to find low-sodium broth (140 milligrams or less) are specialty grocery stores that focus on natural foods.
3. **Sugar free Jell-O and sugar free popsicles.**

LIMITED SECTION

Please do **NOT** consume more than the maximum number of servings listed in each category for each day you are on the diet:

1. **No more than two cups or 16 ounces of juice per day:** fruit juice (apple, orange, cranberry, grape and grapefruit), Gatorade, G2, Vitamin Water, Life Water, Snapple, Powerade, low sodium V-8 Juice and V-8 Fusion.
2. **Limit to three servings per day:** one half cup of regular Jell-O, popsicles or **NO ADDED SUGAR** fudgesicles
3. **Limit to three servings per day:** one cup (eight ounces) of milk (skim, 1%, Lactaid, Almond, or Soy), six ounces of **LIGHT** yogurt, Greek yogurt (no more than 110 calories and 12 grams of sugar per serving), or soy yogurt (for those with lactose intolerance), one half cup of **SUGAR FREE** Jell-O pudding, one half cup of **FAT FREE** or **LOW FAT** cottage cheese.
4. **Limit to two servings of protein shakes per day** (servings sizes are found on the nutritional label on the package). The following are approved protein shakes:
 - Muscle Milk **LIGHT**
 - Pure Protein Shakes
 - Premier Protein Shakes
 - EAS 100% Whey Protein
 - Jay Robb's Protein Powder
 - Jay Robb's Egg White Protein Powder
 - Quest Protein Powder
 - Unjury Protein Powder
 - Soy Protein Powder (for those with lactose intolerance)
 - Nectar (for those with lactose intolerance or wanting different juice-like flavors)
 - Isopure (for those with lactose intolerance or wanting different juice-like flavors)

Nutrition Facts	
Serving Size 1 cup (228g)	
Servings per Container 2	
Amount Per Serving	
Calories 200	Calories from Fat 10
% Daily Value*	
Total Fat 13g	20%
Saturated Fat 5g	25%
Trans Fat 2g	
Cholesterol 2mg	10%
Sodium 600mg	28%
Total Carbohydrate 31g	10%
Dietary Fiber 3g	0%
Sugars 5g	
Protein 5g	
Vitamin A 4%	Vitamin C 2%
Calcium 15%	Iron 4%
<small>*Percent Daily Values are based on a 2,000-calorie diet. Your daily values may be higher or lower depending on your calorie needs.</small>	
Calories: 2,000 2,500	
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Fiber	25g 30g
Calories per gram:	
Fat 9	Carbohydrate 4 Protein 4

For those that are lactose intolerant, please choose from the following: Jay Robb's Protein Powders, soy protein powders, Nectar or Isopure.



SAMPLE BARIATRIC PRE-OPERATIVE LIQUID DIET

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Breakfast	Protein Shake	6 oz. Light Yogurt & 8 oz. Juice	1/2 Cup Low Fat or Fat Free Cottage Cheese & Jell-O	Protein Shake	6 oz. Light Yogurt & 8 oz. Juice	1/2 Cup Low Fat or Fat Free Cottage Cheese & Jell-O	Protein Shake
Snack	6 oz. Light Yogurt & 8 oz. of Juice	Protein Shake	6 oz. Light Yogurt & 8 oz. of Juice	8 oz. 1% or Fat Free Milk	Protein Shake	6 oz. Light Yogurt & 8 oz. of Juice	6 oz. Light Yogurt & 8 oz. of Juice
Lunch	Low Sodium (140 mg or less) Broth Soup & 1/2 Cup Sugar Free Pudding	1/2 Cup Low Fat or Fat Free Cottage Cheese & Jell-O	Protein Shake & Popsicle	Low Sodium (140 mg or less) Broth Soup & 1/2 Cup Sugar Free Pudding	1/2 Cup Low Fat or Fat Free Cottage Cheese & Jell-O	Protein Shake & Popsicle	Low Sodium (140 mg or less) Broth Soup & 1/2 Cup Sugar Free Pudding
Snack	Protein Shake & NAS Fudgesicle	Protein Shake & NAS Fudgesicle	Low Sodium (140 mg or less) Broth Soup & 1/2 Cup Sugar Free Pudding	Protein Shake & NAS Fudgesicle	Protein Shake & NAS Fudgesicle	Low Sodium (140 mg or less) Broth Soup & 1/2 Cup Sugar Free Pudding	Protein Shake & NAS Fudgesicle
Dinner	1/2 Cup Low Fat or Fat Free Cottage Cheese & Jell-O	Low Sodium (140 mg or less) Broth Soup & 1/2 Cup Sugar Free Pudding	Protein Shake	1/2 Cup Low Fat or Fat Free Cottage Cheese & Jell-O	Low Sodium (140 mg or less) Broth Soup & 1/2 Cup Sugar Free Pudding	Protein Shake	1/2 Cup Low Fat or Fat Free Cottage Cheese & Jell-O
Snack	Popsicle & 8 oz. Juice	Jell-O & 8 oz. Juice	NAS Fudgesicle & 8 oz. Juice	Popsicle & 8 oz. Juice	Jell-O & 8 oz. Juice	NAS Fudgesicle & 8 oz. Juice	Popsicle & 8 oz. Juice
Freebies	Sugar Free beverages: Water, Crystal Light, SF Kool-Aid, Diet Snapple, Propel, Coffee, Tea Sugar Free Jell-O, Sugar Free Popsicles, Broth Soup						



THE UTAH CENTER FOR MINIMALLY INVASIVE & BARIATRIC SURGERY

WHAT TO EXPECT WHILE IN THE HOSPITAL

WELCOME TO THE UTAH CENTER FOR BARIATRIC SURGERY

Thank you for choosing to get your surgical care with the Utah Center for Minimally Invasive and Bariatric Surgery. Here you will be cared for by our team of Bariatric nurses. If there is anything we can do during your hospital stay to make you more comfortable, please let us know.

The Evening After Your Surgery

- You will be admitted to our Telemetry Bariatric Unit. You will have a foley catheter in place and telemetry and pulse oximetry leads to better monitor your health and safety.
- Pain control will be provided via IV pain medications. Please communicate with your nurse to ensure your pain is controlled.
- You will be NPO, meaning nothing to eat or drink, for the first night after surgery.
- Your family and friends are allowed to visit you. Please coordinate this with your nurse to ensure the comfort and safety of you and all of our patients.
- You may get out of bed. In fact, we encourage it. However, please ask for assistance as you will have many monitors and IVs that need to be managed safely while you are out of bed.
- Please use your incentive spirometer ten times every hour while awake. Your nurse will instruct you on how to use this.
- If you use CPAP or BiPAP at home, you will continue it during your hospital stay. Please let your nurse know if you use either device.
- You will be given a blood thinning shot every day during your hospital stay. It will start right before surgery.
- Please wear your SCDs (serial compression devices) while in bed. These help prevent the development of blood clots.

The Day After Your Surgery

- You will start your post-operative clear liquid diet. Instructions for this diet will be given to you. Please start slowly. Do not drink more than 30 milliliters per hour. If you have questions regarding your diet, a dietitian can review the post-operative diet instructions with you.

- Your foley catheter will be removed today so you can get out of bed more easily and to prevent a urinary tract infection.
- You may shower.
- You need to get up out of your room and move around the unit at least three times a day. You should be out of bed as much as possible. Drink while sitting up in a chair. Sit in a chair for at least two hours, three times a day. Physical therapy or Occupational therapy may come to assist you with daily activities after surgery.
- You will be discharged from the hospital when you are able to tolerate liquids, your pain is controlled, your exam is appropriate and your labs are within normal limits.
- You will be given discharge instructions on diet, exercise, follow-up, incision care and emergency care. Please review these instructions carefully and ask questions when needed.
- You will be prescribed pain medications, a stool softener, a proton-pump inhibitor and possibly a blood thinner. Your regular home medications may or may not be continued.
- Follow-up two weeks after surgery.



ACTIVITY

Exercise

You should move as much as possible when you get home. Walking is good exercise during the first two to four weeks after surgery. Set up a plan for your exercise, increasing the number of minutes you walk every day. This will make you feel better sooner, reduce your risk of problems after surgery, and improve your bowel function. You should begin your exercise plan the day of surgery, unless otherwise instructed. While in the hospital you should take one walk around your unit, three times a day, unless otherwise directed by staff. Make sure someone is with you and do not attempt exercise if you feel dizzy or too weak.

Exercise Plan: Start by walking 10 minutes a day, walking at a fairly brisk pace (as tolerated). Increase the number of minutes you exercise until you reach the goal of 30 minutes of cardio exercise every day. After six weeks, you may try aerobic classes, bike riding or other activities. You may discuss this at your four week post-op visit.

Stairs

You may go up stairs slowly as long as you do not feel weak. Have someone around the first few times you attempt stairs or exercise. Anytime you feel faint, you should sit or lie down.

Driving

Do not drive until you have been seen for your first post-operative clinic office visit or if you no longer need pain medication. Unless told otherwise by us, you may drive after your first visit and when you can react safely in an emergency situation. You will likely be prescribed a narcotic pain medication after surgery which could impair your ability to drive. You must not be taking pain medicines stronger than regular Tylenol (acetaminophen) at the time you are driving, nor should you have a great deal of pain, as this will affect your ability to react quickly.

Also, do not take narcotic pain medicine that has acetaminophen (Tylenol) in it and regular acetaminophen (Tylenol) at the same time as acetaminophen is in both of them. If you are trying to take yourself off the narcotic pain medicine that contains acetaminophen by switching to regular acetaminophen (Tylenol), allow six hours between doses.

Lifting/Coughing

Practice 10 deep breaths every hour and two coughs every hour, (for at least 12 hours a day) for the first week after surgery to reduce the risk of lung problems or pneumonia. Do not lift heavy objects (more than ten pounds) for the first four weeks. When coughing, be sure to place a pillow over the incision and gently press inward to reduce the pressure (from coughing) on your incision. Avoid lying on or putting pressure on your stomach for these first six weeks. We recommend bringing a pillow for the car ride home as the seatbelt will cross near the surgical incision sites.

Returning to Work

When to return to work will depend on the type of work you do. Most patients will return to work one week after surgery. The more movement involved with your job, the more time may be needed before being able to return.

Diet

Follow the Dietary Guidelines in the Bariatric Booklet. For questions regarding your diet, you may call our office.

Target Goals for Intake Post-operatively:

- 60–80 grams protein per day
- 64 ounces water per day
- Less than 20 grams of fat per day

You may not be able to achieve these goals immediately after surgery but should work towards them. Call our office if you are not able to take in at least 32 ounces of liquids per day.

Bowel Function

You may experience constipation for a few days after the surgery, but this is not harmful. If you need to take something, try 30 milliliters of Milk of Magnesia. If you are belching often, you may be swallowing too much air. You should avoid using straws and drinking carbonated drinks. Gum should also be avoided as it can make this problem worse and may cause a blockage if swallowed.

MEDICATIONS

Discharge Medications

A number of medications are used routinely after surgery. You will be prescribed a narcotic pain medication. You will also be given a stool softener and a PPI (proton pump inhibitor).

Routine Medications

After your surgery, your regular medicines may be adjusted or stopped. This may be discussed in your preoperative visit. Patients who have had problems in the past with blood clots (deep vein thrombosis) in the legs or lungs (pulmonary embolus) may be sent home on blood thinners. You should space out the times you take your medicine, rather than taking them all at one time, in order to avoid having a large number of pills sitting in your stomach.

If you were using a machine before the time of your operation such as C-PAP or BiPAP or home oxygen, you should continue this when you go home. These may be able to be stopped sometime in the future. If using C-PAP or BiPAP, follow up with your prescribing healthcare provider within six to twelve months to determine if adjustments need to be made.

BIRTH CONTROL/PREGNANCY

It is suggested that you avoid getting pregnant for at least 18 months after surgery. A barrier contraceptive (such as a condom or diaphragm) is suggested in addition to the birth control pill (if prescribed) as hormone changes may alter the effectiveness of the pill. Do not start hormonal birth control for at least one month after surgery. Should you become pregnant, please inform our office. Follow up on a regular basis will be necessary.

WOUND CARE

Your incision has been closed with dissolvable sutures on the inside and a special skin glue on the outside. The skin glue will dissolve so do not attempt to remove it from your skin. You may shower the day after surgery and allow clean, soapy water to run over your incision. Do not soak the surgery sites in water (like a hot tub, bathtub, swimming pool or ocean). Do not put any ointment or creams over the incisions for the first six weeks after surgery or while the incision is open, draining or scabbed.

You may go home from the hospital with a drain in your abdomen. You should measure and record the amount of drainage that comes out of your drain every day, discard the drainage in the sink or toilet and bring this list to your two week post-operative visit. It is normal for your incision to drain a small amount of gold-colored liquid. You may cover the site with a clean 4x4 bandage or Band-Aid if leaking persists. If your wound develops any thick drainage, greenish-brown color, a foul odor, redness, and/or tenderness, it may be a sign that your wound is infected. If this happens, call our office.

RETURN TO CLINIC

You will have follow up appointments in the clinic two weeks, three months, six months, nine months, 12 months, 15 months, 18 months, 24 months and every year thereafter for the first five years. Your two-week post-op surgery appointments will be scheduled at the same time your surgery is scheduled. Your two-week and three-month follow-up will be with your surgeon. The other appointments will be with the dietitian. Please make sure to schedule all other follow up appointments according to this plan.

You should schedule an appointment with your family doctor to transition care. For patients with diabetes, heart disease, high cholesterol, high blood pressure and kidney disease or other chronic diseases, you should make a follow up appointment with the treating healthcare provider within one month after surgery. For all others, we suggest an appointment within three to six months of surgery. As weight loss will improve your health status and may require changes in your healthcare regimen, it is suggested that long-term follow up with your family doctor occur every six months after surgery for the first two years and then every year after.

SUPPORT GROUP

All patients are strongly encouraged to attend a monthly support group. The support group is held once every month. Please call our office or visit our website for support group information.

PRECAUTIONS—WHEN SHOULD I CALL THE PHYSICIAN?

Severe, Persistent Vomiting: For gastric bypass, your new stomach pouch will only hold about one to two ounces of liquid or food in the beginning, and for the sleeve about two to four ounces of food. You may vomit if you eat too fast or too much. However, if you have persistent vomiting or vomiting that looks black, bloody or like coffee grounds, this could be a sign of the start of an ulcer, and you should call our office right away.

Diarrhea: Occasional loose bowel movements are not uncommon. However, persistent, watery diarrhea, especially with a fever, can be a sign of a severe infection of the bowels.

Fevers with or without Cough: This could be a sign of lung, wound or stomach infection.

Sudden Shortness of Breath and/or Chest Pain: This could be related to a heart problem, such as a heart attack, or could be related to a blood clot in the lung (pulmonary embolus) or a lung infection.

Leg Swelling and Pain: Leg swelling with pain in the calf, particularly if it is only on one side, could be caused by blood clot formation in the leg.

Passing Out: This could be a sign of dehydration, low blood pressure, which could be caused by blood loss, low blood sugar or other causes.

Sudden, New Stomach Pain: This could be a sign of leakage around your stomach or an infection in your stomach.

Difficulty Swallowing: If you are unable to tolerate swallowing liquids or solids, you may have a blockage or stricture.

Increased Heart Rate: If your heart rate is more than 100 beats per minute, this could be a sign of infection or leak around your stomach.

Increased Pain: Each day after surgery, your pain should improve. If your pain worsens, please contact our office.

For questions please contact our office Monday through Friday, 8 a.m.—4:30 p.m. In the event of an emergency, please call 911.

SPECIAL ISSUES

Nutrition: It is important that you take the amount of protein and vitamin supplements as ordered to help maintain a healthy nutritional state. Symptoms of under-feeding and vitamin deficiencies may include always feeling tired, new onset of swelling, especially in your lower legs, hair loss, depression, memory loss, numbness, constipation, headaches and mouth lesions. Inform your primary care provider and our staff if you develop any of these symptoms.

Loss of Appetite: This is a normal symptom of weight loss surgery. Do not force-feed yourself. Maintaining a nutrition schedule so that meals are not skipped will be helpful. Speak with our staff if this problem persists.

Dehydration (becoming too dry from a loss of fluids): Because your stomach size has been reduced, you may become more at risk for dehydration. Tell our staff when you are having conditions that may lead to dehydration, such as persistent vomiting and diarrhea, early so that we can help prevent this situation. Symptoms of dehydration include dark, concentrated urine or less than your normal urine out-put, feeling dizzy when you change positions, and feelings of thirst. If you have any of these symptoms, call the office right away.

Bloating/Gas: Some foods may make you develop unusual bloating or heavy gas. If you feel these symptoms, avoid those foods and/or cut your food intake until you have relief of these symptoms. You may take any over-the-counter medicine for gas or bloating that can be chewed or crushed for the temporary relief of these symptoms. Please let the dietitian know if you are having frequent problems with bloating.

Dumping Syndrome and Lactose Intolerance: For gastric bypass patients, after your surgery, you may find that you cannot eat certain foods like you did before your surgery. Certain foods that are high in sugar content or some dairy products may cause cramping, bloating and diarrhea. You may have to identify which foods cause these symptoms and avoid them in the future. Please discuss this with the dietitian.



THE UTAH CENTER FOR MINIMALLY INVASIVE & BARIATRIC SURGERY

POST-OP DIET

DAY ZERO (DAY OF SURGERY)

In the hospital you will not be able to eat or drink by mouth until the day after your surgery (post-op day one).

POST-OP DAY ONE

You should aim to drink 24 ounces of clear fluids that day. Try sipping one ounce (30 milliliters) every hour. Stop when you feel full.

Clear liquids include:

1. Sugar-free, diet, non-carbonated beverages such as Crystal Light, sugar-free Kool-Aid, sugar-free Tang, Diet Snapple, FUZE, Powerade Zero, Diet V8 Splash, Propel, Fruit2O, coffee, tea and water.
2. Low-sodium broth soups (chicken, vegetable or beef). Tomato soup and other creamy soups are not broth soups. It needs to be a clear liquid and can NOT contain bits and pieces of meat, tofu, noodles or vegetables. Each serving should not contain more than 140 milligrams of sodium (salt). Bullion cubes are not acceptable as they are too high in sodium. The best places to find low-sodium broth (140 milligrams or less) are specialty grocery stores that focus on natural foods.
3. Sugar-free Jell-O and sugar-free popsicles.
4. Isopure or Syntrax Nectar (clear protein drinks).

Few tips to meet your daily fluid needs:

- Carry a large water bottle with you wherever you go.
- Drink the things on the clear liquid list that you enjoy the most.
- Make a slushy by adding ice to your beverage and blending it.

POST-OP DAY TWO

You should aim for a goal of 48 ounces of fluid for the day. Your goal is to consume two ounces (60 milliliters) every hour.

POST-OP DAY THREE AND FOUR

You should aim for a goal of 64 ounces of fluid each day, taking sips to avoid dehydration. Remember 64 ounces a day is a goal, if you aren't able to drink this amount of fluids just yet, don't worry; just continue to shoot for that goal each day.

POST-OP DAY FIVE TO 13

Continue drinking the liquids on the clear liquids list, but now you can add liquids which contain protein and vitamins your body needs for healing. Your food will continue to be in the liquid form because your stomach is still swollen and tender on the inside, and your stitches need time to heal.

Acceptable liquids include:

One cup (eight ounces) of milk (skim, one percent, Lactaid, almond, or soy), six ounces of yogurt, non fat Greek yogurt (no more than 110 calories and 12 grams of sugar per serving) or soy yogurt (for those with lactose intolerance), half cup of sugar-free Jell-O pudding, and sugar-free fudgesicles.

The following protein shakes are approved:

- Muscle Milk
- Pure Protein Shakes
- Premier Protein Shakes
- EAS 100% Whey Protein Powder
- Jay Robb Protein Powder
- Jay Robb Egg White Protein Powder
- Soy protein powder (for those with lactose intolerance)
- Syntrex Nectar or Isopure (for those with lactose intolerance or just wanting different juice like flavors)

Note: Lactose-free products include Jay Robb Protein Powders, soy protein powders, Syntrex Nectar or Isopure.

POST-OP DAY 14–28

Pureed and blended foods are added.

In week three you may begin eating “real” foods, though still in liquid form. Start focusing on your food intake. Keeping a food journal is a great way to stay on track.

From this point forward your daily goals are:

- 1000–1200 calories
- 20 grams of fat
- 60–80 grams of protein
- 150–180 grams of carbohydrates
- 25 grams of fiber
- 25 grams or less of sugar (exceptions: fresh fruit and milk—they contain natural sugars)

Remember your stomach is tender and still healing during this phase. In order to allow these areas to heal properly without stress to your stitches and to allow your small stomach pouch to get used to its new role, the food you eat must already be broken down and liquefied (blended or pureed). If you attempt to eat solid food now, your stitches and your procedure may be unsuccessful. Please note, everyone heals at a different rate, therefore, you may feel absolutely no restriction or a lot of restriction at this point. Regardless, you must follow the progression of the post-surgery diet to assure healthy healing.

Examples of foods that can be blended or pureed:

- Cooked, canned or steamed vegetables
- Tuna, chicken or egg salad (hard-boiled egg, nonfat or light mayo, mustard and relish)
- Low-sodium soup
- Oatmeal
- Small curd nonfat or low-fat cottage cheese
- Homemade smoothies (nonfat or light yogurt, Greek yogurt, soy yogurt, fresh fruit)
- Beans

Note: The above foods need to be pureed during post-op weeks three and four.

Avoid Drinking Liquids with Your Meals

Liquids make the stomach pouch expand and won't allow enough room for the blended food. If the food passes through the stomach, you will be hungry sooner and more likely to snack. Aim to stop drinking liquids at least 30 minutes before a meal and do not start drinking liquids again until 30 minutes after eating.

POST-OP DAY 29 AND BEYOND

Soft foods are reintroduced.

Slowly introduce new foods into your diet. A soft diet does not mean the foods have to be blended, but it does mean that you should be foods that are easy to tolerate, such as bland foods. There will be some foods that you may not be able to tolerate at this time. If intolerance does happen, please do not feel like you can't ever have that particular food again. You may simply need to prepare it differently the next time. There is no need to lock yourself in a box! Just give your body a few more weeks and then try the food again. If the food is still intolerable, it is probably best to avoid that food for awhile.

Appropriate soft foods for the soft diet include:

- Tuna, chicken, or egg salad (hard-boiled egg, nonfat or light mayo, mustard, relish)
- Fresh or frozen fish
- Eggs or Egg Beaters
- Beans
- Cooked, canned or steamed vegetables
- Fruit without skin
- Sugar-free pudding
- Nonfat or light yogurt, Greek yogurt, or soy yogurt
- Nonfat or low-fat cottage cheese
- Low-sodium soups
- Baked potato (regular or sweet)
- Low-sugar, high-protein cereal

Note: You do not have to blend or puree these foods, but make sure you chew them thoroughly.

Once you can tolerate solid food, start eating regular food. Remember that bariatric surgery restricts solid foods. If you are eating soft and/or mushy foods, you may not feel the restriction. Please follow a well-balanced diet with a focus on lean protein sources. Bariatric surgery is a tool to help you lose weight, you will still need to watch your calorie intake (by reading food labels and keeping a food diary) and exercise (at least 30 minutes a day).

Remember to:

1. Chew your foods 20–30 times before swallowing.
2. Pay attention to your body's signals of fullness (often pressure or discomfort).
3. Avoid drinking fluid for 30 minutes before or after a meal.
4. Include protein as part of each meal, and eat your protein foods first. Protein assists with healing, maintaining muscle mass, preventing hair loss and providing energy. It is digested slowly, so it helps you continue to feel full.
5. Record what you are eating at each meal. If you start this habit now, it will help you succeed in your long-term weight loss journey. Use an app (such as Livestrong or My Fitness Pal), an online program or just a sheet of paper and record what you eat throughout the day. Review what you've eaten at the end of the day. This will help you learn how many calories you are actually eating, what items helped you feel full throughout the day, what times of day you feel hungry and want to snack and what foods you need to avoid.

Choose from these healthy proteins:

- Chicken (soft, moist, canned, or thinly sliced deli meats; do not eat fried chicken)
- Turkey (soft, moist, canned, ground, thinly sliced deli meats)
- Fish (soft, moist, canned, or fresh fish, or shellfish)
- Lean ground beef (96 - 98 percent lean)
- Yogurt (nonfat, light, artificially sweetened or plain)

- Cottage cheese (nonfat or light)
- Eggs or egg whites (Egg Beaters)
- 98 percent fat-free refried beans
- Soy
- Tofu
- Lentil, black bean or split pea soup
- Protein shakes (Pure Protein, Premier, Jay Robb Protein Powder, soy protein powder, EAS 100% Whey, Muscle Milk Light)
- Protein drinks (Isopure, Syntrex Nectar)
- Textured vegetable protein (TVP)
- Milk or nonfat dry milk

Food Intolerances

Food tolerance varies from person to person and from day to day in a given individual. If you experience difficulty with a specific food, it does not mean you will never be able to eat it again. You can try to eat it again a few weeks later. Time of day and stress levels can affect how you handle particular foods.

If you are following the recommended eating practices, it could be the texture of the food, preparation of the food or just the food itself that's causing the problem.

Here are a few examples of foods that may cause problems:

- Dry or overcooked meats
- Skins of certain fruits and vegetables (potatoes, apples or oranges)
- Doughy or sticky foods (white bread, croissants, donuts, cakes, bagels)
- Rice or pasta
- Stringy or fibrous foods (broccoli, asparagus, celery, pineapple or artichoke—all of these foods are tolerated better when they are cooked thoroughly)



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DIET AND EXERCISE TRACKING STRATEGIES

Research has shown a significant association between self monitoring and weight loss. But, to help change your habits, and appropriately adjust your strategies, you must honestly assess what you eat and how much you exercise each day. Not only will this force you to hold yourself accountable, it will also provide a diary to allow you to reflect on what you are doing that is making you successful, and what you are doing that is preventing you from losing more weight.

Overall, no specific diet or exercise plan is better than another. In the end, you want to ensure you have a calorie deficit each day so that you lose weight. For example, 3,500 calories out is equal to a one pound weight loss. So, having a calorie deficit of 500 calories a day for 7 days a week equates to losing one pound a week. So, if walking one mile means burning, on average, 100 calories, you could eat the same, and walk five miles a day to reach this goal. Or you could eat 250 calories less and walk two and a half miles a day to reach this goal. You and your doctor or dietitian should create a calorie goal to help obtain your weight loss goal. Together you will come up with the best way to meet this goal (whether it be through a low-calorie diet and/or exercise goals). Then find the best strategy for YOU to track your progress and accomplish this goal.

There are multiple options for tracking your progress. No one way is better than another. The most important thing to consider when choosing a diary or tracking solution, is to pick the option that YOU will find the easiest to use, the easiest to access and the one you will most likely stick with. For example, many of the smart phone apps are great options, but if you don't have a smart phone or you have to pay high rates for internet access, this may not be your best option. Sometimes just spending five to ten minutes a day writing down what you ate, how much you ate, when you ate it and what exercise you did in a small notebook is the most simple way to realize when, where, why and how you are overeating and how often you are actually exercising each week.

Remember, honesty with yourself and your chosen self-monitoring system is the only way to meet your goals and expectations. Research shows that people are more likely to over estimate their physical activity when using a self reporting method (pen and paper or typing in a guesstimate of exercise distance into an app) than when using a device that monitors their activity. Similarly, people are more likely to underestimate their caloric intake when guessing the calories versus looking them up, or using an app that automatically enters the exact number of calories per serving. Be honest with serving sizes and exercise amounts to increase your success, learn ways to improve and you'll see success.

Listed below are several options to use. We do not endorse any particular method or product. Our center wants to ensure you use the tools that are easiest for you to accomplish your goals! There are many options available online as apps or products. Feel free to explore other options as well. You may want to try a different one each week to see which you like the best and what you are more likely to stick with.

Bring your chosen system with you to your weight management appointments to help self evaluate your progress.

Simple pen and paper: Write down each day what you eat, approximate amounts and how much you exercise. This option may be the hardest to truly track calories in versus calories out, but it will allow you to notice patterns of eating and also recognize how much you are eating. It is very easy to forget about that handful of jelly beans eaten in the hallway at work, but if you write down everything you eat and review it each night, you will easily be able to identify ways to decrease your calorie intake and increase your calorie output.

LIVESTRONG: This is both a smart phone and online app. You can set up a basic profile and set goals, such as a calorie goal each day. It helps you track calories in and out. It allows you to save common meals and individual items that you eat. It also has a database of commonly eaten food, so you don't have to calculate calories yourself. www.LiveStrong.com

MyFitnessPal: This is similar to LIVESTRONG. It allows easy tracking of exercise, calories in and calories out and uses a database of common foods and restaurants. It's compatible with other devices such as FitBit and RunKeeper. Also, similar to LIVESTRONG, there is an online community available for discussions and recipe sharing. www.MyFitnessPal.com

LoseIt: LoseIt is similar to LIVESTRONG and MyFitnessPal. It has a database of multiple foods and you can store your own commonly eaten foods for easy use. It has a barcode scanner to find foods quickly and pull up information. In addition, it can interact with other apps, such as My Fitness Pal and RunKeeper, and other devices like Nike Fuelband and FitBit. LoseIt also has 'challenges' that can encourage you to take your fitness one step farther. www.LoseIt.com

Nike Fuelband: Worn on your wrist, this device helps track your sleep, steps, calories burned and workouts completed. It can interact with multiple apps and directly connect to your phone via bluetooth.

FitBit: Also worn on your wrist, FitBit can track your sleep, steps, calories burned and workouts completed. It also has an associated app to help track fitness, calories and weight loss. There are several types of FitBits available.





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WEIGHT LOSS EXPECTATIONS

Patient Information

Height: _____ Weight: _____

Desirable Body Weight: _____

Excess Weight: _____

Body Mass Index: _____

How Much Will I Lose?

Because every person is different, it is hard to predict how much weight you will lose. But, on average, most patients after 3-5 years are able to maintain successful weight loss of about 50% of their excess weight.

Your goal BMI should be less than 30.

How Quickly Will My Weight Come Off?

The rate of weight loss depends on how much you have to lose. Although we cannot predict how long it will take you to reach your goal weight, we do know the following:

- Heavier individuals tend to lose weight more rapidly.
- Many patients lose anywhere from 20–30 lbs. in the first four weeks after surgery and around 10 lbs. per month thereafter.
- Weight loss may slow down or plateau as soon as 9 months but it usually takes up to 18–24 months to completely stabilize. Although this may be above your ideal weight, you can lose additional weight by choosing healthy foods and increasing your exercise.



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BEHAVIOR MODIFICATION AND PHYSICAL ACTIVITY

Behavior plays a significant role in weight management. Modifying behaviors that contributed to developing obesity is one way to treat obesity either alone or in conjunction with other treatments. A few behavior modifiers include:

- Self-monitoring
- Increasing physical activity
- Becoming educated about the body and how to nourish it appropriately
- Engaging in a support group
- Setting realistic goals

Self-monitoring:

Though losing weight is more complex than simply taking in fewer calories than you burn off, keeping track of how many calories you consume, and how active you are, continue to be beneficial to successful weight loss and weight maintenance. Because self-monitoring is critical for success with lifestyle changes, it is important to look at the various self-monitoring techniques.

Self-monitoring refers to the observing and recording of eating, drinking and physical activity patterns, followed by feedback on these behaviors. The goal of self-monitoring is to increase self-awareness of target behaviors and outcomes, thus serving as an early warning system if problems arise and helping to track success.

Some commonly used self-monitoring techniques include:

- Food diaries
- Regular self-weighing
- Exercise logs
- High-tech tools such as pedometers, accelerometers and metabolic devices

All of these techniques can be utilized simultaneously to track patterns in daily activity. You can then use these patterns to determine which behaviors tend to result in weight gain versus weight-loss. To optimize your weight loss, focus on making the healthy patterns part of your long-term lifestyle change.

With technology advancements, self-monitoring techniques are changing and improving to help defeat some of the major barriers to adherence. The bottom line is that no matter how you do it, self-monitoring should be an important part of your weight loss, weight maintenance and healthy lifestyle change.

Physical Activity:

Studies have proven that individuals affected by obesity who maintain an optimal level of fitness have lower risk of heart attacks than individuals affected by obesity who are not very fit. Regular physical activity is necessary for good health. It is primarily important for someone who is trying to lose weight or maintain a healthy weight. Exercise not only helps control weight, but it also contributes to healthy bones and emotional health. Be sure to check with your doctor before embarking on an exercise routine.

To maintain your weight, the Centers for Disease Control (CDC) recommends 150 minutes of moderate aerobic activity, 75 minutes of vigorous activity or an equivalent mix of the two each week. This recommendation can vary, however, depending on your fitness level and abilities, so consult with a healthcare professional for your individual needs.

Moderate and Vigorous Physical Activities

Physical activity does not have to be strenuous to be beneficial. Someone who has been sedentary but wants to get started with an exercise program should begin by incorporating a few minutes of activity into each day.

Moderate: Moderate activity is physical activity ranging from 64 to 76 percent of maximum heart rate. Moderate intensity activity causes a slightly increased rate of breathing and feels “light” to “somewhat hard.”

Examples of moderate intensity activities:

- Brisk walking (walking one mile in 15 minutes)
- Yard/house work
- Leisurely bike ride
- Playing with family
- Light swimming

Vigorous: Vigorous intensity is physical activity greater than 76 percent of maximum heart rate. Vigorous intensity activities result in increased rates of breathing and sweating and feel from “somewhat hard” to “very hard.” It is quite difficult to hold a conversation when performing this type of activity.

Examples of vigorous intensity activities:

- Competitive sports such as soccer or basketball
- Jogging
- Hiking
- Cycling
- Aerobics

Developing Your Physical Activity Goals

Once you have decided why you want to exercise and make a commitment, then you can set a SMART goal and use the FITT principle to make a plan.

Your goals should be SMART:

- S** Specific: Choose one specific behavior modification per goal to work on.
- M** Measurable: Can you measure this against a baseline?
- A** Attainable or Action-based behaviors: Is the goal attainable? Use action words when writing goals such as “I will” and “I do,” rather than “try, should, would, could.”
- R** Realistic: Do you have honest and realistic expectations of yourself with your time, body, likes/dislikes?
- T** Timely: Is the time allotted reasonable and manageable for you right now? And, when will it conclude?

Then use the FITT principle to develop your physical activity plan:

- F** Frequency: How often?
- I** Intensity: What percentage of your target heart rate do you exercise? How hard do you plan on working?
- T** Type: What mode of exercise are you using (walk, swim, aerobics, bike, dance, weights, yoga, Pilates, etc.)?
- T** Time: How long can you exercise per day? (This does not have to be all in one session. Time can be divided throughout the day.)

Now, let us look at how to put these two principles together and start our plan. Here are some examples of poor and well-written goals:

Poor Goals:

- I want to increase my cardiovascular exercise.
- I need to lose weight.

These goals are too general and do not clearly define the plan.

SMART Goals:

- I will increase my exercise by walking Monday, Wednesday and Friday two times a day for 15 minutes each time. I will walk at a pace that is somewhat difficult.
- I will record my food intake and exercise every day. My goal is to stay under 2,000 calories and to exercise 150 minutes this week.

These SMART goals are specific and allow you to easily determine if you are following your plan or not.

Remember these few things about exercise:

- Make it simple.
- Make it realistic.
- Make it happen.
- Most importantly, make it fun!

The most important commitment YOU make is to YOUR health and wellness.

Setting Realistic Goals:

When developing your goals for weight loss, exercise, eating healthy and more, it is important to keep them realistic. Quite often, individuals become frustrated when they do not see immediate weight-loss results. It is important to not let yourself become frustrated with your weight-loss plan. Changing your diet, incorporating exercise and more can all be significant life changes and they need to be taken seriously. Here are a few tips for developing realistic goals:

- Average weight loss is one to two pounds per week.
- Start slow with exercise and find an activity you enjoy.
- Ask your spouse, family member or friend to exercise with you.
- Make meal times a family affair. Have your children help with cooking and let them choose healthy foods as well.
- Recognize your progress. Continue a proactive mindset and remember that each day is another day forward.
- Don't be afraid to ask for help. Feel like you might be slipping with your eating or exercise routine? Talk to a family member, friend or healthcare professional and they'll help you get back on track.

Behavior modification is the cornerstone of any weight-loss option. It may also be one of the most difficult aspects of weight loss or weight maintenance. Our behaviors are engrained in our daily routines, families, lifestyles and more. Don't expect to change your behaviors in one day or even one week for that matter. It will take time, but it is important to stick with your behavioral changes, as they will greatly help you in your weight-loss journey.



Setting goals, both long term and short term, will help you devise a plan towards moving one step closer to a healthier and happier you. Research has shown a direct link between defined goals and enhanced performance in both sports and business.

People with goals succeed because they know where they are going. It's as simple as that.

—Earl Nightingale.

Establish S.M.A.R.T. goals:

- S** Specific
- M** Measureable
- A** Attainable
- R** Realistic
- T** Timely

First, establish your wellness vision, which is the goals and dreams of a future you. It incorporates all the reasons why you want to lose weight and everything about your future health and well-being. Your long term goals will help you reach your wellness vision. Your weekly goals will lead to achievements in moving you one step closer to your long term goal success.

My Wellness vision is (these are the goals and dreams of a future you):

My three-month goals are:

1. _____
2. _____
3. _____
4. _____

My goals for next week are:

1. _____
2. _____
3. _____

My challenges this week are:

- 1. _____
- 2. _____
- 3. _____
- 4. _____

My solutions are:

- 1. _____
- 2. _____
- 3. _____
- 4. _____

Suggested Weekly Structure to get started:

- Record foods at least every other day to be accountable to yourself. Include in your record foods and beverages, amount consumed, and time of day consumed. Be sure to include your mood and where the meal was eaten because these factors can play a huge part in your dietary patterns.
- Plan your meals ahead of time and make ready prepared snacks to avoid “quick grabs.” Bring food with you when away from home, such as fruit or veggies.
- Strive for 150 minutes of physical activity each week by exercising at least 3-5 days per week. Increase the number of steps you take daily.
- Remove “problem” or “trigger” food from your home, such as sweets or salty foods
- Seek help and support of family and friends, your dietitian, therapist and/or support groups.



The goal of weight loss surgery is to achieve medically significant weight loss and promote good health.

This booklet describes the combination of lifestyle changes you must make in order to have a successful outcome with surgery. It is important that ALL of these behaviors are incorporated into your life. These are not “a la carte” options. Each recommendation is equally important for you to gain success.

In order to maximize weight loss and achieve weight maintenance, to eliminate food related complications, and to stay well-nourished while you lose weight, we encourage you to adopt the dietary and lifestyle behaviors listed with these 10 key points.

10 KEY POINTS OF BEHAVIOR CHANGE FOR SUSTAINABLE WEIGHT LOSS

1. Set Weekly goals

Establishing achievable goals gives a course of action and accountability. Setting S.M.A.R.T. goals enables you to set targets that you are ready to act on and can fit in with your other weekly priorities. Reviewing these on a weekly basis helps you to continually fine tune your goals and strategies and learn what works well for you and what needs to be changed. Keep in mind this is a learning phase to help increase your awareness and find strategies for lifelong success.

2. Attend Support Group Meetings

The journey of weight loss can often be a difficult one and a lonely one. We all know that one person who can “eat anything and not gain a pound.” Realistically, this is not true for the majority of Americans. Most individuals battling obesity or severe obesity find themselves needing support. Support groups are an excellent resource to share your story and learn from others. Support groups are a way for you to interact with other post-bariatric surgery patients and provide each other with support and suggestions. Having a support system and attending a support group will help you achieve significantly better weight management.

3. Be Active

Research has shown that 95% of individuals who maintain significant weight loss are active on a daily basis or accumulate equivalent activity over the course of a week. The recommendation for physical activity for sustained weight loss is 150 minutes per week. The benefits of activity include weight management, improved quality of life, self-esteem, body image, mental functioning, and overall improvement in health. Finding time for exercise can be hard, so make time! Find an activity you enjoy and stick with it. Begin or build from your current fitness level and slowly build up time, intensity, and frequency of activity.

4. Select nutritionally balanced meals and snacks; focus on protein rich food(s) at most meals—approximately 60 grams per day for the first 3 to 6 months.

A balanced diet incorporates a variety of foods from all food groups (dairy, grains, fruits, vegetables, protein, and fat). All food groups provide important nutrients, vitamins, and minerals, which help your body function properly. Protein is an important nutrient in your diet; its main function in the body is to maintain and repair your body cells and tissues. Protein is important in the action of healing, improving the body’s immune function, and in the prevention of anemia.

5. Take small bites and chew food thoroughly.

Initially, the new opening from your stomach pouch will be very small and can easily be blocked with small pieces of food. Blockage of the opening will prevent food from leaving the stomach and will cause nausea and vomiting. Take small bites of food and chew thoroughly to a smooth, pureed consistency before swallowing. This strategy will also increase satiety by aiding in the taste and enjoyment of meals. Chewing thoroughly will also improve digestion and tolerance of foods.

6. Eat and drink slowly

It takes approximately 20 minutes for the hormonal signals from your stomach to reach your brain, signaling that you are satisfied and have eaten enough. Plan at least 20-30 minutes for each meal; less time may result in nausea, vomiting, hiccups, gas, and increased calorie consumption over time. Taking more time to consume meals can also lead to decreased food and calorie intake.

7. Separate eating and drinking

Wait 15 minutes after drinking before eating, take 20-30 minutes to eat and wait 60 minutes after eating to drink beverages. This is important for long-term success. Liquids will move the solid food from your stomach pouch more quickly. This will lead to increased hunger and food intake.

8. Drink at least 8 cups of liquid each day in between meals.

Strive to select non/low-calorie beverages. Non-fat, skim, or 1% fat milk, non-fat Lactaid or calcium-fortified plain soy/almond milk and/or protein supplement are included in these liquids. Alcoholic beverages are high in calories and are not recommended. Avoid soft drink beverages, as they will stretch your pouch due to the carbonated gas, which will limit your success. Limit caffeine in the first month, as caffeine can be irritating to the stomach.

9. Take a multivitamin daily

Other vitamin and mineral supplements may be recommended for you in follow-up care after surgery.

- Chewable or liquid multivitamins
 - Centrum, One-a-day, Prenatal, etc.
- Calcium Citrate
 - Citrical +D, Caltrate +D, etc.
- Vitamin B-12

Do not take your multivitamin at the same time as calcium as it will decrease the absorption of both.

10. Limit high-sugar and high-fat foods.

Foods high in sugar and/or fat are also high in calories. To avoid minimal weight loss, weight regain, and dumping syndrome, limit these types of foods and beverages. Listed below are some foods that are high in calories due to the content of alcohol, sugar, and/or fat. These foods may provide high amounts of energy yet little to no nutritional value and should be limited.

- **Beverages:** Whole milk, sugary beverages, such as fruit drinks, soft drinks, shakes and smoothies, alcoholic beverages, and sweet tea
- **Meats:** Fried meats, sausages, hot dogs, bacon, ribs
- **Starches:** Sweet rolls, doughnuts, biscuits, chips, muffins, high-fat crackers
- **Fruits:** Fruits canned in heavy or light syrup
- **Vegetables:** Vegetables covered in cream sauce, butter or cheese, breaded, or fried
- **Desserts:** Pies, pastries, puddings, ice cream, candies, cookies, cakes
- **Fats:** Oils, lard, shortening, butter, margarine, salad dressing, cream cheese, mayo



Healthy Lifestyle/Diet

Please follow a well-balanced diet with a focus on lean protein sources. Bariatric surgery is a tool to help you lose weight; you will still need to watch your calorie intake (by reading food labels and keeping a food diary) and exercise (at least 30 minutes a day).

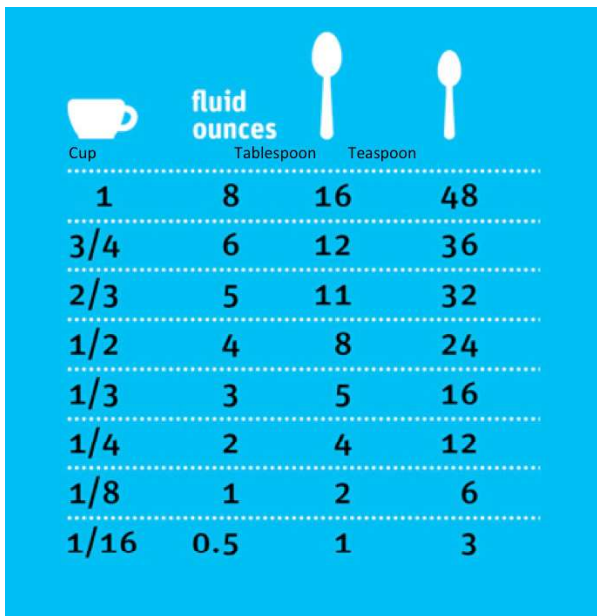
Remember to:

1. Chew your foods 20–30 times before swallowing.
2. Pay attention to your body's signals of fullness often pressure or discomfort
3. Avoid drinking fluid for 30 minutes before or after a meal.
4. Include protein as part of each meal, and eat your protein foods first. Protein assists with healing, maintaining muscle mass, preventing hair loss and providing energy. It is digested slowly, so it helps you continue to feel full.
5. Record what you are eating at each meal. If you start this habit now, it will help you succeed in your long-term weight loss Journey. Use an app (such as Livestrong or MyFitnessPal), an online program or just a sheet of paper and record what you eat throughout the day. Review what you have eaten at the end of the day. This will help you learn how many calories you are actually eating, what items helped you feel full throughout the day, what times of day you feel hungry and want to snack and what foods you need to avoid

Amount: 8 to 10 tablespoons of food per meal, with 4 to 5 small meals per day for the first month, transition to 12-16 Tablespoons (3/4 to 1 cup) of food per meal and 4 small meals per day

Choose from these healthy proteins:

- Chicken (soft, moist, canned, or thinly sliced deli meats—do not eat fried chicken)
- Turkey (soft, moist, canned, ground, thinly sliced deli meats)
- Fish (soft, moist, canned, or fresh fish, or shellfish) Lean ground beef (96-98 percent lean)
- Yogurt (nonfat, light, artificially sweetened or plain)
- Cottage cheese (nonfat or light)
- Eggs or egg whites (Egg Beaters)
- 98 percent fat-free refried beans
- Soy
- Tofu
- Lentil, black bean or split pea soup
- Protein shakes (Pure Protein, Premier, Jay Robb Protein Powder, soy protein powder, EAS 100% Whey, Muscle Milk Light)
- Protein drinks (Isopure, Syntrax Nectar)
- Textured vegetable protein



A conversion chart on a blue background showing the relationship between fluid ounces, cups, tablespoons, and teaspoons. The chart is organized into four columns: Cup, fluid ounces, Tablespoon, and Teaspoon. Each row represents a fraction of a cup, with the corresponding values in fluid ounces, tablespoons, and teaspoons listed below it. The rows are separated by dotted lines.

Cup	fluid ounces	Tablespoon	Teaspoon
1	8	16	48
3/4	6	12	36
2/3	5	11	32
1/2	4	8	24
1/3	3	5	16
1/4	2	4	12
1/8	1	2	6
1/16	0.5	1	3

Protein Malnutrition

During the first three months after surgery, 25% of your weight loss comes from lean body mass. Adequate dietary protein is essential during this time to build tissue and aid in wound healing. You may experience thinning hair and some temporary hair loss around 3-4 months post-op if protein needs are not met. Taking excess amount of vitamin A, biotin or zinc does not stop this process. Over time, the body will begin to preserve its muscle stores so fat is lost instead.

Vitamin/Mineral Deficiencies

Deficiencies occur due to:

1. A lack of gastric juices in the small stomach pouch to aid indigestion.
2. Decreased contact of food with tissues and enzymes in the upper GI tract used for absorption.

The following are the most common deficiencies that can occur:

Calcium: deficiency often results from a lack of milk and dairy consumption due to lactose intolerance and a disruption of normal calcium absorption. Because the body must now rely on alternate mechanisms for good bone health, Calcium Citrate is better absorbed than Calcium Carbonate. Recommendation is 1200-1500 milligrams (mg) per day in divided doses.

Iron: deficiency occurs in 33-50% patients and is higher in menstruating women. A prenatal vitamin providing 40-65 mg of elemental iron is sufficient. If needed, supplemental iron in the form of ferrous sulfate, gluconate or fumarate may be prescribed by your physician. Do not take your iron with calcium or dairy products.

Vitamin B12 (Cobalamin): deficiency occurs in greater than 30% patients. Normal plasma levels can be maintained with 350 micrograms (mcg) daily crystalline B12, or monthly intramuscular injections of 1000 mcg. A nasal spray form of B12 is also available.

Folate: deficiency occurs less often than Vitamin B12 and Iron deficiency. A daily prenatal vitamin with 1 mg folate should be sufficient.

Nausea & Vomiting

Eating too quickly, too much, not chewing thoroughly, and progression of the diet to rapidly may cause nausea and vomiting. Eat and drink slowly. Monitor portion sizes. Gradually progress the diet as tolerated.

Dehydration

In addition to losing weight, you have a greater risk for dehydration, which is the most common issue with individuals following bariatric surgery. As a result of a small stomach, you will be unable to handle “ordinary” portions of food and liquids. Drink at least 6 to 8 cups of liquids between meals daily and increase as tolerated, especially if you are experiencing frequent diarrhea.

Hypoglycemia

Related to hidden sugar intake is the possibility of experiencing hypoglycemia (low blood sugar). It is important to limit concentrated sweets in the diet simply for the reason that they initiate rapid blood glucose rise and rapid

fall (due to the release of insulin), leading to low blood glucose or hypoglycemia. Symptoms include weakness, drowsiness, headache, irritability, trembling, rapid heart rate and cold, clammy feeling. Approximately 10% of patients experience Late Dumping Syndrome of Hypoglycemia. Common manifestations include the same as early dumping but without GI symptoms of nausea, diarrhea, etc. This may occur 2-4 hours after eating and is related to a delayed but significant drop in blood sugar level due to over-production of insulin.

Constipation

Constipation may be due to lack of bulk or fluid in your diet, an irregular pattern of eating, or lack of physical activity. Eat well-balanced, regularly scheduled meals and gradually add fiber to your diet as tolerated. Unsweetened, diluted prune juice may be used when necessary. Benefiber may be added to fluids or foods to provide bulk and to reduce constipation. Taking a walk can also help with the flow of food through the gastrointestinal tract and relieve constipation. Consult your physician.

Other factors to consider:

Dining Out

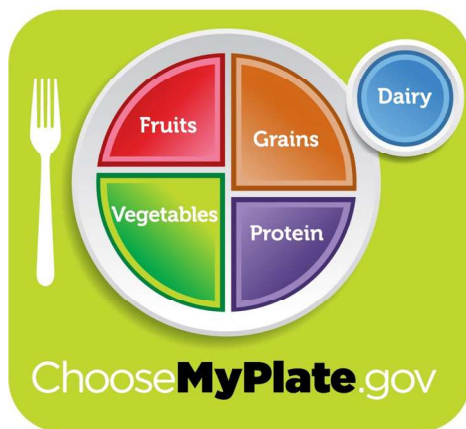
When dining out, choose a seat near the restroom in case you eat a food that does not agree with you, or if you eat more than your stomach can hold. Keep in mind to only eat the amount of food that is recommended and limit high-fat/sugar foods. Restaurant portions may provide enough food for three to four meals, so share with friends or take food home for leftover. Ask the waiter/waitress for a half size, child-sized, or senior citizen portion.

Educate your support team with your nutritional guidelines!

You will need their assistance in monitoring your fluid intake so you do not exceed the recommended fluid goal and so you consume only acceptable beverages.

Choose My Plate

MyPlate shows the five food groups that are the building blocks for a healthy diet using a familiar image. Before you eat, think about what goes on your plate or in your bowl or cup.



Food like vegetables, fruits, whole grains, low-fat dairy products, and lean protein foods contain the nutrients you need without too many excess calories.

- Make half your plate fruit and vegetables
- Switch to skim or 1% milk
- Make at least half your grains “whole grains”
- Vary your protein food choices
- Watch your portion sizes

THE IMPORTANCE OF PROTEIN

Protein is very important to help you heal from your surgery and preserve lean body mass while you are losing fat. The best sources of protein are milk, cheese, cottage cheese, yogurt, eggs, fish, and lean meat, as you are able to tolerate. If you feel that you are not able to get in enough protein foods, you may need to supplement your diet with extra protein. You need a MINIMUM of 60 grams of protein daily. Goal is 60–80 grams protein per day for the rest of your life.

Ways To Add Extra Protein:

- Add Carnation® Instant Breakfast (diet, sugar-free, no sugar added) to skim milk
- Add Carnation® (or store brand) nonfat dry milk to:
 - Soups, hot cereals, skim milk, mashed potatoes, egg substitutes
- Add pureed baby food meats to soups or pasta dishes
- Soy-based sausage links or patties (MorningStar Farms® brand)
- Use skim milk whenever possible in recipes instead of water (soups/hot cereals)
- Add low-fat cheese to foods
- Add eggs or egg substitutes to foods

	Food	Portion	Grams
Dairy Non-fat or low fat (1%)	Cheese	1 oz	7
	Yogurt	8 oz	12
	Milk	1 cup	8
	Cottage Cheese	1/4 cup	7
	Evaporated Skim Milk	1/2 cup	8
	Non-fat Dry Milk	1/3 cup	8
	Soy Milk	1 cup	8
Meat & Meat Substitutes Lean-no skin, trimmed of all visible fat Cooked without fat or breading	Beef, Fish, Pork, Poultry	1 oz (cooked)	7
	Eggs	1 large (cooked)	7
	Egg Beaters®	1/4 cup (cooked)	6
	Beans & Lentils	1/2 cup (cooked)	7
	Tofu	1 oz	3
	Tempeh	1 oz	5

Good Protein Supplements:

(This is just a small list; there are many available.)

Recommendations for choosing protein supplements: Select a whey protein or soy protein (100% protein) that is sugar-free or less than 8 grams carbohydrate and at least 20–25 grams protein per serving. The protein supplement should be around 100 calories. All information based on the serving size from the manufacture (usually 1–2 scoops).

Manufacturer	Product Name	Cal/Serv- ing	Protein/ Serving	Website
GNC®	Pro Performance® 100% Whey Protein	130	20	GNC.com
Vitamin World®	Precision Engineered® Whey Protein	80	17	VitaminWorld.com
Optimum Nutrition®	100% Whey Protein	70/100	17/22	OptimumNutrition.com
	100% Gold Standard™ Whey	120	24	WheyGoldStandard.com
Prosynthesis Laboratories	Unjury® Whey Protein	90	20	Unjury.com
Syntrax® Innovations	Syntrax® Nectar	90	23	Syntrax.com
EAS®	Precision Protein	100	20	EAS.com
Bariatric Nutrition™	Protein Shake	100	15	Bariatric.com
Nature's Best	IsoPure (ZeroCarb)	200	50	TheIsoPureCompany.com
Premier Protein®	Premier Protein® (11 oz container)	160	30	PremierProtein.com
Bariatric Advantage®	Bariatric Advantage®	160	27	BariatricAdvantage.com
Pure Protein®	Super Food Plant Based Protin	140	20	PureProtein.com
Pure Protein®	Whey Protein	150	25	PureProtein.com
Bariatric Fusion®	Bariatric Fusion®	150	27	bariatricfusion.com

IMPORTANCE OF CARBOHYDRATE AND FAT

Carbohydrate

Carbohydrates are the body's primary "quick-start" fuel and are quickly converted into glucose. Based on how quickly they are converted to glucose, carbohydrates are classified as simple (very rapid conversion to glucose, with a corresponding rapid rise in insulin production) or complex (slower rate of conversion to glucose, less stimulation of insulin release). Complex carbohydrates include whole grains, vegetables, and fruits. They are also a good source of dietary fiber—soluble fiber (such as pectin) and insoluble fiber (cellulose, like the "strings" in celery). Simple carbohydrates include "starches" like breads, potatoes, pasta, simple cereals, fruit juices, sweets, alcohol, soft drinks, and some high-sugar fruits like bananas.

The brain needs steady glucose, so our food intake needs to be balanced and timed in such a way that the brain receives a steady supply of this important nutrient. The RDA for carbohydrate is a minimum of 100-130 grams carbohydrate per day. If you are getting too little food, or go too long between meals, it leaves you feeling "foggy" because your brain isn't getting a steady supply of the most efficient fuel it needs to function optimally.

Simple carbohydrates, also called simple sugars, are found in sugar, honey, corn syrup, desserts and fruit. They are digested quickly and provide a surge of quick energy. Complex carbohydrates, found in breads, cereals, pasta, rice and potatoes, take longer for your body to digest and therefore leave you feeling full longer. The energy from complex carbohydrates stays with you longer, too.

Complex carbohydrates, particularly less-processed varieties, such as whole-grain bread, whole wheat pasta, brown rice, and even vegetables, are also an excellent source of fiber and the preferred type of carbohydrate.

Dietary Fat

Fats are classified into saturated (animal fat), monounsaturated, and polyunsaturated (derived from vegetable sources). The right balance of fat is crucial to help absorb fat-soluble vitamins and to provide the essential fatty acids that are used to make a variety of hormones.

The primary sources of unwanted dietary fat for most Americans are the hidden fats, especially “trans” fats, such as partially hydrogenated fats in stick margarine and in processed foods. These hidden calories often sabotage our best weight-loss efforts. Watch food labels to help you detect these hidden fats.

One gimmick to watch for is low-fat/fat-free food items now filling the shelves. The fat has been removed but it has been replaced with simple sugars that give excess calories with little nutritional value. While it may be fat free, it certainly is not calorie free.

Why Vitamins and Minerals

Multivitamin: A good multivitamin is important to cover all nutritional bases, especially just after surgery when you are very limited in your diet. Regardless, you should continue taking a multivitamin for life. A chewable children’s vitamin is recommended after surgery, in order to avoid blockage of the small stomach pouch. One month after surgery, you may be able to change from a children’s chewable MVI to an adult MVI or Prenatal MVI. Immediately after surgery, take the MVI twice per day (once in the morning and once at bedtime). After one month, we suggest taking the MVI at bedtime.

Thiamine: Thiamine (vitamin B-1) helps the body cells convert carbohydrates into energy. It is also essential for the functioning of the heart, muscles and nervous system. A deficiency of thiamine can cause weakness, fatigue, and nerve damage. A total absence of thiamine can cause the disease called beriberi, which is very rare in the United States. It has recently been documented in gastric bypass patients who do not adequately take nutrition supplements.

Vitamin B-12: Vitamin B-12 is essential to growth and cell reproduction. Your nervous system is dependent on vitamin B-12, which is mainly found in animal foods. This vitamin requires gastric acid in order to be absorbed. Although the body stores a large amount of vitamin B-12, this type of deficiency has been documented after gastric bypass surgery. B-12 can be taken in a variety of forms, but the sublingual type is more readily absorbed. Take either 350 mcg daily or 1000 mcg weekly of sublingual vitamin B-12. It is recommended that you do not take this vitamin on an empty stomach.

Calcium: In order to maintain bone strength and avoid osteoporosis, it is necessary to take a calcium supplement. Most people require 1000-1500mg of calcium per day. Calcium citrate is more easily absorbed, because it does not depend on gastric juice. Do not take calcium at the same time as iron or within 1-2 hours of taking any medication. It is recommended to take 500 mg of calcium citrate in 2-3 doses daily.

Iron: Without sufficient iron, your body cannot manufacture enough red blood cells to transport oxygen to all the body parts. A deficiency in iron results in anemia. Symptoms of anemia include light-headedness, weakness, and dizziness. Ferrous fumarate or ferrous gluconate are thought to be better absorbed than other types of iron. Liquids such as coffee, tea, and cola hinder absorption, while vitamin C-rich foods improve absorption. It is recommended to take iron with food but not with the above products or a calcium supplement.

A commitment to a vitamin regimen is essential after bariatric surgery. It helps to increase your chances for continued health many years after your surgery. It is advisable to begin your vitamin/supplement regimen the second week after surgery. Also, remember to follow up with your primary care physician after surgery.



THE UTAH CENTER FOR MINIMALLY INVASIVE & BARIATRIC SURGERY

TIPS FOR YOUR NEW EATING LIFESTYLE

1. Eat 3 small meals (and 2–3 high-protein snacks, if needed) daily.

A meal could be 1–3 ounces of protein and $\frac{1}{4}$ cup or less of another food. As your stomach pouch capacity increases, larger portions may be eaten and between-meal snacks stopped.

2. Good, well-balanced nutrition is important.

Lean protein first! However, for your body to use protein properly, you need to eat adequate complex carbohydrates as well. Eventually your diet will include more fruits, vegetables, and whole grains.

3. Your body needs approximately 80g lean protein per day.

Protein is needed for post-op healing, maintenance of body structures, and preservation of muscle tissue. In the beginning, you may need to eat mostly protein to achieve an appropriate daily intake.

4. Fluids must be continually sipped all day long to prevent dehydration.

You should not drink 30 minutes before and 30 minutes after meals. Aim for 64 ounces of sugar-free, non-carbonated fluids per day.

5. Eat slowly.

Chew slowly and to a mushy consistency at least 20 times! Remember that the stomach can only hold 1-2 oz. of food after surgery. Overeating or eating too rapidly may cause nausea/abdominal pain.

6. Avoid lactose if you are lactose-intolerant. You may use products like Lactaid® milk or tablets.

7. Become familiar with reading labels.

Labels are a great source of information and give you in-depth information about the product you are purchasing (such as the amount of fat, protein, carbohydrates, sugar, and fiber it contains). Guidelines are as follows:

Fat: less than 4–5g per serving

Total carbohydrate: less than 10–15g per serving

Fiber: aim for 3–5g per serving

8. Choose low-fat or fat-free products when available.

Fatty foods are high in calories and will hinder your weight loss if consumed in high amounts. However, use caution with products labeled “fat-free” and “reduced fat”—they may contain more sugar and/or calories than regular versions of these products.

9. Choose sugar-free products when available.

10. When cooking meats, use moist-heat methods and do not overcook, as this makes them difficult to digest.

Moist-heat methods include stewing, boiling, braising, and steaming. You may also add small amounts of fat-free sauces to meats to make them easier to chew/swallow.

11. To rule out intolerance, introduce one food at a time.

12. Take a multivitamin daily.

The following is a list of actions that can help you delay the impulse to eat.

Sometimes we eat out of habit or boredom, but remember to separate your emotions and your eating. Make sure to check in with yourself and see if you are actually hungry, or if you are emotionally eating. Keep this handy list either at home, work, or both. Participate in a non-food related activity that helps you mentally and physically relax without eating.

- Find an activity you enjoy
- Limit where you eat
- Make a list of victories
- Enroll in a class
- Discover a hobby
- Take a relaxing shower or bath
- Visit a park
- Play with your kids
- Write a letter or email to a friend
- Do a puzzle
- Go for a walk
- Call a member of your support system
- Go for a bike ride
- Walk your pet
- Mow the lawn
- Clean your house
- Play tennis
- Shoot hoops
- Read a book or magazine
- Write your feelings in a journal and come up with non-food solutions
- Play an instrument
- Draw or paint
- Participate in a fitness class
- Meditate



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SLOW DOWN! YOU EAT TOO FAST

Eating should be an enjoyable time, so make the moment last.

Eating or drinking too quickly can lead to an early feeling of fullness or nausea and vomiting. It is recommended that you take at least 20 to 30 minutes to eat or drink. Do not drink fluids with your meals. Stop drinking fluids 15 minutes before you eat a meal or snack. Wait about 60 minutes after your meal to drink. The following are suggestions to help you slow down the process:

1. Chew your food thoroughly to a mushy, liquid consistency. This will slow you down AND let your taste buds become more involved and satisfied.
2. To limit the size of your bite, use a smaller utensil.
3. Put your utensils down between bites.
4. Use smaller plates and bowls to provide the illusion of more food.
5. Use a timer or stopwatch to keep track of time and work on slowing down.
6. Remember learning a new habit takes time and consistent practice.

The 15-30-60 Minute Rule

The 15-30-60 minute rule will aid in the effective functioning of your stomach pouch. When you combine food and beverage after surgery, you will push the food through your stomach pouch at a much faster rate. This could lead to feelings of hunger prior to appropriate time to eat and setting you up to make less healthy choices and consume extra calories. Unhealthy choices and additional calories will lead to weight gain.

- Stop drinking 15 to 30 minutes prior to eating
- Enjoy your meal over at least a 30 minute period
- Wait 60 minutes after eating to drink beverages

Our bodies need water to carry out the simplest functions. When we do not drink enough water, our bodies do not work as well. Consume at least 8 cups of liquids over a 30 to 60 minute time period per day between meals to help stay hydrated. It is recommended that 2 to 3 cups of low-fat, 1% milk, lactose-free milk, or calcium fortified soy/almond milk are part of your 8 cups per day. Avoid carbonated beverages and straws after surgery; these will cause your stomach pouch to expand as well as produce unwanted gas. Also, it is recommended that you avoid alcohol. Caffeine, which can irritate the stomach after surgery, should also be limited for the first month post-surgery.

Recommended beverages include the following:

- Water
- Non-fat, 1%, Lactaid® milk, or calcium-fortified dairy alternative
- Fat-free strained soups
- Sugar-free beverages such as Crystal Light®, MiO®, etc.
- Decaf coffee
- Decaf tea
- Sugar-free JELL-O®
- Sugar-free popsicles

Flavor ideas include:

- Splash of fruit juice
- Twist of lemon, lime, or orange
- Protein powder or sugar-free Carnation® Instant Breakfast
- Vanilla and other extracts
- Sugar substitutes

Urine color is usually an adequate gauge of hydration status. Water excreted from the body that is pale yellow and with little odor indicates proper hydration. Dark colored urine suggests dehydration. If you are taking vitamin/mineral supplements, this will not be an accurate indicator because the excretion of excess vitamins makes your urine bright yellow. Thirst should not be used as a measure of when to drink water, since thirst is the last outward sign that you are already dehydrated. Instead, to avoid dehydration, spread out fluid intake throughout the day and evening.



Consuming foods high in added sugar puts you at a greater risk of developing Dumping Syndrome.

Dumping Syndrome occurs when an excessive amount of liquid or solid foods enters the small intestine in a concentrated form. As a result, individuals can experience abdominal fullness and nausea, flushing, rapid heartbeat, faintness, sweating and feel the need to sit or lie down. Other symptoms include abdominal bloating, increased gas, crampy abdominal pain and diarrhea, which often occur from 20 to 60 minutes after consuming a meal. Read the ingredient list on the food label to find if sugar has been added to your food.

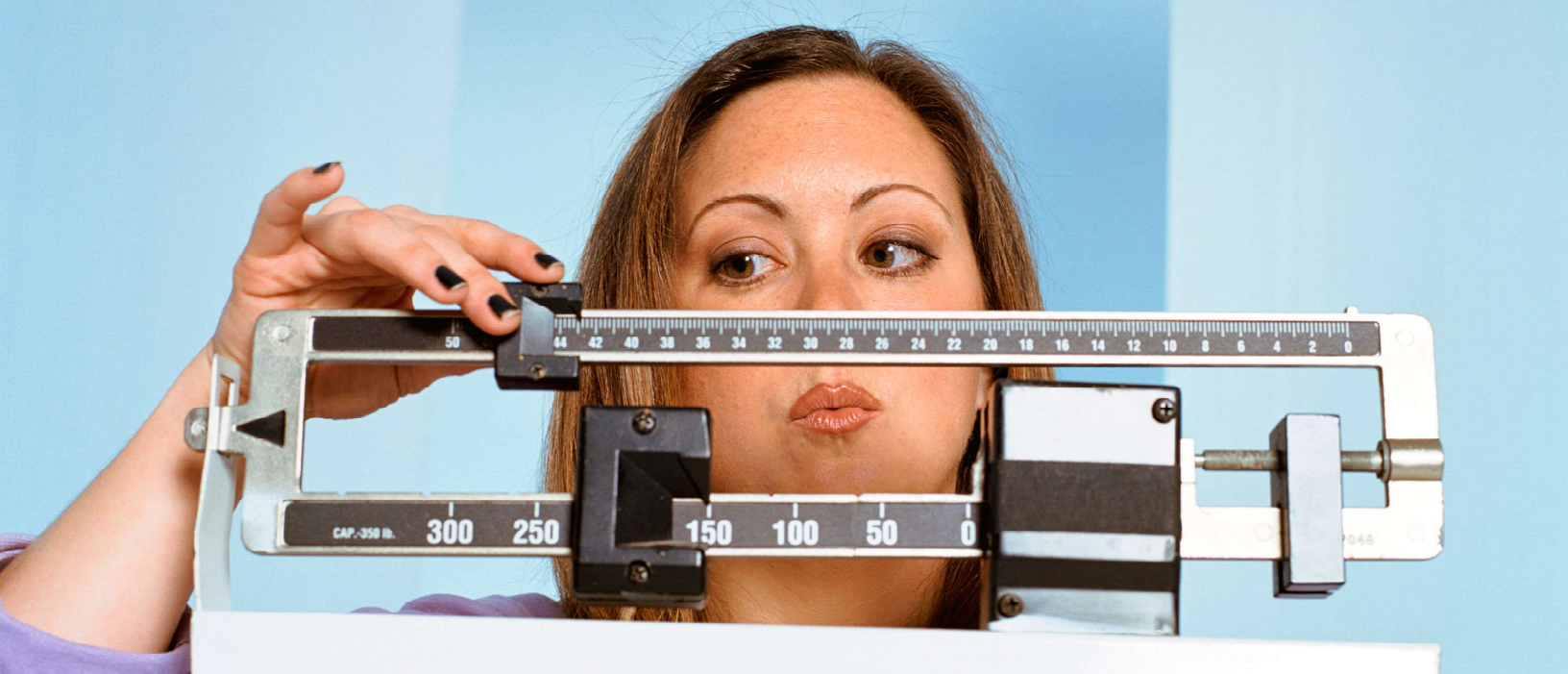
Sugar may be listed in many different forms, such as:

- Corn syrup
- High fructose corn syrup
- Fruit juice concentrate
- Honey
- Maple syrup
- Molasses
- Raw sugar
- Dextrose
- Fructose
- Glucose
- Lactose
- Maltose
- Sucrose

The amount of sugar listed on the Nutrition Facts panel includes the natural sugar found in milk, fruit, and some vegetables, as well as any added sugar. To avoid any added sugars, check the list of ingredients.

By law, sugar-free foods have less than ½ gram of sugar per serving. Foods labeled “no sugar added” do not have any form of sugar added during the processing or packaging. Also, unsweetened foods have no sugar added.





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WEIGHT PLATEAUS

Weight plateaus are inevitable. Anyone who has lost a large amount of weight (more than 10–15 pounds) has hit one or more weight-loss plateaus. The weight-loss plateau is a period of body adjustment, where your body “catches up with itself.” Patience is key during weight plateaus. After gastric bypass surgery, many individuals experience weight plateaus every 3–4 months during weight loss.

There are two types of plateaus. The first plateau is the short plateau, lasting 2 weeks to 4 weeks. The short plateau is the kind that all active “dieters” run into throughout their weight-loss efforts. It is not necessary to make adjustments for this type of plateau, because your body is simply re-adjusting to your new weight. Over time (2-4 weeks) you will naturally start losing weight again, as long as you continue your healthy diet and exercise program. Patience is all you need to get past a short plateau.

The second type of plateau is the long-term plateau, which lasts for longer than 4 weeks. If you go for more than 4 weeks without losing weight, AND you are continually following a nutritious diet and exercise program, then you need to make some changes. A plateau lasting for longer than 4 weeks is because you are no longer asking your body to go beyond its point of comfort.

When you first start a new way of eating and a new exercise program, everything is a total shock to your body. All of a sudden you are filling the body with good healthy food full of nutrients, and you are pushing your body so that it responds to physical activity. You burn a high number of calories because it requires a ton of effort just to do simple exercise. Over time, you adjust and become more efficient at exercise, and it no longer requires the same amount of calories that it once did. If you do not change your activity, and continue to eat the same amount of food, you will eventually stop losing weight. The same principle applies to food. If you cut your calories down to 1500 per day, and lost 15 pounds this way, your new weight may use those 1500 calories for maintenance now rather than weight loss. It's as simple as calories in = calories out.

How do you break out of this long-term plateau? There are several things you can try, but the most important thing to remember is CHANGE. Any change is worth a try to shake things up a bit. Let's start with food intake: Have you been taking in the same number of calories or fat grams for a long period of time or have they started to increase due to increased portion sizes? If so, then you need to throw your body off, and there are a couple of ways to do this. You can cut your calories or fat grams to adjust for your new weight. Some individuals may need to try decreasing calories or fat grams by a small amount each day. You can switch from eating 3 square meals per day to 6 smaller meals throughout the day. You can eat your largest meal in the morning and smaller meals at lunch and dinner. You can increase your water intake.

As far as exercise goes, you need to find ways to further challenge your body. You can try many different strategies. Look at completely changing your exercise method. Introduce cross-training into your program. If you only walked before, alternate with cycling or aerobics. You can exercise for 5-10 minutes longer each day. Exercise harder during your normal session time. Try interval training, where you alternate intensity levels throughout your workout or add another day of exercise to your week. Switch the time of day you exercise. Lift weights or vary which activity you do first. There are a lot of ways to change your routine and continue to challenge yourself.

It also helps to keep a food and physical activity record. Try a few changes with your eating habits and physical activity. It takes some experimenting to find out what will work for you at this particular time in your weight-loss journey. You can expect your new method will become effective within 2 weeks. If you are not seeing any other results, then you need to change your method again. If you find yourself becoming frustrated, don't give up! Come to a support group session or make an appointment with your doctor or dietitian to discuss ways to overcome this plateau. If you are close to your goal weight (or ideal weight within reason) and none of these methods work, have your body fat tested. It is very possible that you are already at your ideal body fat level, and your body is not going to allow any further losses. Accept your new weight, and congratulate yourself for the long, hard road you just traveled!





THE UTAH CENTER FOR MINIMALLY INVASIVE & BARIATRIC SURGERY

MAINTENANCE AND RELAPSE PREVENTION

YOU HAVE WORKED HARD TO IMPROVE YOUR HEALTH—DON'T GIVE BACK A SINGLE POUND.

Studies of people who have lost a significant amount of weight and kept it off for more than one year have several habits in common. These include:

Food Plan and Mindful Eating:

- Eating breakfast every day within one hour of getting up.
- Keeping the number of food choices they have to make to a minimum. Eating similar meals every day, even on holidays and weekends.
- Preplanning for special occasions, such as holidays or birthdays.
- Avoiding soda (diet or regular), juices, and sweet drinks.
- Striving to be mindful of your eating and exercise pattern and keeping consistent throughout the rest of your life.
- Keeping a log of what you eat most days.
- Redefining food to mean nutrition and energy for your body rather than relief from boredom, stress, or depression.

Exercise:

- Formulating a plan for moderate and regular physical activity that you enjoy and can sustain. You do not have to dread exercise, but rather make it fun and enjoyable like dancing, playing catch, swimming, etc.
- Using the stairs instead of elevators, walking instead of driving, parking far away.
- Sleep and Stress Management:

- Getting at least 6 hours of uninterrupted sleep.
- If you are having trouble or are going through a stressful time, try keeping a journal to help during these periods.
- Practicing stress management skills.

Support:

- Staying close to your support team (spouse, family, friends, etc.).
- Following up with health care providers for support and problem solving.

Motivation:

- Becoming your own best friend and cheerleader by focusing on your achievements not related to the number on the scale, such as being able to run a half mile longer or lifting more weight.
- Keeping in mind that weight loss usually goes slowly and that set points and plateaus happen every once in a while. Recognizing the cause and moving forward.
- Keeping in mind your reasons for wishing to lose weight and re-evaluate these monthly.
- Moving forward despite challenges—freedom from food traps and a healthier and happier you will be your reward.
- Staying focused on your wellness vision and the things that motivate you.
- Setting weekly S.M.A.R.T. goals that are Specific, Measurable, Attainable, Realistic, and Timely.





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BARIATRIC EXERCISE AND ACTIVITY SUPPORT GROUP INTRODUCTION

WELCOME!

Congratulations! Since you are here, you have already made some very important positive decisions to improve your health by showing interest in participating in our bariatric program. It is vital that you become and remain active (before and after surgery) for the program to be a success and reach your goals.

It is our hope that we can assist you along this journey. We want to rejoice with you in your successes and help you through the tough times as well. We are glad that you are choosing to participate in this support group and look forward to your contribution.

This information pack contains important educational material that will help you be aware of the various resources available to you including:

- Clinic/gym use options at both Jordan Valley Medical Center and Jordan Valley Medical Center West Valley campus
- Opportunities for one-on-one personal training
- Community resources
- Educational material/ideas for meeting your weight loss and/or weight maintenance goals
- Guest speakers on special, related topics as directed by the group

One of our staff members will also provide an initial tour of our facility and show you basic use of the exercise equipment.

It is our hope that this support group will help you meet your goals toward better health and a happier life.

Exercise and Activity Options—Jordan Valley Medical Center

1. We have established a standard day of the week where you may come in, free of charge, to use our facilities.
Open gym hours are every Thursday evening from 5:30 p.m. to 6:30 p.m. This is an unsupervised exercise session, but there will be a physical therapist present who may be available for advice and to perform basic vital sign checks (including blood sugar and blood pressure) if needed.
2. The large majority of our exercise machines (including weight machines and treadmills) have a weight capacity of 300 lbs. Some equipment has higher weight capacities and will be marked with a blue sticker. The following equipment may not be used:
 - a. Specialty treadmills
 - b. Therapy pool
 - c. Equipment where you exceed the weight capacity
3. If you have questions regarding specific exercise machines, please contact us and we will be glad to assist you.
4. We have an athletic training staff who may provide specific one-on-one personal training. The cost is \$15 per session for a minimum of six sessions and is dependent on trainer availability.
5. No person may use the gym without signing the Release of All Claims and Usage Agreements
6. No personal use of Jordan Valley Physical Therapy Clinic outside of weekly gym hours.
7. Relations and friends who are not a part of the program may not use the exercise equipment.

Exercise and Activity Options—Jordan Valley Medical Center West Valley Campus

1. We offer “Wellness” passes to use our outpatient physical therapy gym and full-size indoor pool at a nominal charge (averaging \$2–\$3/visit). If you are interested, we have an information sheet with clinic hours and pricing available upon request.
2. That gym/clinic is located on the first floor of the Medical Arts building at 3336 South 4155 West.
3. The facility may be used any weekday. There is a large pool which may also be used. Locker rooms are available with showering facilities.
4. Gym and pool use is considered unsupervised. However, physical therapists will be available to answer basic questions.
5. As with Jordan Valley Medical Center, everyone who uses the West Valley facility will be required to sign the proper release forms and follow the code of conduct and equipment usage agreement.

Exercise Before Your Bariatric Surgery—The First Step Toward Success!

Our goal is to start you on a lifelong success of weight management. Exercise is the cornerstone to achieve your goals. Before your surgery, begin a daily exercise program, working up to a total of 30 minutes of exercise. The good news is that it does not have to be done all at once! You can do five minutes here, three minutes later and keep adding a few minutes throughout the day to accomplish the recommended 30 minutes.

If exercise is not part of your lifestyle, here are some ideas to get you started.

1. In a chair, do marching, toe tapping, heel raises and straightening the knee, repeating each exercise 10 times with each leg.
2. Standing at your kitchen or bathroom counter, raise up onto the balls of your feet, kick your leg out to the front, back and sides, march in place and squat, repeating exercise 10 times with each leg.
3. In your house, walk up and down your hallway 10 times, three times a day.
4. If your knees allow and you have stairs, go up and down them two to three times at once.
5. Other ways to increase your activity level are to park your car farther away from the store; walk two aisles before getting the electric cart; stand instead of sitting while waiting for someone or something; when you stand up

from your bed or chair repeat standing up two to three times; carry in one bag at a time from the car to make more trips in and out of the house, etc.

Not sure how to add exercise to your busy schedule? Here are some ideas.

1. Take five minute breaks at the office, twice a day, to walk up and down the hallway.
2. Wake up 10 minutes earlier and walk around the block before getting ready in the morning.
3. Park your car so that you have to walk for at least three to five minutes to get to the office.
4. Stand up and march in place for one to two minutes several times a day, then start to add rolling up onto your toes.
5. Bring one-pound weights to work and raise your arms above your head 10 times each hour.
6. Start small, slow and consistent. Adding five minutes to your day is better than no exercise at all.

Remember, exercise will speed up the benefits of your surgery and is integral to maintain weight loss throughout the years following your surgery. **The time to begin a daily habit is NOW!**

Benefits of Physical Activity

In order to lose your maximum amount of weight and to maintain that weight loss, it is very important to incorporate exercise into your daily routine. Remember that exercise doesn't just include going to the gym. There are many ways to get a great workout that can be enjoyable at the same time.

Bariatric surgery is a wonderful tool that can help you lose weight and gain your life back. Physical activity plays an important role in helping you find success.

Why is exercise important?

1. Burns calories
2. Reduces fat while building muscle
3. Increases energy
4. Helps lower blood pressure
5. Improves mood and self-esteem
6. Enhances the immune system and strengthens bones
7. Relieves stress

What exercise routine should I follow after surgery?

Hospital Stay—You will need to get up and walk. This will help you feel better and get you on the right track for going home.

Initial Post-Operative Stage: Home After Surgery (Week 1-4)—Start slow. You may feel tired or fatigued. It is important to still get up and move around. Walk around the house or use the stairs as tolerated. You are just beginning to heal after surgery, so light activity is recommended.

Advancement Stage: Week 5–6

1. Check with your surgeon for approval to increase activity/exercise. Patients with specific complications or special needs may need to stay at the Initiation Stage until medically cleared with the surgeon.
2. If you are able to increase your regimen, start slowly with low impact exercise. This may include stationary bike riding, treadmill, and/or housework.

Maintenance / Lifestyle Modification Stage

1. Increasing activity/exercise on a regular basis as tolerated. A long-term goal should include 30 minutes of moderate activity daily. This does not have to be all at one time. Moderate activity includes stair walking, gardening, cycling, tennis, dancing and walking.
2. Walk one mile in 15 minutes.

Ideas and Activities to Stay Motivated and Fit

1. Start your activity with a warm-up. This will improve your workout and help prevent muscle injury.
2. Use stairs instead of taking elevators or escalators.
3. Park your car farther from your intended destination.
4. Go walking. Take advantage of an area park, enjoy the beauty of the mountains with a short hike or take a walk around the neighborhood.
5. Go sledding, ice skating or skiing.
6. Water aerobics and swimming provide great exercise with low impact on the body. Walk slowly from side to side in the pool in chest deep water. When comfortable, walk one lap side to side and then one lap at a slow jog from side to side. Use a “noodle” or other flotation device in the deep-end and cycle your legs like you are on a bicycle. Begin swimming slowly as you are comfortable. Find a low impact water aerobics class to join.
7. Housework or outdoor activities such as gardening and yard work.
8. Find a hobby.
9. Turn off the television or computer.
10. Sports are fun and help you stay fit.
11. Exercise with friends or family. Make a date to go for a daily walk, play sports or other activities.
12. Yoga has many positive benefits including building muscles and reducing stress. Yoga helps to stretch the body and strengthen the body’s core. There are many different types of yoga (Hatha and Bikram to name a couple). Explore your options and find which style works best for you.
13. Be creative in finding ways to be active. What activities do you enjoy?
14. Start an exercise journal. Set small, weekly goals that are realistic and attainable. Document the type of activity and time spent on a daily basis.
15. At the end of the week, check to see if you have met your desired goals. Set a new goal each week. As time goes on, you will see how many successes you have accomplished.
16. If you do not meet a desired goal, determine why you didn’t and create a new goal.
17. If you have met the goals that you have set, reward yourself. It’s important to find ways to let ourselves know that we are doing a good job and that we have accomplished something we have worked hard for. Be sure to choose healthy rewards.
18. Be aware of how your body feels. If something doesn’t feel right, slow down or stop.
19. Always use the proper exercise equipment and gear to help prevent injury.
20. Keep yourself hydrated before, during and after exercise. Don’t wait until you are thirsty. By the time you feel thirsty, you’re most likely already dehydrated.
21. Avoid carbonated beverages and fruit drinks. These take longer to absorb and can cause cramping, nausea and/or diarrhea.
22. Protein, protein, protein—make sure you are consistently maintaining your recommended protein requirements. Protein will help you build muscle as well as keep your energy at a high level. If you do not get your protein, you will feel tired and sluggish.
23. Find an exercise buddy—you can encourage each other to keep moving.

Exercise for Weight Loss and Maintenance

Energy intake and energy output play a role in weight gain, weight loss and weight maintenance. It takes 3,500 calories to create one pound of fat.

1. Weight loss = Energy Intake (food) < Energy Output (physical activity)
2. Weight gain = Energy Intake (food) > Energy Output (physical activity)
3. Maintenance = Energy Intake (food) = Energy Output (physical activity)

This is why it is important to balance both diet and exercise. You will gain weight if you take in more calories than you burn off. An exercise regimen that includes aerobics and conditioning promotes the best overall benefits.

We have found many phone apps and fitness bracelets, such as the Fit Bit, are very helpful to monitor calorie intake and encourage activity/exercise.

Aerobic Exercise

Aerobic exercise helps to condition your lungs and heart by utilizing oxygen more efficiently. This helps your body reach and maintain the Target Heart Range (THR). Your THR is the safest and most beneficial range of heartbeats per minute during exercise. Activities such as walking, jogging, running and swimming are all aerobic. Try different types of aerobic exercise each day.

To find your target heart rate take the number 220 and subtract your age (220 - age). For example, if you are 55 years old, your maximum target heart rate would be 165 beats per minute (220 - 55). For weight loss, you want to maintain a heart rate range of 60–80% of maximum target heart rate. For a person who is 55 years old, your heart rate should average 93–124 (60 – 80% of 165) beats per minute with exercise/activity.

The lower number suggests a safe rate for beginners, while the higher number should be a long-term goal. Remember to consult your physician before starting any vigorous exercise programs. A staff member will be happy to assist you to find your personal target heart rate if needed.

Conditioning Exercise

Conditioning exercise helps improve muscle strength and flexibility. In order to build muscle and strengthen bones, exercises that incorporate weight resistance and flexibility should be included in your overall fitness plan. Resistance exercises include weights, rowing machine and push-ups. Flexibility includes warm-up routine, stretching and yoga. Before you start your strength training, begin with a 10–15 minute aerobic warm up.

Calories Used in 20 Minutes of Different Activities

1. Walking at 2 mph: 83
2. Walking at 4.5 mph: 100
3. Dancing: 105
4. Golf: 85
5. Housework: 63
6. Skipping rope: 245
7. Swimming 800 yards: 152
8. Yardwork: 54
9. Ice Skating: 100
10. Mowing lawn: 150
11. Washing car: 65
12. Cycling: 135
13. Running: 190

Source: University of Chicago Medical Center, 2008