

Weight Loss Surgery - Patient Education Manual



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THIS MANUAL PROVIDES A GENERAL GUIDELINE AND REFERENCE. PLEASE FOLLOW YOUR SURGEON'S EXACT DIRECTIONS AND DIETARY PLAN.

Important Information

- 1. This information is intended to be a guide for your care after your Sleeve Gastrectomy.

 Your surgeon's directions and information are always your first reference. In the event this information differs from your surgeon's ALWAYS ask your surgeon.
- 2. If you experience a medical emergency **at any time,** you should call 911 or go to the emergency room and notify us as soon as possible.
- 3. If you are having a medical problem or are going to the emergency room after normal business hours, please call your surgeon's office immediately and notify the answering service so they can contact your surgeon. It is <u>very important</u> to notify your surgeon of any medical emergency, because many medical providers are unfamiliar with weight loss surgery. This could lead to errors in your treatment.
- 4. Remember, your healthcare provider must obtain x-ray visualization prior to the insertion of a nasal gastric tube.

WHEN TO CALL YOUR SURGEON:

Heart rate greater than 120 beats per minute

Excessive pain in chest or pain/swelling in legs

Vomiting bright red blood or blood in stools

No bowel movements, even after stool softener or Milk of Magnesia for three days

Milky or malodorous discharge from incision

Inability to keep fluids down and/or no urination

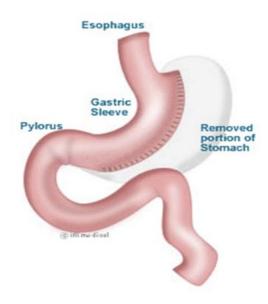
Frequent vomiting or diarrhea lasting more than 12 hours

Difficulty breathing or shortness of breath at rest

Uncontrollable pain or severe unusual pain around incisions

Fever over 101

Anatomy after Surgery



GASTRIC SLEEVE ANATOMY CAPACITY AFTER SURGERY 60 - 90 ML/CC POUCH 2 - 3 OUNCES(ABOUT THE SIZE OF A DECK OF CARDS)

Medical Information

Here are some suggestions for certain steps you can take before your operation to help you be as prepared as possible for surgery.

Vitamins: Vitamin and mineral intake is especially important after bariatric surgery in order to maintain good health and nutrition. It will be easier to remember to take your vitamins after surgery if you begin your supplement routine before surgery. Remember they will always need to be chewable or liquid after your surgery.

Exercise: The best thing to do is to begin activity before your surgery. Walking on a daily basis is a good way to increase activity, without injuring yourself, before surgery. Walking improves circulation and makes breathing easier during recovery. If you have mobility constraints, walking after surgery will become easier as your weight decreases.

Medications: Avoid Aspirin and all Aspirin-containing medications for at least two weeks prior to surgery. Also, discontinue the use of Coumadin, Plavix, or anti — inflammatories such as, Ibuprofen, Advil, Aspirin and Alka — Seltzer for two weeks before surgery **unless otherwise instructed by your surgeon.** You will need to stop taking any diet pills two weeks before surgery. Do not take any herbal medications including; Omega 3 Fatty Acids, St. John's Wart, Gingko, garlic, and green tea because these all have blood thinning properties. Other herbal supplements such as Kava and Valerian Root are known to interact with anesthesia and should also be stopped at least two weeks prior to surgery.

Smoking: It is best to stop smoking at least six weeks before surgery. Since smoking hinders proper lung function, it can increase the risk of complications associated with anesthesia such as deep vein thrombosis (DVT), cardiopulmonary complications, pneumonia, infection, and collapsing of the tiny air sacs in the lungs. Smoking also stimulates stomach acid production, which can lead to possible ulcer formation and can significantly slow the healing process after surgery.

Alcohol: Changing your habits prior to surgery makes the transition after surgery a little easier. Avoidance of alcohol for the year after surgery and avoiding frequent consumption thereafter is recommended. The liver becomes especially vulnerable to toxins, such as alcohol, during periods of rapid weight loss, causing liver damage and gastric irritation. Another reason to avoid alcohol is its high calorie content. After surgery, you may experience effects of alcohol more readily. Small amounts can have a significant effect of intoxication.

Hygiene: It is important to maintain good hygiene by keeping skin clean and dry in the days before surgery. Good skin integrity is essential for the operative site because skin breakdown could possibly cause your surgery to be delayed.

Things to know before your surgery:

You will need to stop taking any diet pills or herbal products, including green tea, two weeks prior to surgery.

Stop taking aspirin or anti–inflammatory medication such as ibuprofen, Advil, Naproxen, Aspirin, Alka – Seltzer, etc. two weeks prior to surgery.

You will be requested or possibly required to stop smoking at least six weeks prior to surgery.

Stop Estrogen supplements two weeks before surgery. If you are stopping a birth control medication, be sure to use a backup birth control method.

If you are taking Coumadin (Warfarin), check with your doctor for specific special instructions.

Stop Omega – 3 Fatty Acids oils/supplements two weeks before surgery.

If you are taking aspirin once a day for heart, vascular or neurological reasons, then you may stop it <u>one week before surgery</u>.

Check with your surgeon regarding any oral diabetic or blood pressure medications for specific instructions

Your surgeon or anesthesiologist will specifically order any medications to be taken on the morning of surgery; take these medications with a small sip of water

DO NOT EAT OR DRINK ANYTHING AFTER MIDNIGHT THE NIGHT BEFORE YOUR SURGERY UNLESS SPECIFICALLY ORDERED BY YOUR PHYSICIAN!!!

Preparing for Surgery

Things to have waiting at home:

Chewable Gas-X or Gas-X strips (for intestinal gas pain)
Protein drinks and clear liquids
Liquid or chewable vitamins
Help or support around the house for at least one to two days

Day before surgery: Clear Liquid Diet Only

Shower with anti-bacterial soap (DIAL-orange)

Nothing to eat or drink after midnight

Morning of Surgery:

Shower the morning of surgery with antibacterial soap
Brush your teeth the morning of surgery
No gum, mints, water or coffee
Your surgeon's office or provider will tell you if there are any medications he/she would like you to take the morning of surgery – these should be taken with a small sip of water

Things to Expect the Day of Surgery:

Lovenox or blood thinner injection in the abdomen before and/or after surgery IV fluids
General anesthesia
Incentive spirometry and coughing/deep breathing every hour while awake
Sequential compression device on legs (preventative for DVT)

Things to Expect After Surgery:

Up and walking shortly after surgery
Discomfort and drowsiness
Use of Incentive spirometry every hour
Sequential compression device on legs (preventative for DVT)
Metallic taste and very dry mouth
Upper GI Test
Nothing to drink until clearance from surgeon
Go home within 23 hours of surgery, except Medicare

Pain Overview:

Pain medicine will be ordered and administered via IV or liquid oral medication Expect some pain, but it should be tolerable (5 or less on a scale of 1 to 10)

Ask for pain medication before going home to make your trip more tolerable If pain medicine is not working, tell your nurse

Get a prescription for pain medication to take home

Left shoulder pain and incisional pain is common (left side is usually the most uncomfortable)

Incisional Care:

Pinkness or redness around incisions is normal (bruising near incision or in abdominal area is normal)

Staples, sutures (stiches), skin glue or possible steri - strips

May have some clear drainage

May have hardness around or under incision site(s)

OK to use with antibacterial soap, but do not scrub or attempt to take glue off – Do not use any alcohol or peroxide

No ointments or creams (such as Neosporin) for six weeks

Medications:

Crush or cut pills for six weeks (liquid or chewable if available) – check with pharmacist about crushing pills. Most surgeons allow whole pills no larger than the size of a pencil eraser

No NSAIDs (Non-Steroidal Anti – Inflammatory) such as Advil, Aleve, Motrin, Ibuprofen or any aspirin (unless approved by your physician)

Find out about resuming medications before leaving the hospital.

Start vitamins – liquid or chewable. Calcium to be started in week 4

Traveling After Surgery:

When traveling in the first four weeks following surgery, frequent movement is mandatory while awake. Be sure to take your incentive spirometer and do 10 repetitions every hour. Also, practice coughing and deep breathing at these intervals. These practices will help keep your lungs expanded and help prevent blood clots.

If traveling by car, be sure to stop every hour and a half, and walk for five minutes to help prevent blood clots. If traveling by plane, it is imperative that you get up from your seat and walk the aisle every hour.

Things you can expect in the first few days after surgery:

No lifting anything over 20 pounds for the first two weeks after surgery, unless otherwise specified by your surgeon.

No strenuous exercise for four weeks after surgery. Only walking is permitted and must be done daily.

Return to work in approximately seven to ten days (sooner is possible). If lifting at work, please wait 3 weeks before returning, unless cleared by your surgeon.

When back at work be sure to get up and move every hour for the first four weeks to help prevent blood clots.

No driving while still on pain medication.

Be sure to drink at least 48 ounces of fluids each day the first week (64 ounces a day thereafter).

Be sure to get in 40 grams of protein each day (build up to 70 - 80 grams a day after the first several weeks).

No baths, hot tubs or swimming pools for four weeks (continue showering and cleaning incision sites with antibacterial soap)

You may have some left shoulder pain that is referred pain from surgery. Walking will help this pain, as well as, drinking warm liquids.

You may continue to have some mild lower abdominal pain for up to four weeks after surgery, especially if twisting or bending.

Diet Plans

Pre-surgical 2 week weight loss protocol

BMI	Daily Diet Protocol	Calories	Protein-daily (g)
<40	5 Whey Protein Shakes and Vitamins and	800-820	70
	64 oz Water		
40-44	6 Whey Protein Shakes and Vitamins and	960-980	84
	64 oz Water		
45-49	7 Whey Protein Shakes and Vitamins and	1120-1300	98
	64 oz of water		
50-55	8 Whey Protein Shakes and Vitamins and	1280-1300	112
	64 oz water		
> 55	7 Whey Protein Shakes plus one 380-calorie	1500	112
	Frozen Entrée and Vitamins and 64 oz water		

In Hospital

Bariatric Clear Liquids

Broths, Water, Water with Crystal Light (no lemonade/citric)

GOAL: Minimum 48 fluid ounces of liquid daily

Day of Discharge to 4 Weeks

Bariatric Full Liquids

Add cream/blended soups and yogurts

NO chunks or lumps

Continue multivitamin and mineral supplement

Use protein supplement 1 - 2 per day (goal 50 - 80 grams per day)

GOAL: 48 – 64 ounces of fluid daily

Weeks 5-6

Bariatric Soft

Applesauce consistency

Continue all supplements (vitamins, minerals, protein)

Continue 48 – 64 ounces of fluid daily

GOAL: minimum 50-80 grams of protein daily and exercise 20 minutes five times a week

Week 7 and Beyond

Bariatric Regular

Ground beef and meats (moist cooking)

3 Months – Lean beef and raw veggies

Continue all supplements (vitamins, mineral), and fluids

May continue protein supplement, if unable to get 60 grams of protein via diet

GOAL: Exercise 20 – 30 minutes five times a week

Continue all supplements, fluids, protein, and exercises

GOAL: Protein and Produce! Lean beef is now okay and raw veggies. Exercise 45 minutes

five times a week

Things to Have Ready at Home

Equipment:

Blender or Magic Bullet Measuring spoons Measuring cups Small plate

Food and Beverages:

Plenty of water

Crystal Light/sugar free beverages/Mio flavoring

Broth – Chicken, Beef and Vegetable

Low fat cream soups (no lumps or bumps)

Fat free/skim milk

Sugar free popsicles

Yogurts

Non fat dried milk

Protein supplement of your choice < 14 grams of sugar, and at least 20 grams protein per serving (DO NOT use Ensure or Boost)

Clear Liquid Diet

This diet is allowing your new stomach to heal completely. Remember, if you decide to consume any food or beverage that is not on this list, **you may disrupt your staple line**, experience nausea, vomiting, diarrhea, weakness, sweats, chills and rapid heart rate.

Duration: Hospital Stay

Clear Liquid Diet

Goal: 48 ounces of fluid and 40 grams of protein (minimum) per day

Food Group	Allowed Foods	Foods to Avoid
Beverages	Water and ice chips, decaf tea, decaf coffee, crystal light,	Sugar sweetened drinks, cocoa, CARBONATION,
	sugar free Kool – Aid, Diet Snapple, Fruit H2O Water	CAFFIENE, AND ALCOHOL
Juice	Clear dietetic juices that are mild, such as: cranberry, apple or grape. Make sure are sugar free or no sugar added. You may choose to dilute your juice with water.	Acidic juices such as citrus and tomato juices, juices with pulp, orange, pineapple, grapefruit and lemon
Milk	Skim milk or Lactose free milk, Fairlife Milk	All others
Others	Sugar free or no sugar added popsicles	Sugar popsicles NO JELL-O
Soup	Broth and low sodium broths	High fat, high salt soup, tomato soup, unstrained soup, cream soups
Supplemental Beverages	Recommended Protein Supplements	Be careful!! Avoid protein drinks with high sugar and low protein levels (such as Ensure, Slim-Fast, and Boost) >20 grams protein <14 grams sugar per serving

Instructions:

Minimum 48 fluid ounces per day Small amounts (4 – 6 ounces of liquids) When you feel full, STOP! Remember to walk, walk, and walk! (It is the key to recovery)

Protein Supplements

Please choose one of the following protein supplements to help meet the 60 grams of protein per day minimum. Mix as directed. If you choose milk, make sure to use skim milk, light soy milk or lactaid milk. Lactose intolerance can occur the first few weeks after surgery.

New Whey: Individual 3 ounce or 5 ounce vials provide 25 or 42 grams of liquid protein. Found at Vitamin Shoppe, GNC, Vitamin World or online

Bariatric Advantage® Ready – To Shake™: Meal Replacement and Pudding Mix. Each individual lightweight bottle contains a pre – measured serving of powder. Just add water and shake for a full meal replacement. Each serving provides 100 calories, 15 grams of protein, and 7 grams of carbohydrates and 1.5 grams of fat. They are fully fortified, with 5 servings providing 100% of the RDA for required nutrients, and 150% of the RDA of protein. This product is available in Strawberry, Vanilla and Chocolate. Lactose free and sucralose sweetened. (www.bariatricadvantage.com)

Isopure Whey Protein Powder: Available flavors: Dutch Chocolate, Strawberry, Banana, available at Vitamin Shoppe, GNC

Nectar™: Mixes instantly, aspartame free, zero carbohydrates, zero fat, and 23 grams of whey protein.

- *Single Serving packet and Grab N' Go: Lemon Tea, Roadside Lemonade and Fuzzy Navel
- *Latte: robust latte flavor, caffeine free
- *Matrix 5.0: Vanilla, Chocolate, Cookies and Cream and Orange Cream
- *Fruitilicious: Apple Ecstasy, Caribbean Cooler, Crystal Sky, Fuzzy Navel, Roadside Lemonade, Strawberry Kiwi, Lemon Tea and Twisted Cherry

Unjury: Individual serving will provide 20 grams of protein. Available in Vanilla, Chocolate, Strawberry Sorbet, Chicken Broth flavor or Unflavored (www.unjury.com)

Body Fortress: Whey protein powder provides 26 grams of protein per scoop. Found at Kroger and Wal-Mart. Available flavors: Chocolate, Vanilla, Cookies and Cream and Strawberry.

Costco or Wal-Mart: Whey protein and Premier Protein ready to drink; contains 24-30 grams of protein per scoop; can be mixed with water or skim milk for a shake.

Full Liquid Diet

This diet is allowing your new stomach time to heal completely. Remember, if you decide to consume any food or beverage that is not on this list **you may disrupt your staple line**, experience nausea, vomiting, diarrhea, weakness, sweats, chills and rapid heart rate.

Duration: Day of discharge to week 4

Full Liquid Diet

Goal: 64 ounces of fluid and 50-70 grams of protein (minimum) per day. Begin counting grams of protein you consume per day. Walk, walk, and walk!

In addition to everything on the Bariatric Clear Liquid Diet, you may also have:

Food Group	Allowed Foods	Foods to Avoid
Beverages	Water and ice chips, decaf tea, decaf coffee, Crystal Light, sugar free Kool – Aid, Diet Snapple, Fruit H2O water.	Sugar sweetened drinks, cocoa, CARBONATION, CAFFEINE AND ALCOHOL.
Juice	Mild, clear juices, such as: cranberry, apple or grape. Use the "light" not the diabetic.	Acidic juices, such as citrus juices with pulp, orange, pineapple, grapefruit and lemon and tomato juice
Milk	Skim, light soy or lactose free milk. Yogurts. Fairfield Milk	All others
Others	Sugar free or no sugar added popsicles	Sugar popsicles, sugar pudding, ice cream and NO Red JELL-O
Soup	Low sodium broths, low fat cream soups, Healthy Choice, Healthy Request, blended soups	High fat, high salt soup, soups with any solid material
Starches	None	Cold cereals, grits, oatmeal, sugar sweetened cereal
Supplemental Beverages	Whey isolate protein shakes. Recommended high quality protein choices on previous page.	Be Careful! Avoid protein drinks with high sugar and low protein levels (such as Ensure and Boost) >20 grams protein <14 grams sugar per serving

Instructions:

Each meal will equal about 2-4 ounces, or quarter to half cup in volume (1 ounce = 2 Tbsp)

1-2 supplemental protein beverages (at least 40 grams of protein per day) Minimum 48 fluid ounces liquids per day, but when you feel full STOP! Small amounts (4-6 ounces) sip slowly and stop as soon as you feel full or nauseated No carbonated beverages

Start with very thin liquids and advance slowly to thicker liquids

Soft Food Diet

Duration: Weeks 5-6

Goal: PLAN 3 small meals to include 50-70 grams of protein a day and 64 ounces of fluids

In addition to everything on the Bariatric Full Liquid Diet, you may also have:

Food Group	Allowed Foods	Foods to Avoid
Beverages	Water and ice chips, decaf tea, decaf coffee, Crystal Light, sugar free Kool – Aid, Diet Snapple, Fruit H2O water.	Sugar sweetened drinks, cocoa, CARBONATION, CAFFEINE AND ALCOHOL.
Milk	Skim, light soy or lactose free milk, Fairlife Milk	All others
Others	Sugar free popsicles, Fruit n' Juice Popsicles, Sugar free Jell-O, sugar free pudding	Sugar sweetened deserts
Soup	Low fat cream soups, soups of any kind	Full fat cream soups, full sodium soup
Starches	Cooked cereal, cream of rice, cream of wheat, Malt-O-Meal, thinned grits or oatmeal, mashed potatoes, mashed sweet potatoes, crispy toasted bread	Sugar sweetened cereals, cold cereals, bread (unless toasted), pasta, Ritz crackers or soda crackers unless light and all other starches
Meats/Protein	Low fat cottage cheese or ricotta, low fat yogurt, low fat cheese, egg, tuna, canned chicken (with light mayo only), shaved deli meats, ground beef, ground turkey Cooking methods: boiling, slow	Dry meat or poultry, mixed dishes (i.e. lasagna), beef (other than ground because hard to digest) Cooking methods: Grilling, dry/direct heat
Vegetables	cooker, foil wrapped Cooked, canned or pureed, (soft – able to be smashed with a fork)	Broccoli, cauliflower, cabbage, onions, snow peas, asparagus, celery, raw vegetables
Fruits	Cooked, canned or pureed, unsweetened applesauce and bananas (fruits only occasionally)	Cherries, berries, citrus fruits, grapes, plums and most raw fruits
Fats	Promise and I Can't Believe It's Not Butter spray	All other fats
Supplements	Adequate amount to meet protein requirement of at least 70-80 grams per day	High sugar and/or calorie (Ensure, Boost, Slim Fast)

Bariatric Regular Diet

Duration: Continuous beginning Week 7

Goal: PLAN 3 small meals (plus 1 <u>planned</u> protein snack – only if needed)

<u>In addition to everything on the Full Liquid Diet and Soft Food Diet, you may also have:</u>

Food Group	Allowed Foods	Foods to Avoid
Beverages	Water and ice chips, decaf tea, decaf coffee, Crystal Light, sugar free Kool – Aid, Diet Snapple, diet V-8 Splash, Fruit H2O water.	Sugar sweetened drinks, cocoa, CARBONATION, CAFFEINE AND ALCOHOL.
Milk	Skim, or lactose free milk only	All others
Others	Sugar free popsicles, Fruit n' Juice Popsicles, sugar free Jell-O, sugar free pudding	Sugar sweetened deserts
Soup	Low fat cream soups, soups of any kind	Full fat cream soups, full sodium soup
Starches	Cooked cereal, cream of rice, cream of wheat, Malt-O-Meal, thinned grits or oatmeal, mashed potatoes, mashed sweet potatoes, crispy toasted bread, wild rice, angel hair pasta, whole wheat pasta	Sugar sweetened cereals, cold cereals, bread (unless toasted), and all other starches NOTE: rice and pasta may be difficult to get down
Meats/Protein	Low fat cottage cheese or ricotta, low fat yogurt, low fat cheese, egg, tuna, meats (chicken, turkey, pork, beef, seafood) Cooking methods: boiling, slow cooker, foil wrapped	Dry meat or poultry, fatty or greasy meats Cooking methods: Grilling, dry/direct heat
Vegetables	Cooked, steamed, canned or pureed, (soft – able to be smashed with a fork)	Raw vegetables and stringy vegetables may be difficult or can get stuck
Fruits	Cooked, canned or pureed, unsweetened applesauce, fresh fruit, bananas, some melons, citrus (only eat fruits rarely)	Consider fruits a treat or dessert and only eat occasionally 1-2 times a week
Fats	Promise and I Can't Believe It's Not Butter spray, Omega 3 fats, olive oil, canola oil, flaxseed oil	All other fats
Supplements	Adequate amount to meet protein requirement of at least 70-80 grams per day	High sugar and/or calorie (Ensure, Boost, Slim Fast)

Successful Strategies

Fluids: Stay hydrated! 64 to 72 or more ounces of water every day **Supplements:** Multivitamins, calcium and others as instructed

Food: Healthy food choices! Protein first – protein to promote healing and weight loss,

usually between 70-80 grams a day

Exercise: Begin by walking, even short distances! As you lose weight you will become more active with planned activity (gym, walking, weights, exercise machines, personal trainer, etc.) or unplanned activity/lifestyle (gardening, household chores, shopping, playing with kids/pets, etc.) **Goal is 30 minutes of exercise 5 days a week!**

Change your eating habits to be successful!

Eating Mechanics

- *Pace yourself about 30 minutes per meal
- *Small bites about the size of a nickel
- *Chew well 25 to 30 times per bite, pulverize
- *Sip fluids do not gulp, sip slowly.
- *Do not drink 10 15 minutes before meals and 30 minutes after meals to allow enough room for your protein.

Planning

- *3 meals per day (no more than 4-5 hours apart) NO GRAZING!
- *Protein snack (only if needed) may be 8-10 grams of protein and less than 150 calories

Mindful Eating

- *Pay attention to your food, avoid multi tasking
- *Enjoy flavors of foods; the most flavors are in the first few bites
- *Try to differentiate head hunger from real hunger. Ask yourself if you have eaten in the last couple of hours? Did you just see a food commercial? Did you just smell food? If the answer to these questions is YES, then it is probably head hunger

Sample Menu

*Clear Liquids: includes those that can be seen through. Clear liquids minimize the need for digestion and lessen the production of solid waste, allowing your gastrointestinal system time to heal.

Breakfast:

½ cup decaffeinated coffee or tea – artificial sweetener okay, but no cream/creamer Protein drink – drink over one hour

Lunch:

½ cup broth – one scoop chicken broth flavored or unflavored protein powder Sugar free Popsicle

Dinner:

½ cup broth

Protein drink – drink over one hour

*Full Liquids: includes those that are pourable and smooth. Full liquids have more calories, protein and nutrients to help meet your daily requirements. Protein will give your body the building blocks needed to heal from surgery.

Breakfast:

1 cup of coffee or tea

1 cup skim milk with one scoop protein powder (chocolate or strawberry) – drink over 30 minute period

Lunch:

½ cup blended cream soup – no chunks or lumps with one scoop unflavored or chicken broth flavored protein powder

½ cup broth – one scoop unflavored chicken broth flavored protein powder

Dinner:

% cup blended cream soup – no chunks or lumps with one scoop unflavored or chicken broth flavored protein powder

½ cup broth – one scoop unflavored or chicken broth flavored protein powder

^{*}You may also have sugar free popsicles at any time

^{*}You may also have crushed ice with sugar free drink flavoring at any time. Sip on liquids throughout the day, aiming to drink one ounce of liquid every 10 minutes while awake.

^{*}You should not skip meals; however a protein shake with at least 20 grams of protein and fewer than 250 calories may be substituted for a meal.

*Soft Foods: are foods that can be easily mashed with a fork (applesauce consistency). This stage continues to allow your system to heal and slowly adjust to more dense foods. Advancing too rapidly into foods that are too dense or hard can cause food getting "stuck", vomiting and pouch irritation.

Do not drink 30 minutes before meals and 30 minutes to an hour after meals to avoid washing your food through the pouch, stretching the pouch, or causing vomiting.

Breakfast: (Choose two totaling 20 grams of protein or more)

½ cup Cream of Wheat made with skim milk – may be sweetened with artificial sweetener

1 egg plus 1 egg white omelet sprinkled with 2% shredded cheese

Blue Bunny sugar free yogurt with ½ scoop protein powder

½ cup sugar free Jell-O made with unflavored protein powder

Lunch: (choose two totaling 20 grams of protein or more)

1 cup black beans (cooked and mashed) with 1 Tbsp fat free sour cream and salsa

½ cup tuna fish with light mayo (baby food consistency) and Melba toast

½ cup fat free cottage cheese

1 to 2 small smashed new potatoes with 2% cheese and fat free sour cream

1 egg whisked into ½ cup of simmering broth (egg drop soup)

½ cup fat free ricotta blended with a little sugar free vanilla instant pudding powder and a drop of vanilla extract

½ cup sugar free pudding made with protein powder

Dinner: (choose two totaling 20 grams of protein or more)

3 ounces soft baked fish poached in V8 or chicken broth

2 egg omelet sprinkled with 2% shredded cheese and a spoonful of liquid salsa

½ cup canned chicken with light mayo (baby food consistency)

Thin sliced 95% lean deli meat with 2% cheese roll up

½ cup fat free ricotta cheese with low sugar spaghetti sauce (Classic or Barilla) warmed in microwave and sprinkled with 2% mozzarella

½ cup fat free cottage cheese with no sugar added applesauce and a sprinkle of cinnamon

Sip on liquids throughout the day, aiming to drink 1-2 ounces of liquid every 10 minutes while awake. You can add unflavored protein powder to almost anything to increase the protein. You should be consistently consuming 64 ounces of water per day and 70-80 grams of protein per day.

You should not skip meals, however, a protein shake with at least 20 grams of protein and fewer than 250 calories may be substituted for a meal.

*Solid Foods: One you are released back to "normal" foods be cautious. Start out slow and only try one new food per meal. By trying one new food once and you don't tolerate it well; it does not mean that you will ever be able to have that food again. Wait a few months and try it again. Tolerances change as we progress post operatively. Do not drink 30 minutes before and 30 minutes after meals to avoid washing your food through the pouch, stretching the pouch or causing vomiting.

Breakfast: (choose one from each section)

Scrambled egg (if tolerated) with turkey and ½ slice of whole wheat toast Morningstar Farms veggie breakfast sausage patty with an egg cooked over easy 1 egg plus 1 egg white omelet with diced ham and 2% cheese

½ cup fat free ricotta with sugar free preserves ½ cup fat free cottage cheese with no sugar added applesauce Blue Bunny sugar free yogurt

Lunch: (choose one)

95% lean deli meat with 2% cheese, spread with low fat cream cheese rolled up on a whole wheat tortilla

Chicken salad, tuna salad or egg salad on Melba toast

Taco salad- 90% lean ground beef, small amount of lettuce, tomato, onion, and 2% shredded cheese, fat free sour cream and chunky salsa

Dinner: (choose 1 meat [2-3 ounces], 1 vegetable [½ cup] and 1 complex carb [½ cup]

Meats: Sweet turkey Italian sausage, moist rotisserie chicken, 90% lean ground beef or ground turkey meatloaf, grilled pork chop, grilled or blackened shrimp, pot roast, grilled steak, chili made with 90% lean ground beef, baked boneless, skinless chicken breast **Veggies:** Snow peas, green beans, carrots, Brussels sprouts, steamed cauliflower, steamed broccoli, stir fry vegetables, green pepper (red, yellow or green), cucumbers, tomatoes, radishes, cabbage and spinach

Complex carbs: Sweet potato, peas, potatoes, squash, corn, yams, plantain, brown rice, whole wheat pasta, whole wheat bread

3 meals per day – one mid morning protein snack, **only if needed** and one mid afternoon snack, **only if needed**. A protein snack is one that is 8-10 grams of protein or more with fewer than 150 calories. Nothing except clear liquids after dinner, this includes sugar free Popsicles and sugar free Jell-O. Continue to focus on protein and get at least 70-80 grams per day and 64 ounces of fluids. Cooking methods of slow cooking: baking, grilling and boiling are still the best. Be careful not to overcook and dry out the food. Reheating food, especially in the microwave tends to dry out making it tough and difficult to tolerate. If reheating food in the microwave, place it in a baggie first to seal in all of the juices.

<u>Food that may not always be tolerated:</u> bread, rice, pasta, fruit with skin, lettuce/salad, dry or stringy meats such as fajita meat, brisket jerky, pork, rubbery seafood such as shrimp, lobster, scallops, calamari, and stringy vegetables such as asparagus and celery.

Vitamin Supplementation

It is very important to supplement your vitamins and minerals after weight loss surgery. Your diets are changing and the quantity is much less, therefore you must take supplements. It is also necessary to take <u>B12 due to decreasing stomach acid.</u>

Supplement as follows:

Liquid or Chewable Adult Multivitamin

- *Begin upon release from the hospital
- *Two doses daily, may be taken together

Iron (only if recommended by your physician)

- *Ferrous Fumerate 18-29mg
- *Ferrous Sulfate is most common; however it is NOT well absorbed after bariatric surgery
- *Two most common brands available are Celebrate and Bariatric Advantage. These are available online and in some specialty pharmacies.

B12-500 mcg sublingual daily or 2500 mcg sublingual every week

- *Begin using upon release from hospital
- *Sublingual (under tongue) This can be purchased over the counter at your local health food store or pharmacy either in a spray or melt away tablet
- *Nasal Spray available by prescription, please speak to Bariatric Coordinator for more information.
- * B12 should not be taken in pill form, as there are not enough acids in your new system for absorption

Calcium Citrate 1000 to 1500mg daily

- *Begin with your soft diet
- *Calcium Citrate products are best absorbed with Vitamin D and magnesium. Calcium Citrate can be taken in liquid or chewable forms and should be taken in 500mg doses with at least one hour between doses. Do not take Calcium at the same time as iron.
- *Do not use calcium carbonate, as it in NOT well absorbed after bariatric surgery.

B-Complex Vitamin- 1 daily

Activity and Exercise

- *Exercise is important, but if you have not exercised start slow and work up. Begin with 10 minutes a day for five days a week and then work up to 20 minutes five days a week. Eventual goal should be 45-60 minutes five days a week.
- *Exercise does not have to be painful or expensive
- *You do not have to join a gym or buy expensive equipment
- *Just begin by walking
- *Exercise is important to becoming healthier while losing weight
- *Set realistic goals and give your body time to respond to what you are doing
- *Try varying your exercises and do different things so you don't get bored
- *Even if you are unable to walk or are in a wheel chair, you can still exercise
- *Find a workout buddy or join a fitness gym or group. Try a new fitness video because these things will help you succeed and stay with a program.
- *Extra skin after weigh loss is positively impacted by vigorous exercise
- *If you burn more calories than you are taking in, you will lose weight
- *Muscle requires more calories to maintain
- *Exercise helps prevent muscle loss during rapid weight loss
- *Muscle is important to maintain a steady metabolism
- *There are no shortcuts to weight loss so even if you get frustrated, don't give up!
- *Track your progress and be accountable
- *Reward your successes with things like buying a smaller size in clothes or getting a massage, manicure, pedicure or going to the movies, etc

Medical References/ Medical Concerns

<u>Drugs to avoid after Sleeve Gastrectomy:</u> for the first 3 months (ALWAYS FOLLOW YOUR PHYSICAN'S INSTRUCTIONS)

Advil Ibuprofen Asproject Nayer Uracel Voltaren Aleve Azolid Indocin Orudis **Amigesic** Bufferin Ketoprofen Oruval Butazolidin Lodine Pamprin-IB Anacin Clinorial Meclomen Percodan **Anaprox** Ansald Disalcid Midol **Ponstel** Anthra – G Dolobid Mobic Rexolate Tandearil Arthropan Equagesic Motrin Ascriptin Feldene Nalfon Tetracycline Asprin **Fiorinal** Tolecin Naprosyn

Pain medication options after gastric surgery:

Tylenol in any form Cox - 2 Inhibitors

Tylenol with codeine For migraines: Imitrex, Ergotamine, Deseril

Glucosamine 1500 mg and/or chondroitin 1200 mg, in

Vicodin liquid form

Percocet, Fioricet, Oxycontin Methacarbamol

Toradol (Ketoraloac) - only if given by

injection or IV

Soma, Flexeril, Robaxin, Zanaflex

Drugs that are considered safe:

Benadryl Tylenol (Extra Strength) Triaminic (all)

Tylenol Gas-X Tylenol (cold products)

Dimetapp Imodium AD Milk of Magnesium

Any fiber, preferably

Robitussin or Delsym Phazyme Citrucel
Safetussin Colace Peri - Colace

Sudafed Miralax

Claritin Reditabs Dulcolax suppositories
Zyrtec (liquid or chewable) Glycerin suppositories

Medical Concerns

There are some problems that patients may experience that may or may not fall into the medical category of "complications." Nevertheless, they arise as issues that some patients have to deal with, so we aim to provide proactive information.

<u>Incisions:</u> After your surgery, your incision sites will have some swelling and bruising, numbness of the skin around the site, and mild to moderate itching. The lower right abdominal incision may have more bruising because of the camera insertion. The scars will be red, dark pink or purple and will have pain or discomfort that should be controlled with prescribed medication. Keep incisions clean and notify the surgeon if you notice increase in swelling or tenderness, redness, discharge, foul smell, or fever of the area. These could be signs of infection and it is VERY important to notify your surgeon right away.

<u>Nausea:</u> Nausea may be caused by a number of things including: fullness, not eating, insufficient chewing, and pain medication, sensitivity to odors, post nasal drip, or dehydration. Nausea that occurs in the first days after surgery can usually be controlled with medication; however, if the nausea is so severe that it prevents you from consuming adequate amounts of fluid, you may need to return to the facility to receive IV fluids to prevent dehydration.

<u>Vomiting:</u> Persistent vomiting can lead to dehydration, electrolyte imbalance, and can cause vitamin deficiencies to occur. In the beginning, it is very difficult to determine the amount of food that will make your new pouch full, without over filling it. It is very important to chew your food well, eat moist foods, and eat very slowly to avoid over filling your pouch. Vomiting may occur from:

Eating too fast
Not chewing well
Over eating
Eating food that is too dry
Eating solid foods too soon after surgery
Drinking with meals or drinking too soon after a meal

<u>Dehydration</u>: Not drinking enough fluids causes dehydration and it may lead to bladder and kidney infections. Symptoms of dehydration include dark colored urine, fatigue, dizziness, nausea, fainting, lower back pain and a whitish coating on the tongue. To avoid dehydration:

Drink at least 64 ounces of fluids per day, and increase the amount if you are sweating Avoid caffeine containing beverages, they act as a diuretic and may dehydrate you Always carry a bottle of water with you wherever you go, if drinking is difficult due to nausea, try sucking on ice chips

<u>Bowel Habits:</u> After surgery, the amount of food consumed is greatly reduced and the quantity of fiber or roughage may be much less and therefore bowel activity may be diminished. The diminished bowel activity may lead to less frequent bowel movements or even constipation. If constipation becomes a problem, milk of magnesia, Benefiber or mineral oil may be used as a laxative to prevent rectal difficulties. Bowel movements may be foul smelling and associated

with flatulence and may be a different color and consistency than before surgery. On the other hand, with the increase of liquids, you may have diarrhea up to three times a day. Most of these changes resolve as your body heals and you adapt to surgery. Please call your surgeon if you have persistent diarrhea or constipation that is not resolved with milk of magnesia or mineral oil.

<u>Bleeding after the surgery:</u> On rare occasions, there can be some bleeding from surgery that may require a blood transfusion and/or an emergency room visit. On more rare occasions, you may have to return to the operating room.

Post Operative Leaks: Leaks can occur after the surgery along the internal staple line. They usually occur about 10-14 days after surgery. You are checked for a leak while in the operating room and sometimes again before leaving the facility. Eating solid foods before you are medically cleared can contribute to a leak. Fever and rapid heartbeat typically can be signs of a leak and should be reported immediately to your doctor. Leaks typically have to be repaired surgically.

<u>Strictures and Small Bowel Obstructions:</u> This is a narrowing or obstruction within the colon or stomach that can occur early or late after surgery. Many times you may have nausea, vomiting, abdominal bloating and no bowel movements. You need to let your doctor know immediately if this occurs. X-rays will need to be taken and sometimes a dilation or surgery is required.

<u>Pulmonary Emboli:</u> These are blood clots that travel to the lungs. They can happen to anyone, but there is an increased risk after bariatric surgery. A sign of a blood clot to the lung is chest pain that does not move and is accompanied by shortness of breath. Swelling in one or both of the legs can precede these symptoms with some calf tenderness. If this occurs contact your surgeon immediately or go to the emergency room. To help prevent blood clots from forming, it is important to keep moving after the surgery. In addition, if you are traveling long distances by car or plane within six weeks of your surgery, be sure to change positions every hour and get up and move around.

<u>Gallstones:</u> Cycles of weight loss and weight gain predispose to formation of gallstones. Many patients who undergo bariatric surgery have already had their gallbladders removed. The period of rapid weight loss just after weight loss surgery creates an increased risk of forming gallstones (25% or less).

<u>Hair Loss</u>: Most patients notice some increase in hair loss around 3-5 months following surgery. For some patients the amount of hair loss is less dramatic. This occurs as part of the body's response to sudden calorie and protein deprivation just after surgery. The body puts some of its normal maintenance activities "on hold" until nutrition is coming in again, and the effects take a few months to show up.

Frequently Asked Questions

When can I take a bath or shower?

As soon as you get home you may take a shower. You may gently wash the incision or incisions with mild soap and water. Please avoid bathing or submerging your wounds in any water for 4 weeks. If you have glue do not remove it, but let it come off naturally.

When can I start exercising?

You will be required to start walking before you leave the hospital and continue to walk and move around as much as you can when you get home. You should not lift, shove or attempt any other exercise until your surgeon tells you to do so; usually about 4 weeks post-op. However, walking on a treadmill is acceptable.

When can I drive?

As soon as you are no longer taking pain medication.

When can I go back to work?

As soon as you feel fit; two weeks or less for most jobs.

How big will my stomach be after surgery?

It is usually between 70 and 90 ml's or 2-2.5 ounces.

What happens to the old stomach?

When the sleeve is created the remnant stomach is removed and sent to pathology.

Will I be able to eat normal foods again?

You will be able to eat regular food following the 6 week transitional period after surgery. The biggest difference will simply be the portion size. After eating a few ounces or less, you will feel full. You will need to avoid foods high in sugar and limit fats in your diet. You can otherwise eat a wide variety of foods but some foods maybe difficult such as dry meats, pasta, rice, breads, asparagus or other stringy fruits and vegetables.

Can I take my regular medications?

Your medication may need to be crushed or converted to a liquid or chewable form for the first three to six weeks after surgery. Medications that come in larger pill form may still need to be broken or crushed. Also, you should avoid aspirin products and anti-inflammatories for the first three months after surgery as they can cause irritation and ulcers. Remember that your vitamins and minerals should always be in chewable or liquid form for better absorption.

When can I have sex?

Sex is fine to resume as soon as you feel ready. You may want to be cautious at first if you are still having any muscle tenderness or soreness around the incisions.

Can I take oral contraceptives (birth control pills)?

Oral contraceptives can continue usually one to two weeks after surgery and may still be taken orally because of the small size of the pills. A backup form of contraception may be required should you begin experiencing severe vomiting and diarrhea. Using a barrier method is suggested as a backup. Check with your OBGYN or PCP to see what options might be best for you.

Can I get pregnant after surgery?

It is strongly recommended you wait at least 18 months after surgery before trying to conceive. Approximately 18 months post-op your body will be fairly stable from a weight and nutrition standpoint. You should also know that fertility usually increases with weight loss, so be sure to take extra precautions.

Internet Resources

Do you have access to the internet? If so, you may want to check out the following websites:

www.bethesdaweb.com

Bethesda Health website, please visit the Center for Surgical Weight Reduction. We are always adding to our website.

www.obesityhelp.com

ObesityHelp.com is a comprehensive website designed to meet some of the informational needs of the bariatric patient both before and after surgery. The website offers reviews of surgeons, hospitals and programs to enable prospective clients to make informed decisions concerning their choice.

www.bariatricadvantage.com

This site offers vitamin and protein supplements especially formulated for bariatric patients.

www.asmbs.org

This site is hosted by the American Society for Bariatric Surgery and gives good technical, medical information.

www.fitday.com

This site allows you to follow your daily nutritional information and exercise patterns.

www.sparkpeople.com

nawls.com

National association of weight loss surgery

Obesity Action Coalition

www.oac.org

Food Sources of Vitamins and Minerals

Vitamin A

Food sources include: Cod-liver oil, sweet potatoes, carrots, leafy vegetables, and fortified foods such as breakfast cereals

What it does: Promotes good eyesight and normal functioning of the immune system.

Vitamin B1 (Thiamine)

Food sources include: Enriched, fortified, or whole-grain products such as bread, pasta, and cereals

What it does: Helps the body process carbohydrates and some protein.

Vitamin B2 (Riboflavin)

Food sources include: Milk, breads, fortified cereals, almonds, asparagus, dark meat chicken, and cooked beef

What it does: Supports many body processes, such as turning food into energy. It also helps your body make red blood cells.

Vitamin B3 (Niacin)

Food sources include: Poultry, fish, meat, whole grains, and fortified cereals

What it does: Helps with digestion and changing food into energy; helps make cholesterol.

Vitamin B6

Food sources include: Fortified cereals, fortified soy-based meat substitutes, baked potatoes with skin, bananas, light-meat chicken and turkey, eggs, and spinach

What it does: Supports your nervous system. Helps the body break down proteins. Helps the body break down stored sugar

Vitamin B12

Food sources include: Beef, clams, mussels, crabs, salmon, poultry, soybeans, and fortified foods

What it does: Helps with cell division and helps make red blood cells.

Vitamin C (Ascorbic Acid)

Food sources include: Citrus fruits, berries, tomatoes, potatoes, broccoli, cauliflower, Brussels sprouts, red and green bell peppers, cabbage, and spinach

What it does: Promotes a healthy immune system and helps make collagen. It's also needed to make certain chemical messengers in the brain.

Vitamin D

Food sources include: Fortified milk, cheese, and cereals; egg yolks; salmon

What it does: Maintains bone health and helps the body process calcium; important for immune system function; may protect from cancer.

Vitamin E

Food sources include: Leafy green vegetables, almonds, hazelnuts, and vegetable oils like sunflower, canola, and soybean

What it does: As an antioxidant, it helps protect cells from damage.

Folate (Folic Acid)

Food sources include: Fortified cereals and grain products; Lima, lentil, and garbanzo beans; and dark leafy vegetables

What it does: Promotes cell development prevents birth defects, promotes heart health, and helps red blood cells form

Vitamin K

Food sources include: Leafy green vegetables like parsley, chard, and kale; olive, canola, and soybean oils; and broccoli

What it does: Helps blood clot and maintains bone health.

Calcium

Food sources include: Dairy products, broccoli, dark leafy greens like spinach and rhubarb, and fortified products, such as orange juice, soy milk, and tofu

What it does: Helps build and maintain strong bones and teeth. Helps muscles work. Supports cell communication.

Chromium

Food sources include: Some cereals, beef, turkey, fish, broccoli, and grape juice

What it does: Helps maintain normal blood sugar (glucose) levels.

Copper

Food sources include: Organ meats (like liver), seafood, cashews, sunflower seeds, wheat bran cereals, whole-grain products, and cocoa products

What it does: Helps break down iron helps make red blood cells, and helps produce energy for cells.

Fluoride

Food sources include: Fluoridated water, teas, and some fish

What it does: Prevents dental cavities and stimulates new bone formation.

lodine

Food sources include: lodized salt, some seafood, kelp, and seaweed

What it does: Works to make thyroid hormones.

<u>Iron</u>

Food sources include: Leafy green vegetables, beans, shellfish, red meat, eggs, poultry, soy foods, and some fortified foods

What it does: Carries oxygen to all parts of the body through red blood cells.

Magnesium

Food sources include: Whole grains, leafy green vegetables, almonds, Brazil nuts, soybeans, halibut, peanuts, hazelnuts, lima beans, black-eyed peas, avocados, bananas, kiwi, and shrimp

What it does: Helps muscles and nerves work, steadies heart rhythm, maintains bone strength, and helps the body create energy.

Manganese

Food sources include: Pecans, almonds, legumes, green and black tea, whole grains, and pineapple juice

What it does: Supports bone formation and wound healing, and also helps break down proteins, cholesterol, and carbohydrates. It's also an antioxidant.

Molybdenum

Food sources include: Legumes, grain products, and nuts

What it does: Helps process proteins and other substances.

Phosphorus

Food sources include: Dairy products, beef, chicken, halibut, salmon, eggs, and whole wheat breads

What it does: Helps cells work the body make energy, helps red blood cells deliver oxygen, and helps make bone.

<u>Potassium</u>

Food sources include: Broccoli, potatoes with the skin, prune juice, orange juice, leafy green vegetables, bananas, raisins, and tomatoes

What it does: Helps the nervous system and muscles; helps maintain a healthy balance of water.

<u>Selenium</u>

Food sources include: Organ meats (like liver), shrimp, crabs, salmon, halibut, and Brazil nuts

What it does: Helps protect cells from damage and regulates thyroid hormone.

<u>Zinc</u>

Food sources include: Red meat, fortified cereals, oysters, almonds, peanuts, chickpeas, soy foods, and dairy products

What it does: Supports immune function, as well as the reproductive and nervous systems.

Side Effects of Vitamins:

Many people think that if some is good, a lot is better. This is not always the case. High doses of certain vitamins can be poisonous. Ask your doctor what is best for you.

Recommendations

The Recommended Dietary Allowances (RDAs) for vitamins reflect how much of each vitamin most people should get each day. When looking for vitamins look for "USP" on the label. This ensures that the supplement meets the standards for strength, purity, disintegration, and dissolution established by the U.S. Pharmacopeia (USP) testing organization.

- The RDA for vitamins may be used as goals for each person.
- How much of each vitamin you need depends on your age and gender. Other factors, such as pregnancy and your health, are also important.

The best way to get all the daily vitamins you need is to eat a balanced diet that contains a wide variety of fruits, vegetables, fortified dairy foods, legumes (dried beans), lentils, and whole grains.

Dietary supplements are another way to get the vitamins you need if the food you eat is not supplying enough vitamins. Supplements can be helpful during pregnancy and for special medical problems.

If you take supplements, <u>DO NOT</u> take more than 100% of the RDA. <u>Be very careful about taking large amounts of fat-soluble vitamin supplements -- vitamins A, D, E, and K. Because these vitamins are stored in fat cells, they can build up in your body and may cause harmful effects.</u>

Hibernation Syndrome

Two or three weeks after weight loss surgery, the patient's body figures out that it is not going to be receiving its accustomed calories for a long time. In about half of our patients this results in what we call the hibernation syndrome, where one's body falls back on its built-in evolutionary response to a low food supply-the person just wants to rest and be still as possible until the food returns. Energy level drops through the floor, and the patient can become tearful or irritable. There can also be a component of depression caused by the loss of the previous relationship with food. This syndrome can be unnerving for patients because it comes at a time while they are just beginning to get over the pain and other effects of surgery-they believe they should be feeling better but they just want to curl up and go to sleep. The good news is that this is not a dangerous or unusual thing, and resolve in about 2 weeks when the body figures out how to use fat as its main energy source. Please reach out to the Bariatric Coordinator to start individualized visits if needed.





Success and your future

After your gastric sleeve, calories are still absorbed. The surgery restricts your stomach capacity. You must develop new eating habits. You must follow a low fat, low concentrated sweet diet for the rest of your life in order to keep your weight off and prevent weight regain.

All patients lose weight in the first 12 months after surgery. Many will not continue to lose weight after this time, and some may have weight regain. Diet and exercise becomes critical for continued weight loss.

The average woman needs 1200 calories or less per day. Male patients and very active patients may be able to eat more than 1500 calories and maintain weight loss. All patients must be aware of their caloric intake and their diet choices for the rest of their lives.

Please remember to attend support groups and reach out to your Bariatric Coordinator to help you.

