

## Gastric Sleeve Patient Manual Guide



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## **Morbid Obesity and Bariatric Surgery**

*Morbid obesity, also referred to as clinically severe obesity, is a chronic disease that afflicts approximately 9 million adult Americans. For comparison purposes, obesity affects twice as many patients as Alzheimer's disease. If the entire morbidly obese population lived in one state, it would be the 12th largest state in the country. The health effects associated with morbid obesity are numerous and can be disabling. Often, individuals with morbid obesity suffer with more than one health effect, creating a situation that can shorten life span and negatively impact quality of life. Understand that you are not alone, and we are here to help you overcome this disease and put you on the track of a healthy life.*

The many benefits of achieving appropriate weight and eating control are obvious. Everyone feels better physically and emotionally when his or her weight is under control. In addition, high blood pressure, sleep apnea, reflux, diabetes, cholesterol problems and other health problems have been demonstrated to be improved once weight loss is achieved. It is important to understand that weight loss should be gradual, sustained, and accompanied by careful attention to proper nutrition.

### **What is the Gastric Sleeve**

The vertical sleeve gastrectomy is a restrictive form of weight loss surgery in which approximately 85% of the stomach is removed leaving a cylindrical or sleeve shaped stomach with a capacity ranging from about 60 to 150 cc, depending upon the surgeon performing the procedure. Unlike many other forms of bariatric surgery, the outlet valve and the nerves to the stomach remain intact and, while the stomach is drastically reduced in size, its function is preserved. The sleeve gastrectomy is not reversible.

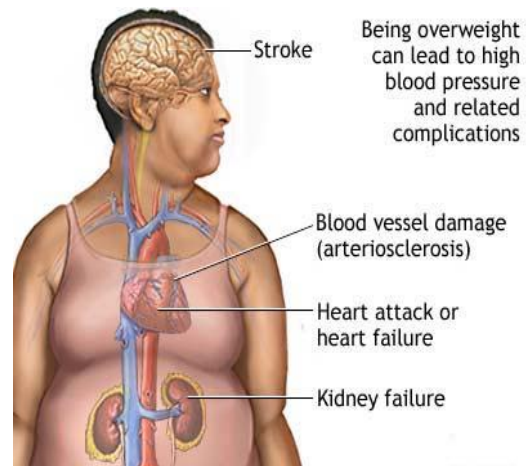
Because the new stomach continues to function normally there are far fewer restrictions on the foods which patients can consume after surgery, albeit that the quantity of food eaten will be considerably reduced. This is seen by many patients as being one of the great advantages of the sleeve gastrectomy, as is the fact that the removal of the majority of the stomach also results in the virtual elimination of hormones produced within the stomach which stimulate hunger.

Perhaps the greatest advantage of the gastric sleeve lies in the fact that it does not involve any bypass of the intestinal tract and patients do not therefore suffer the complications of intestinal bypass such as intestinal obstruction, anemia, osteoporosis, vitamin deficiency and protein deficiency. It also makes it a suitable form of surgery for patients who are already suffering from anemia, Crohn's disease and a variety of other conditions that would place them at high risk for surgery involving intestinal bypass.

Below is a partial list of the complications patients must consider when thinking about proceeding with surgery. These complications will be listed on an operative consent form and will be reviewed prior to surgery.

#### Possible Complications:

- Cardiovascular Problems (especially with unidentified existing heart disease): heart attack, stroke or death.
- Respiratory Problems: pneumonia, pulmonary embolus.
- Wound Problems: infection in wound (<5%), hernia development (1% for laparoscopic).
- Stomach/Intestinal Problems: leak from stomach or intestinal surgical sites requiring additional surgery, intestinal blockage (1-2%), stomal stenosis from scarring (1%), dumping syndrome (cramping bloating, diarrhea after eating).
- Nutritional Problems: excessive weight loss, vitamin mineral deficiencies (may need ongoing medications or injections), hair loss, bone weakening, gallstones or kidney stones.
- Injury to Nearby Organs: spleen-splenectomy (<1%), significant liver-bleeding (<1%), or potential for transfusions (<5%).
- Death Can Occur: For Laparoscopic Gastric Sleeve (<1%)



pre-

and

### **Signs and Symptoms of Complications**

#### **Leak at the Anastomosis (Connection from your small intestines to your new pouch)**

During your surgery, your surgeon will check to see if your new connection has an air leak.

- This is done by filling your new pouch with air and your belly with saline. If there are air bubbles present, the anastomosis will be reinforced.

Call your surgeon if you experience

- Increased heart rate
- Sense of anxiety\*\*\*
- Fever
- Worsening Shortness of breath

These may be signs of a leak at your anastomosis and may require intervention.

## Pulmonary Embolism

A pulmonary embolism is a clot that has traveled from another part of your body, usually your legs that blocks air from going in and out of your lungs. This is the most common early complication of surgery.

This is an emergency!

[Go straight to your local Emergency Room!](#)

- Chest pain
  - Under the breastbone or on one side
  - Especially sharp or stabbing; also may be a burning, aching, or dull, heavy sensation
  - May get worse with deep breathing, coughing, eating, bending, or stooping (person may bend over or hold his or her chest in response to the pain)
- Cough
  - Begins suddenly and may have some blood or blood-streaked sputum
- Rapid breathing
- Rapid heart rate
- Shortness of breath
  - May occur at rest or during activity or it may start suddenly

### What you can do to prevent a Pulmonary Embolism

#### **WALK, WALK, WALK!!!**

The day of surgery, the nurses will have you walking in the halls. This will help to decrease the chance of a blood clot in your legs. You will also be given a dose of a blood thinner prior to surgery and after surgery. You will also use a compression device on your legs while lying in bed in the hospital to decrease the risk.

At home...

WALK, WALK, WALK.

Choose the bathroom furthest from your room. Resume your activities as directed.

## Vitamin Deficiency

After your surgery, it is extremely important that you continue to take your vitamins as directed by your provider.

Calcium is necessary for maintaining bone strength

Vitamin B12 → Nourishes the nervous system

Iron → Carries Oxygen throughout the body

Without these vitamins...

Calcium:                   ↑ risk of fracture

Vitamin B12:           ↑ risk for memory loss, numbness, paralysis

Iron:                      ↑ risk for a stroke, heart attack or anemia

## Recommended Vitamins

### 1. Multivitamin or Juice Plus

200% (RDA) Recommended Daily Allowance:

Juice Plus + 1 multivitamin

or

2 Multivitamins

### 2. Calcium 1500-2000mg/day + Vitamin D

Divide this into 3 doses per day

Choose a brand that contains calcium citrate and Vitamin D3

### 3. Optional: B Complex

B-50 dosage or B-100 dosage

## Dehydration

- It is very important that you drink 8 8oz glasses of water a day.
- Dehydration may lead to hospitalization.

To prevent this...

**Sip, Sip, Sip all day long!**

## Wound Infection

After surgery, you will have multiple small incisions on your abdomen and in your belly button.

You will have steri strips on these incisions.

- Please call your surgeon if you experience:
  - Redness at incision site
  - Increased tenderness or warmth at incision site
  - Fever >101.0
  - Yellow or green discharge at incision site
  - Excessive swelling at incision site
  - If bleeding saturates the 2<sup>nd</sup> dressing

We recommend that you clean your incision sites, especially your belly button with hydrogen peroxide or Alcohol pads at least once a day to prevent infection.

- Drainage is normal from your belly button, but if it is yellow or tan please contact your surgeon.

## **What to Expect after Surgery**

It is very important to follow the eating and drinking instructions starting right after the operation to allow the new stomach structure to heal completely and in the right position.

You will notice a difference in the amount and type of food you can eat. You will receive nutritional counseling to help show you the dos and don'ts. Since the amount of food you can eat will be much less, it becomes very important to eat the right types of food to be sure your body gets enough nutrients.

Exercise is important. Most people find that as the weight comes off after surgery, it becomes easier to exercise. Then, as they exercise more the weight comes off even more. It's like a reverse snowball effect: as a snowball rolls downhill it goes faster and grows bigger – but instead of a snowball getting bigger, it is you getting smaller and healthier! We recommend that our patients exercise at least 30 minutes a day at least 5 days a week.

It is reasonable to expect to lose about half of your excess body weight after Gastric Sleeve surgery. Most patients lose about 1 - 2 pounds per week. Most patients stabilize at their new lower weight between 3 and 5 years after surgery.

Weight-related medical problems may be alleviated or eliminated after weight-loss surgery. Such conditions include diabetes, high blood pressure, sleep apnea, and weight related depression. Significant weight loss may also decrease your risk of heart disease and some types of cancer.

### **Helpful Rules to Effective Weight Loss**

#### **Rule 1: Eat only when you are hungry, and no more than three small meals a day.**

Your new small stomach pouch can hold only about one-fourth of a cup of food. If you try to eat more than this at one time, you may become nauseated or vomit. If you routinely eat too much, the small stomach pouch may stretch. Frequent vomiting will cancel the effect of the operation and can also cause certain complications. To avoid this, you need to learn to listen to your body and stick to your plan.

#### **Rule 2: Eat slowly and chew thoroughly.**

Food can pass through your new stomach only if it's been chewed into very small pieces. Always remember to take more time for your meals and chew your food very well.

#### **Rule 3: Stop eating as soon as you feel full.**

Once your stomach is full, your body receives a signal that you have eaten enough. It takes time, though, for you to become aware of this signal. If you rush through your meal, you may eat more than you need. This can lead to nausea and vomiting. Take time to enjoy every bite of your meal. Try to recognize the feeling of fullness-then stop eating at once.

#### **Rule 4: Do not drink while you are eating.**

The Gastric Sleeve can work only if you eat solid food during your three meals. You should not drink anything for 30 minutes after a meal. This allows you to keep the feeling of fullness as long as possible

#### **Rule 5: Eat only good quality, nutritious food.**

With the Gastric Sleeve, you should be able to eat only a small amount so the food you eat should be as

nutritious as possible. Follow the nutrition guidelines in the previous section and specific instructions from your surgeon and/or dietitian. Also, ask your doctor or dietitian before you take any vitamin supplements.

**Rule 6: Avoid fibrous food.**

Food that contains many fibers, such as asparagus, can cause the food to become stuck. That's because you can't chew this food well enough to break it up into small pieces and your saliva can't break it down. Fibrous food should be avoided. If you would like to eat asparagus or other fibrous foods once in a while, then be sure to cook them well, cut them into very small pieces first, and then chew thoroughly.

**Rule 7: Drink enough fluids during the day.**

Drinking enough fluids is essential for staying hydrated and for flushing waste products out of your body. Individual needs will vary, but you should drink at least six to eight glasses of liquid a day. Remember: Drink only non-carbonated/zero calorie liquids such as water, tea, or coffee (without milk, cream, or sugar). Also, keep your food and drinks completely separate during the day.

**Rule 8: Drink only low-calorie liquids.**

Drinks, including those containing calories (milkshakes, sodas), simply run through the narrow outlet created by the Gastric Sleeve. If you drink liquids high in calories, you will lose little weight, even if you follow all of the other dietary guidelines.

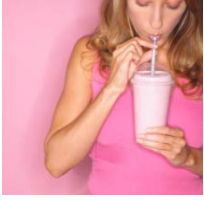
**Rule 9: Exercise at least 30 minutes a day.**

Since physical exercise consumes energy and burns calories, it is a very important part of any successful weight-loss program. Obviously, exercise can also help improve your general health. In addition to adopting a routine exercise program, you can increase your activity level in your everyday life. For example, stand rather than sit, walk rather than stand, be outside rather than inside, walk rather than drive, climb the stairs rather than use the elevator. If it's too hot outside to walk, go to the mall. It's as easy as finding a parking space away from the entrance to the mall and using the stairs, not the escalator! If you don't have time before or after work, take ten minutes out of your lunch break and walk then. Remember that you should always check with your doctor about the amount and type of exercise that is best for you.

## Preparing for Weight Loss Surgery

### Two Weeks before Surgery

Start on a High Protein Diet. You need to purchase a protein shake mixture from any of your local grocery stores or Retail stores such as GNC, Wal-Mart, and Target. The protein shakes must be low in sugars and carbohydrate. Drink the protein shake for breakfast and a lean meat and vegetable for lunch and dinner. This will help shrink the liver prior to surgery. You may drink other liquid drinks (sugar free) in between the meal.



### One Week before Surgery

**Do not take Coumadin, Plavix, Aspirin, Ibuprofen or other arthritis medications for one week before surgery, because these medications can cause stomach irritation and/or more bleeding after surgery.**



Have your physician convert all of your time released or extended released medication to non time released. If you are unsure about which medications to stop, contact your pharmacist.

### Pre-Operative Preparation

Preparation for bariatric surgery includes several steps to optimize a patient's health in anticipation of an operation.

- Stop all carbonated beverages
- Stop all beverages which contain caffeine
- Begin a routine exercise program (consult your physician first)
- Begin cutting food into small pieces and practice chewing very well
- Stop any over the counter Herbal Supplements
- Join a monthly support group

Begin the practice of not drinking with your meals. Stop drinking 30 minutes before you eat and do not drink again until 30 minutes after your eat. This will be a requirement following your surgical procedure and needs to become a lifetime habit.

You will be scheduled for an EGD (endoscopy) prior to surgery. REMEMBER, Nothing to eat or drink after midnight prior to this procedure.

## **2 Day Clear Liquid Diet Prior to Gastric Sleeve**

You will need to consume clear liquids only for the 2 (Two) days prior to surgery.

This would include:

- Apple or other clear juice (juice without pulp)
- Clear Broth (Chicken, vegetable or beef)
- Jell-O (any color is fine)
- Popsicles
- Water or flavored water products
- NO SOLID FOOD

## **Morning of Surgery**

You will receive a call from the office the night prior to your EGD and/or surgical procedure to be told when to report to the hospital. You will be asked to report between 5:30 AM and 9:30 AM to the AM Procedure Unit on the 7<sup>th</sup> Floor of Atlanta Medical Center. For patients going to Crawford Long Hospital, you will be given specific instructions when you go for your pre-op evaluation. If you are having your surgery at the Atlanta Aesthetic Surgery Center you will go to the facility on your pre-op visit and sign consents and be oriented to the facility. Please remember to bring a picture ID and/or driver's license with you to the hospital. We will need to verify your identification prior to placing an arm band on your wrist.



You will be asked to remove all of your clothing and put on a patient gown and a pair of booties. The nurse will start an IV in preparation for surgery.

You will receive medications that have been ordered by your physician or anesthesia at this time in preparation for surgery.

**If you consumed any medication the morning prior to reporting to the hospital you let the nurse know.**

You will be taken to the Operating Room and placed in the Holding Area. Upon arrival to the holding area, you will meet the individuals who will be taking care of you during surgery. The anesthesiologists will speak to you as well, and you will be given some medication that will make you very drowsy prior to actually being taken to the Operating Room suite.

Your family members will be asked to wait in the Surgical Waiting Room. This waiting room is also shared by family members of patients that are in the intensive care unit. Please limit your family members to three (3) adults. Children under the age of 12 should not accompany patients to the hospital.

## **After Surgery**

You will be taken to the Recovery Room following surgery where they will monitor your respiratory status and other vital signs to be sure you are stable before sending you to the nursing unit. If there should be any concerns regarding your vital signs or respiratory status, you may be sent to the Surgical Intensive Care Unit to be monitored post operatively. This does take place on occasion and you should be aware of the possibility.

You may experience pressure in your abdomen during your stay in the recovery room. This is a normal occurrence; however, you should notify your nurse of any discomfort that you may be experiencing.

When the Anesthesiologist feels you are stable and doing well, you will be evaluated for discharge.

## **Discharge Instructions**

### **BATHING:**

You may shower 48 hours after surgery. No tubs baths, swimming or hot tub use for 4 weeks following surgery.

### **DRESSINGS:**

Keep the dressing dry for 48 hours after surgery. After 48 hours you may remove the top dressing and leave the steri-strips (thin white pieces of tape). These may get wet and will eventually fall off voluntarily. The ones remaining will be removed in 2 weeks on the first post-op visit. The umbilical area may not have steri-strips. The umbilical area may drain a clear light brown or pale red color fluid. This is ok as long as the drainage is not pale yellow or tan in color. Some of you will have clear glue like substance over your incisions. This will stay on until it peels off by itself.

Your incisions should be cleaned once a day with Hydrogen Peroxide and a cotton ball or gauze. Clean the belly button (umbilicus) area with Hydrogen Peroxide or alcohol as long as it is draining. Do not put any Q-Tips into your umbilicus!

### **ACTIVITY:**

You may resume usual self-care. You may drive when you feel you are able. No lifting, pushing, pulling or tugging over 25 lbs. for 4 weeks. Walking every day and using incentive spirometry at least 4 times a day (for 2 weeks) is very important.

### **MEDICATIONS:**

Gas-X as needed up to 7 times per day.

Liquid Imodium if needed or as directed for diarrhea.

Tylenol Rapid Blast for mild pain. Follow package directions.

**NO ASPIRIN, NO NONSTEROIDAL ANTI-INFLAMMATORY DRUG,  
NO TIME RELEASED DRUGS  
(Arthritis medication, Aleve, Motrin, Advil)**

REMEMBER TO STOP TAKING YOUR MEDICATION FOR DIABETES THE DAY OF SURGERY. HOWEVER CONTINUE TO CHECK YOUR SUGAR AT HOME. IF YOUR SUGAR INCREASES ABOVE 150 CALL YOUR PRIMARY PHYSICIAN SO HE CAN MANAGE YOUR SUGAR. REMEMBER TO CONTINUE TO TAKE ALL OF YOUR OTHER MEDICATIONS AND LET YOUR PCP OR CARDIOLOGIST DECREASE THEM AS NEEDED.

### **WHEN TO CALL YOUR PHYSICIAN**

- Abdominal pain not relieved by pain medication
- Shortness of breath or increase in breathing
- Rapid or increase in heart rate
- BLEEDING: From the incision(s), in vomit or stool (would be black or maroon in color).
- NAUSEA OR VOMITING that is not relieved by medications or that prevent fluid intake for a day.
- PAIN that is not relieved by medication prescribed by physician.
- CALF OR LEG PAIN and/or swelling.

### **SIGNS OF INFECTION:**

- temperature of 101° or above
- redness and swelling at incision site(s)
- Pus-like or foul smelling drainage
- Separating or opening of healed incision

**FOLLOW-UP:**

**Contact the office if you have any questions**

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Calls will be return the same day.

Make your first post-op appointment with OUR OFFICE for 2 WEEKS after discharge from hospital. Please call if you feel you need to be seen earlier.

Make appointments with your primary care physicians or other specialist within the first week after discharge to monitor heart, BP and diabetes medications.

## Medications to **Avoid** After Lap Gastric Sleeve Surgery

A.S.A. Enseals	Cataflam	Indocin
Advil	Clinoril	Lodine Magnaprin
Alka Seltzer	Coricidin	Maprin/Maprin 1-B
Anacin	Cortisone	Measurin Mediprin
Anacin Tablets/Caplets/Maximum Strength	Coumadin	Meclomen
Anaprox	Daypro	Midol Caplet/200
Anaprox DS	Dipyridamole	Mobigesic Motrin
Ancid Ansaïd	Disalcid	Motrin
Arthritis Strength Tri-Buffered Bufferin	Doan's Pills	Nalfon
Ascriptin A/D Caplets	Dolobid	Naprosyn
Ascriptin Extra Strength Caplets	Easprin	Naprosyn Norwich Tablets
Asperbuf	Ecotrin Caplets/Tablets/Maximum Strength	Norgesic
Aspergum Aspirin – all Brands including Children's	Emperin	Nuprin Caplets/Tabs
Aspirin	Excedrin – any type	Orudis P-A-C Analgesic
BC Powder/Cold Powder	Feldene	Pamprin
Bufferin – Regular & Extra Strength Buffex	Fiorinal	Pepto-Bismol – any type
Buffinol Cama Arthritis Strength	Halfrin	Persantine
	Ibuprofen	Tolectin
		Vanquish



**Chewable Tablets**



## Medications that are Considered **Safe** after Surgery

Benadryl

Tylenol

Dimetapp

Robitussin

Sudafed

Triaminics

Tylenol cold products

Tylenol Extra strength

Gas-X

Phazyme

Imodium

Colace

Dulcolax-suppositories

Fleets enema

Milk of Magnesia

Peri-colace

Claritin



## Your Program of Recovery after Surgery

### TROUBLESHOOTING

#### **What to Do If Food Gets “Stuck”**

When food is not passing through the pouch you may experience any or all of the following symptoms:

- **Excessive Salivation (Frothing)**
- **Heartburn**
- **Nausea**
- **Cramping**
- **Vomiting / Dry Heaves**
- **Pain**
- **Thirst**

In this case, the following steps can be taken to alleviate the discomfort as quickly as possible:

- **Relax! Stress will only increase the discomfort. Lie down if you can.**
- **Don’t eat anything. Drink sips of water. Warm beverages seem to help relax the stomach best.**
- **Stay on liquids for several hours.**

Remember if you cannot take in liquids for 24 hours you should contact us for further advice.

#### **Did I Chew My Food Well? Did I Take Too Big of a Bite?**

If you do not chew your food well enough, the bites you swallow will be too large to pass easily from the gastric pouch. The un-chewed bites will remain in the pouch and are more likely to cause discomfort. Your food should be cut the same size as your “pinky” nail to be small enough.

#### **Nausea and Vomiting**

It is very common for post operative patients to feel nauseated during the first few months. If this nausea causes frequent vomiting, this necessitates a phone call or visit to the office for follow-up.

When you feel full, stop eating and put the food away. Don’t pick at it if you are still at the table. A meal should take no longer than 15 – 20 minutes to finish. If it is taking longer, you are probably waiting too long between bites, or getting full and waiting for it to pass through to give you more room. The goal is not to finish your meal; it is to learn what full means and feels like.

One of the causes of nausea and vomiting is noncompliance with nutritional guidelines; therefore, following the provided guidelines is very important.

Any problems with nausea or vomiting should prompt the following questions and necessary changes to avoid further pain and discomfort:

- How long am I taking to eat and/or drink?
- Did I drink fluids with my meal or too soon before/after the meal?
- Am I eating more than I should?
- Am I chewing solid foods until they resemble a pureed consistency?
- Did I lie down too soon after my meal?
- Did I eat hard-to-digest foods such as tough meat or fresh bread?
- Did I eat foods from the next stage of the menu plan before being cleared by the physician to do so?

If vomiting persists throughout the day, do not eat solid foods. Sip on clear liquids (stage 1). If vomiting occurs for more than 24 hours, contact the surgeon immediately.

### **Frothing**

As the new pouch heals, mucous sometimes is excreted to help break down food. With some patients, this mucous will back up in the esophagus and causes frothy clear vomiting. This is short lived and usually resolves by the 3<sup>rd</sup> month. Frothing is not a complication, so try drinking hot water ½ hour prior to your meal to emulsify the mucous. Your meal should then be better tolerated.



### **Gas Pains**

Gas pains are common in the first few weeks after surgery. Sometimes these pains can be severe and more uncomfortable than the “surgical” pain. To help relieve these pains, try to increase your activity level to include some walking. You can also try anti-gas over-the-counter preparations such as Mylanta, Maalox and Gaviscon.

Gas pains or spasms may occur months or even years after your sleeve operation. The cause for random episodes of gas or spasms is often unknown, and this discomfort will usually relieve itself in a short time. If the

discomfort from gas or spasms persists, contact your surgeon for evaluation and possible treatment with medication to relax the intestine.

### **Hair Loss**

If you notice hair loss/thinning, especially around the third month after surgery, you should consult with our dietitian to help increase your protein intake. Hair loss is often attributable to protein deficiencies, and by increasing your protein intake, you may reduce hair loss. There are no “guarantees,” however. Hair re-growth frequently occurs after several months. We recommend 70-80Gm protein each day.

### **Bowel Habits**

It is common to have some temporary bowel changes following surgery. These changes range from constipation to diarrhea. If you do not move your bowels by the first or second day at home, you may try a mild laxative such as Milk of Magnesia. Follow the bottle instructions.

Maroon or blood-tinged stools should be reported to your surgeon, as they may indicate the need for additional medication to reduce the chance of ulcers.

## **Constipation**

After surgery, constipation may occur. Remember that food intake now is very small compared to that before surgery; therefore, bowel movements will be decreased. Many people report having a bowel movement every two to three days. If stools are hard, be sure to drink an adequate amount of fluid (48 to 64 ounces per day) between meals. Also, when appropriate, include more fiber-containing foods in the meal plan such as oatmeal, bananas, fruits, and fiber products. You may also try Smooth Move, Apricot or Prune juice, unsweetened, Milk of Magnesia or Miralax.

## **Diarrhea**

Immediately following surgery, there may be some diarrhea. This should be temporary. If diarrhea occurs more than 3 times in a day, you may take Imodium or over the counter equivalent. If diarrhea persists and adequate hydration is not possible, contact the office. You may have bloody stools (black tarry) the first 1-2 bowel movements. If this persists, please call the office.

## **Sleeping**

You may sleep in whatever position is comfortable when you get home. Many people find that sleeping on their stomach may not be comfortable for many weeks due to abdominal discomfort. If you are having difficulty sleeping, this is normal and most likely due to the busy 24-hour schedule of the hospital environment. Some people find that taking their pain medication before sleep will help them feel more comfortable and get to sleep. You may also try a mild crushed sleeping aid such as “Tylenol PM” to help you rest if the problem persists.



## **Headaches**

Some of you who were without anti-depression medication for several days may have migraine type headaches as a withdrawal effect. Please resume these medications ASAP. (No extended or time released medications.)

## **Returning to Work**

You should plan on taking 7-14 days off work. We recommend to those who must return to work before 2 weeks, begin with a less than full time schedule and work slowly back to full time. You will need to be sure your employer will allow you to take time to eat your meals slowly at work to ensure proper nutrition. If you need “return-to-work” or other insurance papers completed, please bring them to the office at the one-week visit and we will be happy to assist you with their completion. Remember, NO lifting over 25lbs. For 4 weeks...NO EXCEPTIONS.

## **Activity**

It is important to be up out of bed or chair and active when you return home. You might notice that you tire easily and need to take frequent rest periods.

You can resume sexual relations when desirable, keeping the restrictions on other physical activity in mind.

## Exercise

Exercise is one of the most important things you can do for yourself after surgery to keep healthy, increase your energy level and lose the maximum amount of weight.



Walking will burn about 200 calories per mile (there are 3,500 calories in one pound). When you get home, you should start a walking program to your tolerance. In addition to the walking program, you should be active and walking as you would normally around your house. If you begin to feel short of breath, tired or exceed your target heart rate during the walking program, slow your pace or stop.

After the first couple weeks, you can substitute another type of exercise you enjoy for the walking program if you are feeling strong enough. The exercise should have an aerobic component that raises heart rate to a healthy target heart rate.

It is also very important to add in resistance training to your workout routine prior to your cardio/aerobic workout. You may use resistance bands or hand weights that you can purchase at your local retail stores (Walmart, Dicks, Target, Sport's Authority)

## Pregnancy after Surgery

Women of childbearing age should be on a reliable method of birth control until their weight has stabilized for at least 12-18 months. We DO NOT recommend pregnancy until at least 12 months after surgery! If pregnancy does occur, a detailed consultation with your bariatric surgeon and obstetrician will be necessary to assess your nutritional status. After delivery, weight loss will resume.

## The Internet

The Internet has a wealth of information and online support groups for bariatric surgery patients. Support group members have recommended searching under "Gastric Bypass" to find a wide selection of sites. You can post messages and ask questions of former patients from a variety of programs across the nation.

## Support Groups

One of the assets of the Bariatric Surgery Program is the post-operative care provided to our patients. Medical studies on Gastric Sleeve patients conclude that the most successful patients are those who adhere to and take advantage of the follow-up activities provided by comprehensive programs.

Monthly Support Group programs not only offer you the opportunity to compare your experience with the patients in one-on-one, informal setting, but they strive to provide educational sessions each month on topics of interest to Gastric Sleeve patients. We strongly encourage you to attend support groups, which are posted on the website. Remember, one of the lifestyle commitments you made when you decided to have surgery was adherence to follow-up (the other two were diet and exercise).

## **Advancing Your Diet after Gastric Sleeve Surgery**

### **Stage 1- Week 1: Clear Liquid Diet**

Clear Liquid Diet to begin post-op Day 1 if no nausea or vomiting.

You must sip fluids all day. The goal should be 4-8 ounces per hour for a total of at least 64 ounces of clear liquids per day.

Start children's chewable multiple vitamins with iron on the first day home (2 per day), along with calcium, and B-12.

#### **Recommended Sugar-Free Clear Liquids:**

- Clear Broth or Bouillon – Chicken, Beef, or Vegetable, can add protein powder
- Crystal Light or sugar-free Kool-Aid
- Decaf tea and coffee (NutraSweet, Splenda, Sweet-n-Low, Stevia allowed, non-dairy creamer is ok)
- Fruit juice sweetened with splenda or other artificial sweetener. Avoid citrus (orange, grapefruit, and pineapple) and tomato. Grape, apple and cranberry are okay. No juice drinks or juice cocktail
- Herbal Tea or un-sweet tea – Caffeine Free
- Jello
- No Carbonated beverages
- Propel Water by Gatorade or Powerade Zero
- Sugar Free drinks including Diabetic Breeze
- Sugar-free Carnation Instant Breakfast
- Sugar-free popsicles, Sugar Free Italian Ice, Sugar Free Sherbert
- Water
- Ocean Spray

**Take Supplements - Exercise Daily - Extra Protein - Drink Fluids**

## Stage 2- Week 2: Full Liquid Diet

Start high Protein Full Liquids (Pro-complex, Body Fortress, etc.) in addition to Sugar Free Clear Liquids.

### **RECOMMENDED FOODS:**

- All food from previous stages
- Cream of Wheat
- If protein powder with clear liquid tolerated then mix protein powder of choice with non-fat milk or Almond Breeze. If Lactose intolerant, use non-fat Lactase-Enzyme treated milk.
- Low Fat creamed soups – thinned (no chunks), check useful websites for recipes.
- Natural applesauce
- Non-fat Yogurt (sugar-free), Greek Yogurt
- Skim milk or lactose free skim milk Fat-free / sugar-free pudding less than 60 calories and 8 grams of sugar per serving, natural applesauce, low fat / sugar-free yogurt (no fruit chunks)
- Sugar-free Carnation Instant Breakfast- made with skim milk
- Sugar-free Fudgesicles
- Sugar-free pudding- make with skim milk and add protein power
- Sugar-free yogurt (no chunks) – made with Nutra-sweet or Splenda. Greek yogurt
- Unsweetened 100% Fruit Juice diluted with water without pulp (no orange juice, grapefruit or tomato juice). Limit to 4 ounces per day.
- V-8 juice (low sodium), V8 Fusion, tomato juice and all other no added sugar fruit juices. Try light versions sweetened with Splenda.
- Thinned Oatmeal
- Soups with soft noodles



## Stage 3 - Week 3: Pureed Diet to Soft Diet

### **Pureed Diet to Soft Diet**

- ✓ Add one new food at a time
- ✓ Aim for 48 to 64 ounces of fluid per day to prevent dehydration. Avoid drinking 30 minutes before and after meals.
- ✓ Avoid starchy foods like white rice, pasta, breads
- ✓ Chew completely and slowly
- ✓ Continue full liquids to pureed adding one new food at a time, as tolerated.
- ✓ Eat three (3) meals a day and (2) two snacks.
- ✓ Limit fats and avoid sugars.
- ✓ Protein is the priority (70-80 grams per day).



### **RECOMMENDED FOODS:**

- All foods from previous stages.
- Baked potatoes (no butter), sweet potato
- Blended protein shakes with non-fat, sugar-free frozen yogurt, pureed fruit
- Box mashed potatoes
- Canned peaches, apricots, mandarin oranges or pears (sweetened with splenda)
- Cream of Wheat, Grits or Cream of Rice cereal. Start with 1-2 Tbsp at a meal.
- Dried beans and peas-navy beans, kidney beans, low fat refried pinto beans, lima beans, lentils, split peas cooked without added fat until very tender (remember that these foods may cause abdominal discomfort and/or gas).
- Eggs, scrambled or egg whites
- Hummus
- Lean meats (fish, tuna fish, chicken, turkey) make sure the meats are moist and very chewed up before swallowing
- Low fat cheese containing less than 6 grams of fat per ounce (most 2% cheese), Low fat or nonfat cottage cheese (¼ cup), ricotta cheese
- Oatmeal
- Smoothies, watch sugar content!
- Soft canned fruits (pears or peaches) sweetened with splenda
- Soft cooked vegetables (avoid asparagus and celery)
- Tuna fish made with low fat mayo
- Tuna, canned salmon without skin, ground white meat turkey, ground chicken
- Vegetables such as green beans, zucchini, squash (mushy in mouth before swallowing)

## **Stage 4 - Week 4: Add new foods one at a time**

### **SOFT TO REGULAR DIET**

- ✓ Aim for 64 ounces of fluids to prevent dehydration. Avoid drinking 30 minutes before and after meals.
- ✓ Continue drinking fluids especially water between meals and throughout the day.
- ✓ Three (3) meals a day, plus two (2) snacks, if needed. No more than two oz's of meat and 1 oz of other food for a meal and 1-2oz for snacks.

### **RECOMMENDED FOODS:**

- All foods from previous stages.
- Avoid fibrous vegetables(raw cabbage, celery, asparagus, lettuce)
- Avoid fruit with membranes(orange, grapefruit, pineapple, grapes)
- Avoid tough meats (steak, roast, pork chops)
- Cheese containing less than 5 grams of fat per ounce (most 2% cheese), Laughing Cow cheese, cheese sticks
- Dried beans and peas-navy beans, kidney beans, low fat refried pinto beans, lima beans, lentils, split peas cooked without added fat until very tender (remember that these foods may cause abdominal discomfort and/or gas).
- Lean meats (fish, tuna fish ,chicken, turkey) make sure the meats are moist and very chewed up before swallowing
- Low fat or nonfat cottage cheese (¼ cup)  
or canned in juice
- Soft canned fruits (pears or peaches) sweetened with splenda , sugar free
- Soft cooked vegetables

### **Remember:**

- Add one new food at a time
- Avoid starchy foods like white rice, pasta, breads
- Chew completely and slowly
- Continue supplemental protein (70-80 grams of protein is the daily goal)

### **You are recommended to avoid the following food for the long term.**

- Foods high in carbohydrates: allowed to eat once per month (Pasta, Rice, breads, Crackers, Potatoes)
- Foods high in saturated fats and avoid trans fats
- Fried foods
- Sugar beverages such as juice and soda.



## **General Dietary Guidelines for Life for the Gastric Sleeve Patient**

Choose foods high in PROTEIN, moderate to low in carbohydrates, and moderate to low in fat.

### “HEALTHY CHOICES”

- ✓ Avoid carbonated beverages and alcohol.
- ✓ Avoid greasy or spicy foods.
- ✓ Avoid or limit whole milk.
- ✓ Baked, broiled, barbecued chicken (without skin), turkey, fish, shellfish. REMINDER: Chew, chew, chew so that they can pass through small stomach opening.
- ✓ Canned water packed tuna (1/4 cup = 1 oz meat)
- ✓ Chopped cooked chicken or turkey (make with diet Mayo or dressing) or use for stir fry.
- ✓ Drink water between meals. Remember 64 ounces or 2 liters per day (at a minimum). Remember to avoid drinking 30 minutes before and after your meal.
- ✓ Eat 2 – 3 meals per day. 2-3 snacks daily. Do not force a meal if you are full. No more than 3-4 ounces at a meal and 1-2 ounces at snacks.
- ✓ Eat slowly and chew foods well to avoid pouch distress.
- ✓ Egg / egg whites / egg substitute (1 egg = 1 oz meat = 7gm protein)
- ✓ Ground white meat chicken and turkey – use for hamburger patties, casseroles, etc.
- ✓ LEAN PROTEIN SOURCES: (your new favorite foods)
- ✓ Lean red meats and pork – ground will be best tolerated.
- ✓ Liver
- ✓ Proteins should always be eaten first at every meal.
- ✓ Take nutritional supplements as directed.
- ✓ Tofu – use in stir fry, soups, add to scrambled eggs (2 ½ x 2 inch square = 1 oz meat). Tofu takes on the flavor of whatever it is cooked with.



## How Do I Get The Recommended Amount of Protein I Need?

\*It is recommended that you get average 60-80gm protein/day. This should be broken up into 3 meals, 2 snacks.

\*You can determine the protein amount with packaged/labeled foods, but foods without labels can be tricky.

Here is a helpful explanation for protein content:

1 ounce of protein = 7gm of protein

1 egg = 7gm protein



\*Serving of protein 3oz =



(size of palm of your hand or deck of cards) = 25gm protein

### Protein-Rich Foods

Greek Yogurt:

Yoplait: 1 container = 11gm

Fage: 6oz = 15gm for 0%, plain

Flavored, 2% = 10gm

Chobani: 6oz = 14gm

### **Food Labels:**

Read all your food labels to determine the nutrient content and be on the lookout for hidden sugars. Serving size is important!

Be careful when reading labels at the market. Quoted protein amounts are based on certain serving sizes and you may not be able to have a whole serving – so, a product that appears high in protein may not be all that high.

Check the other nutrients also. A food high in protein, but also high in carbohydrates or fats would not be a good choice as the proportion of protein is not as good as it looks.

### **Protein and your meals:**

Eat all your protein foods first, and then move on to your vegetables and fruits, then finally your grains and cereals, which should be whole grain.

Half your meal size should consist of protein.

Try to have protein as part of every meal.

### **Helpful Hints for Success:**

1. Avoid time release or extended release forms of medications
2. Begin with chewable, liquid, or crushable vitamins, you may progress to whole vitamins after 6 months
3. Choose a multivitamin with at least 18mg of iron, 400mcg of folic acid, and some selenium and zinc
4. Continue to take in 60-80grams of protein per day
5. DO NOT EAT/DRINK at the same time. Stop drinking 30 minutes prior to eating and wait 30 minutes after eating to resume drinking
6. Don't worry: as long as you continue your follow up visits, we will make sure you're not lacking any of your vital nutrients
7. Exercise a minimum of 3 times per week, including resistance training prior to cardio.
8. Fluid 64oz. per day (four 16 oz bottles or eight 8 oz bottles)
9. Maintain a food diary that includes water intake and exercise log
10. No NSAIDS, example: Aspirin, Ibuprofen, Advil, Motrin, unless approved on individual basis
11. Take vitamins close to or at mealtime to help intolerance
12. Taking supplements will promote and help maintain weight loss, so continue for life

## Guidelines for Food Selection for Gastric Sleeve Patients

The following list is to be used as a guide for making food selections.

Always work toward eating a well balanced diet.

	<b>FOODS RECOMMENDED</b>	<b>MAY CAUSE DISTRESS</b>
<b>Protein</b>	Eggs, fish, chicken, turkey, tofu. Try to choose white meat poultry. If tolerated, nonfat/low-fat cottage cheese, cheese, plain or artificially sweetened nonfat/low-fat yogurt, Lactaid milk.	Fried or high fat meats, fried eggs, highly seasoned or spicy meats, skin of meats and tough meats. Avoid red meat (beef, lamb, pork) during the first 4 months.
<b>Breads, Potatoes and Starch Substitutes</b>	Mashed Potatoes, Crackers, Green peas, Rice, Toast, Cream of Wheat, Grits, Couscous, Oatmeal, Sweet potatoes *Beans and lentils however may cause discomfort and gas.	Breads made with dried fruits, nuts and seeds, pastries, donuts, muffins, pasta and rice if not fully cooked, sugar coated cereals, coarse bran cereals, potatoes to which sugar has been added.
<b>Vegetables</b>	Soft cooked fresh, frozen or canned vegetables (i.e., carrots, beets, mushrooms, spinach, squash, green beans), vegetable juice, and raw vegetables as tolerated after several months.	Any vegetable with tough skin or seeds (i.e., tomato, corn, celery). Cabbage, cauliflower, broccoli and brussel sprouts may cause gas distress.
<b>Fruits</b>	Unsweetened canned fruits, fresh fruits as tolerated in approx. 3 months)	Fruit juices/drinks, fruit skins, fruits canned in heavy syrup. Dried fruits, pineapple for 6 months, melons and raw apples may cause gas distress.
<b>Soups</b>	Protein soups made with allowed foods, spicy soups as tolerated. While restricted on liquids with meals, strain and eat liquids only	Soups prepared with heavy creams or made with high fat ingredients.
<b>Fats</b>	Small amounts of butter or margarine or oil may be used, low-fat salad dressings, nonfat/low-fat mayonnaise, sour cream and cream cheese are tolerated. Peanut butter in small amounts.	Regular mayonnaise, salad dressing, margarine, butter and sour cream.
<b>Sweets</b>	Not recommended. See “dumping” explanation.	All sweets, candies and desserts especially if made with chocolate or dried fruits or if eaten on an empty stomach.
<b>Beverages</b>	Decaffeinated coffee, un-sweet tea, water, nonfat/low-fat Lactaid milk, Crystal Light, fruit juices with sweetened with Splenda, half calorie juices, and Sugar free Kool-Aid.	Alcohol, sweetened fruit drinks or carbonated regular soda.
<b>Miscellaneous</b>	Iodized salt, pepper, herbs and flavored seasonings as tolerated. Light mocha mix or other nondairy low-fat substitutes.	Jalapenos, nuts, seeds, tough skins for at least 3 months post-op.

<b>Name &amp; Price of Protein</b>	<b>Kcal/ serving</b>	<b>Protein-gms/ serving</b>	<b>Type of Protein</b>	<b>Sugar-Grams/ serving</b>	<b>Availability</b>	<b>Notes</b>
<b>EAS AdvantagEdge CHO control (\$5.99/4pack)</b>	100kcal	15gm	Milk Protein concentrate, Calcium Caseinate, Whey protein Isolate	0	Most grocers, drug stores, Walgreens.com, GNC, Walmart, Target, Vitamin Shoppe, Google on internet	Can mix with milk, Almond Breeze, or Silk, add to pudding yogurt
<b>Can mix with milk, Almond Breeze, or Silk EAS Myoplex Carb Sense (\$44/20 pack mix)</b>	90kcal/10.5 fluid oz	22gm	Milk Protein concentrate, Calcium Caseinate, Whey protein Isolate	0	Most grocers, drug stores, Walmart, Target, GNC, Vitamin Shoppe, Google on internet	Can mix with milk, Almond Breeze, or Silk, add to pudding, yogurt
<b>Bariatric Advantage Micro-filtered Whey (\$46.95/tub)</b>	140kcal/2s coops	27gm	Whey Protein Isolate	1	<a href="http://www.bariatricadvantage.com">www.bariatricadvantage.com</a>	Can mix with milk, Almond Breeze, or Silk, add to pudding yogurt
<b>GNC Soy Protein 95 (\$16.95/1 lb tub)</b>	130kcal/sc oop	25gm	Soy Protein Isolate	2	GNC or <a href="http://www.gnc.com">www.gnc.com</a>	Can mix with milk, Almond Breeze, or Silk, add to pudding yogurt
<b>IDS Whey Isolate (\$38.89/5#tub)</b>	125kcal/sc oop	25gm	Whey Protein Isolate	3	Amazon.com, GNC, Google on internet, <a href="http://www.store.bariatriceating.com">www.store.bariatriceating.com</a>	Can mix with milk, Almond Breeze, or Silk, add to pudding, yogurt
<b>Pure Unflavored Protein Isolate (\$24.99/21 servings)</b>	100kcal/2s coops	24gm	Whey Protein Isolate	0	<a href="http://www.store.bariatriceating.com">www.store.bariatriceating.com</a>	Useful in for clear liquid diet, mixes with broth, soups, crystal light
<b>Nectar Protein</b>	90kcal/25gm serving	23gm	Whey Protein Isolate	0	<a href="http://www.store.bariatriceating.com">www.store.bariatriceating.com</a> ; <a href="http://www.bodybuilding.com">www.bodybuilding.com</a>	Tastes like fruit juice
<b>Unjury</b>	90kcal/	20gm	Whey	2	<a href="http://www.unjury.com">www.unjury.com</a>	Several

<b>\$18.95/tub</b>	25gm serving		Protein Isolate			varieties, some for clear liquids, recipes included on website
<b>Elite Protein \$16.99/2# tub</b>	117kcal/scoop	24gm	Whey Protein Isolate	0	<a href="http://www.bodybuilding.com">www.bodybuilding.com</a> <a href="http://www.supplementwarehouse.com">www.supplementwarehouse.com</a>	Multiple Flavors
<b>Zero Carb Isopure 31.99-38.99/3#tub</b>	100kcal/scoop	25gm	Whey Protein Isolate	0	<a href="http://www.bodybuilding.com">www.bodybuilding.com</a> <a href="http://www.supplementwarehouse.com">www.supplementwarehouse.com</a>	Multiple Flavors
<b>Any Whey Protein Powder \$29.99/30 servings</b>	70kcal/scoop	17gm	Whey Protein Isolate	0	<a href="http://www.optimumnutrition.com">www.optimumnutrition.com</a> , <a href="http://www.bodybuilding.com">www.bodybuilding.com</a>	Unflavored to mix with any food or beverage
<b>Procel \$22.88/can</b>	28kcal/scoop	5.3gm	Whey Protein Concentrate	0	<a href="http://www.carepathways.com">www.carepathways.com</a> <a href="http://www.amazon.com">www.amazon.com</a>	Must use 5 scoops per serving. Unflavored, mixes with anything, food or beverage.
<b>Gold Standard Whey Protein \$39.99/5# tub</b>	120kcal/scoop	24gm	Whey Protein Isolate	1	<a href="http://www.bodybuilding.com">www.bodybuilding.com</a> <a href="http://www.GNC.com">www.GNC.com</a> <a href="http://www.vitaminshoppe.com">www.vitaminshoppe.com</a>	Multiple Flavors
<b>Prostat Liquid Protein \$31.99/bottle</b>	64kcal/1oz	15gm	Whey Protein Isolate	0	<a href="http://www.bariatricchoice.com">www.bariatricchoice.com</a> <a href="http://www.amazon.com">www.amazon.com</a>	Wild Cherry Punch, Butter Pecan, Natural