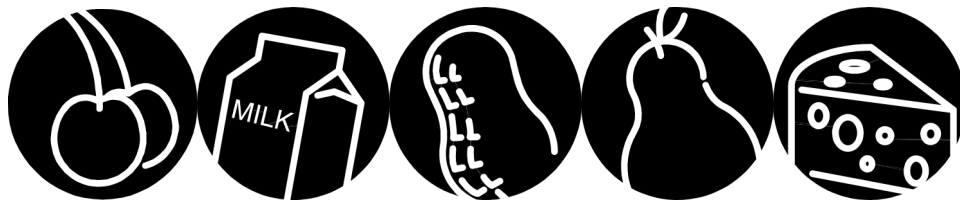


The Cornell Weight Loss Surgery Program: Dietary Guidelines for Laparoscopic Sleeve Gastrectomy

Liz Goldenberg MPH, RD
Jaimie Sherry MS, RD, CDN
212-746-5294

www.CornellWLS.com



“Sleeve Basics”

- * Consume only the foods allowed on the soft diet (approximately 3-4 weeks) until otherwise informed by RD/MD
- * Eat slowly and chew thoroughly- at least 25 times!
- * Avoid concentrated sugars, especially those in liquid form (see page 6). They are filled with non-nutrient calories and slow down weight loss
- * Limit fats and fried foods; they are a concentrated source of calories
- * Remember the stomach can only hold 4-6 oz after surgery. You will probably feel satisfied after 2-3 tablespoons of food. Do Not Overeat! Over time your stomach will stretch. It takes 6-9 months (possibly longer) for your new stomach size to stabilize and allow you to determine your normal meal amount
- * Stop eating when you feel comfortably satisfied- if ignored, vomiting will follow and you can stretch the size of the stomach. If you are unable to keep anything down and are having extreme difficulty staying hydrated, sip on Gatorade which also has electrolytes necessary for normal cell function. Once you feel better, return to non calorie beverages such as water and diet drinks.
- * Drink at least 6 - 8 cups (8oz) of fluid per day to prevent dehydration. (Monitor for the following signs: headache, dizziness, nausea, lethargy, a white-ish coating on the tongue and dark urine.)
- * Stop drinking liquids 15 minutes before meals and resume 30 - 45 minutes after meals
- * Eat 3 small nutrient dense meals + 1 high protein snack a day
- * Meals should include: protein first, then fruits and vegetables, and then whole grains
- * Set up a schedule for supplements (vitamins, minerals and protein shakes; refer to supplement page) and medications; remember to take Calcium with meals and separate from iron supplements
- * Introduce new foods one at a time in order to rule out an intolerance. If a food is not tolerated, reintroduce it in 1 week
- * If you cannot tolerate dairy, substitute Lactaid for milk. You may need to take lactase pills with dairy to help digest the lactose. You can also try soy milk fortified with calcium and vitamin D
- *Exercise! This is the key to long term weight loss and maintenance. Walking should be the main exercise for the first 6 weeks. Between 6-8 weeks, more strenuous exercises can be added.

Sleeve Gastrectomy

Your diet progression during and after your hospital stay:

- **Bariatric Surgery Clears** — In the hospital you will receive 2-4 meals of clear, sugar free liquids. It is begun immediately after surgery or after the results of your “swallow test” are back.
- You will be drinking water, tea, broth, sugar free jello, and Gatorade*.
 - Try to sip fluids at the rate of ½ to 1 oz per 20 minutes (=1 ½ to 3 oz per hour).
 - Sipping fluids out of bottles or straws may cause gas. Gas is already a problem after surgery so you will not want to make it worse.

*Gatorade can be used in the hospital and should be discontinued when you return home. If you experience diarrhea or vomiting, Gatorade can be used during that time to help re-hydrate.

- **Bariatric Surgery Pureed** – You will progress to a diet composed of pureed foods low in fat and with no sugar. *You will remain on this diet until you get discharged.*
- You will be given foods like pureed poultry and meat, mashed potatoes and unsweetened applesauce.
 - You will only be able to eat a few tablespoons of food, but the hospital will provide normal sized portions.
 - It is up to you to control how much you eat.

- **Bariatric Surgery Home Soft Diet** - You will be discharged on this diet and follow it until your RD or MD says otherwise. *Approximately 3-4 weeks.* Please see the next page for more food suggestions.
- Blenderized meat and poultry, soft poached eggs
 - Low fat cottage cheese, sugar free puddings
 - Unsweetened applesauce, pureed canned peaches (not in syrup), mashed ripe bananas
 - Blended soft cooked vegetables, or overcooked and mashed with a fork
 - Oatmeal, grits, farina

- **Bariatric Surgery Solids** – If you can tolerate the items in the soft diet after 3-4 weeks, you will gradually advance to solids. This is a modified diet which emphasizes lean protein, fruits/vegetables, and whole grains and de-emphasizes fat and sugar.
- This diet is very individualized. It is normal to experience food intolerances. Try to reintroduce that food a week later while focusing on eating slowly, chewing thoroughly, and not overeating.
 - You will eventually be able to tolerate a variety of foods from each of the food groups.

Food Suggestions for Home Soft Diet (first 3-4 weeks)

Food Group	Food Choices
Bread, Cereal, Pasta, and Rice <i>1-2 serving/d 1 = ¼ cup</i>	Hot cereal (with skim milk) – unsweetened oatmeal, cream of wheat, and grits.
Fruit  <i>1-2 serving/d 1 = ¼ cup</i>	Unsweetened applesauce, pureed canned / jarred peaches and pears in their own juice (not syrup), any fruit pureed without the skin, mashed ripe banana.
Vegetable  <i>1-2 serving/d 1 = ¼ cup</i>	Any vegetable (except corn) cooked soft and blended or mashed with the back of a fork. Make sure broccoli and cauliflower are cooked very well.
Meat, Poultry, Fish, Nuts, Beans and Eggs  <i>2-3 serving/d 1 = ¼ cup</i>	Chopped up soft poached eggs or scrambled egg. Egg salad with low fat mayo. Blenderized meat and poultry and flaked fish (fillet) cooked very soft and moist (mix with lemon, light dressing, a pinch of oil). Blenderized tuna salad without vegetables. Very soft/moist meatloaf (after one week), gefilte fish, and silken tofu.
Milk, Cheese, and Yogurt  <i>3-4 serving/d 1 = ¼ cup</i>	Skim milk or Skim Plus. Low fat or non fat cottage cheese or ricotta cheese, sugar free custards and puddings, non-fat unsweetened / low sugar yogurt (Dannon Light and Fit®, Columbo Light®), sugar free frozen yogurt, and sugar free fat free ice cream.
Fats and Oils	Limit all
Miscellaneous  <i>2-3 servings/d 1 = ¼ cup</i>	Canned soups, homemade soups (vegetable, meat, poultry contents should be overcooked or blended) - limit cream soups – Healthy choice®, Progresso Lite®, and Healthy Request®, egg drop soup and miso soup. Sugar free jello, sugar free popsicles (Dole®, Starburst®), Pedialyte® popsicles, sugar free/fat free ice cream. Artificial sweeteners which are acceptable: Nutrasweet / Equal®, Sweet n' Low®, Saccharine and Splenda® / sucralose
Liquids (sip throughout the day but not during meals. Try to drink at least 6 to 8 8oz cups of fluid per day)	Flat diet soda, Skim milk or Skim Plus, Crystal Light®, decaf coffee and tea, all broths, any sugar free beverages (sugar free Kool Aid® and sugar free Tang®, and water! Gatorade®*

*Gatorade can be used in the hospital and should be discontinued when you return home. If you experience diarrhea or vomiting, Gatorade can be used during that time to help re-hydrate.

***Can I use baby food?** For people who do not want to do any preparing, canned and jarred baby foods are acceptable. Choose the ones low in sugar and higher in protein (meat and chicken).

*Most foods can be eaten (low in sugar and fat) as long as they are put into a blender and the final consistency is puree.

Sample Menus
(Home diet part 1/first 3-4 weeks)

Breakfast 8 AM	Breakfast 8 AM	Breakfast 8 AM
$\frac{1}{4}$ - $\frac{1}{2}$ cup cooked cereal $\frac{1}{4}$ - $\frac{1}{2}$ cup skim plus or fat free Lactaid milk	$\frac{1}{4}$ cup unsweetened applesauce $\frac{1}{4}$ - $\frac{1}{2}$ cup non fat cottage cheese	$\frac{1}{2}$ - 1 soft poached egg $\frac{1}{4}$ cup unsweetened applesauce
Supplement 10 AM	Supplement 10 AM	Supplement 10 AM
$\frac{1}{2}$ cup skim plus or skim Lactaid milk with 1 scoop acceptable protein powder *See pg. 8 for examples	$\frac{1}{2}$ cup skim plus or skim Lactaid milk with 1 scoop acceptable protein powder *See pg. 8 for examples	$\frac{1}{2}$ cup skim plus or skim Lactaid milk with 1 scoop acceptable protein powder *See pg 8 for examples
Lunch 12 PM	Lunch 12 PM	Lunch 12 PM
$\frac{1}{4}$ - $\frac{1}{2}$ cup sugar free yogurt $\frac{1}{4}$ cup pureed fruit	$\frac{1}{4}$ - $\frac{1}{2}$ cup blended soup $\frac{1}{4}$ cup egg salad with low fat mayo	$\frac{1}{4}$ - $\frac{1}{2}$ cup blended soup $\frac{1}{4}$ cup tuna fish with low fat mayo
Snack 2 PM	Snack 2 PM	Snack 2 PM
$\frac{1}{4}$ - $\frac{1}{2}$ cup unsweetened applesauce 1 sugar free popsicle	$\frac{1}{2}$ cup cottage cheese 1 sugar free popsicle	$\frac{1}{4}$ - $\frac{1}{2}$ cup low fat ricotta cheese with cinnamon
Dinner 6 PM	Dinner 6 PM	Dinner 6 PM
$\frac{1}{4}$ - $\frac{1}{2}$ cup blended soup (with protein) $\frac{1}{4}$ cup pureed fruit	$\frac{1}{4}$ - $\frac{1}{2}$ cup blended soufflé $\frac{1}{4}$ cup mashed potato	1-2 oz flaked fish $\frac{1}{4}$ cup puree vegetable

*It is up to you to what time of the day you choose to eat your meals, supplements, and snack.

Concentrated Sweets

Most of the foods and beverages that contain concentrated sweets are filled with “empty” calories in the form of sugar. These products provide mainly calories with limited nutritional value, which means they often do not contain a good amount of vitamins, minerals, protein and fiber. These nutrients are essential after weight loss surgery to help you recover and receive the nutrition that you need. After surgery, every bite counts. Filling up on these “concentrated sweets” can prevent weight loss and can replace healthier foods in your diet with high calorie, high sugary foods. Take a look at the concentrated foods / beverages below and make a mental note of a healthier option for you.

Note: Artificial sweeteners such as nutrasweet/Equal ®, saccharine/Sweet & Low ®, and sucralose/Splenda ® are OK to use.

Ice cream

Chocolate milk

Pudding

Sweetened, fruited or frozen yogurt

Dried fruits

Canned or frozen fruits in syrup

Fruit juice

Sugar coated cereal

Doughnut

Popsicles

Cakes

Pies

Cookies

Jellies

Regular soft drinks

Lemonade

Kool Aid

Sugared ice tea

Snapple or fruit drinks

Table sugar

Honey

Candy

Regular Jell-O

Sugar gum

Molasses

Syrups

Sherbet / Sorbet

Jams



Diet Progression for Sleeve Gastrectomy

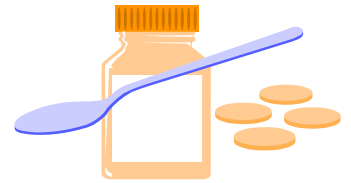


These are general guidelines regarding when to introduce various foods. Everyone is different and may not progress at the same rate. The nutritionist will review and provide written materials regarding the advancement of your diet at your 3 week post-op visit.

- **Day 1 Post-op:** Nothing by Mouth.
- **2-3 Days Post-op:** Progress from Bariatric Surgery Clears (Clear liquids, No concentrated Sweets) to Bariatric Surgery Puree (No concentrated sweets, low fat puree). Try to consume 3-4 oz of fluid for every hour you are awake (not during meal time).
- **3 Days to 3 Weeks Post-op:** Home Soft Diet (high protein foods). Try to consume 4-6 oz of fluids every hour. You should be consuming approximately 550-700 calories and 50-70 grams protein.
- **3-6 Weeks Post-op:** All foods previously tolerated, tofu, fish and seafood, thinly sliced deli turkey or ham and other luncheon meats, slices of low fat cheese, unsweetened canned or cooked fruit, potatoes, squash, unsweetened cereal with skim milk or skim plus (ie. Cheerios and Chex), boiled chicken in broth (cut up in small pieces), crisp toast and crackers, beans and peas, and lean, moist ground turkey and beef.
- **6-8 Weeks Post-op:** Diced Poultry (no skin), vegetable burgers, soft cooked vegetables, soft fruits (watermelon, honeydew, peaches, plums), well cooked pasta.
- **3 Months Post-op:** Rice, un-toasted bread, lean and moist meat and poultry.
- **4 Months Post-op:** Veal, crunchy fruits and vegetables including salads.
- **6 Months Post-op:** Beef and Pork (choose poultry and fish more often in view of lower fat content).

The diet should always be high in protein and low in refined carbohydrates (white flour). Preferably, choose protein first, then fruits and vegetables, and then whole grains.

Supplement Rx



*You will require vitamin and mineral supplements for the rest of your life in order to prevent deficiencies. Remember, you are eating much less food and it will be harder to get the proper nutrition each day.

The first 3 Weeks after surgery:

- Chewable Multi-Vitamin: Flintstones Complete, Centrum Jr. with iron, or adult chewables (Childrens: chew 1 in the AM and 1 in the PM, Adults- chew 1 daily)
- Chewable Calcium: Tums (any strength), Viactiv (chew 1 in the AM and 1 in the PM- best if taken with food)
Remember, you are only on this type of calcium for 3 weeks
- Vitamin D: As prescribed by MD/RD, only if your preoperative levels are low.
- Protein shakes: These must be high protein (15 to 25 grams/serving) AND low sugar (less than 6 grams/serving). You must read product labels to determine the nutritional value.
There are 2 types of protein shakes : Pre-mixed and Powders mixed with milk

Pre-mixed (Ready to Drink)	Powders mixed with milk*
Atkins, Myoplex Low Carb, Perfect Zero Carb Isopure, Slimfast Low Carb	Designer Protein, GNC Challenge 95, Whey Supreme, No Added Sugar Carnation Instant Breakfast, Revival Soy, Lindora

*Directions for powders: Add protein powder by the scoop/tablespoon to 8 oz Skim Plus Milk, Skim Milk, or Fat Free Lactaid daily. You may choose to drink your shake in 2- 4 oz servings.

After surgery you will need between 50-70 grams of protein a day. In order to meet your protein needs, protein shakes such as the ones listed above, will supplement your meal plans. Once you are able to get enough protein from your food, you will not need to continue using protein shakes on a daily basis.

Supplements after 3 Weeks:

Vitamin / Mineral / Supplement	Suggestions
1-2 Adult Multi-Vitamin with minerals (e.g. Iron)	Centrum with Iron, Geritol Complete, Adult chewables
1200 mg of Calcium Citrate / day (Best taken in 2 doses with food; discuss options with nutritionist)	Citracal with D, Twinlabs Chewable Calcium Citrate, Solgar Calcium Citrate with D. Calcium should be in the Citrate form. Avoid Carbonate- is not absorbed as well.
Vitamin D	As prescribed by MD/RD, only if your preoperative levels are low.
Iron	As prescribed by MD
Protein Shakes as above	If unable to consume 50-70gms of protein / day from diet, then protein supplement may be indicated. Discuss with nutritionist
2 “Gall Bladder” pills / day (Ursodiol)	This is used only for 6 months, and only if you still have your gall bladder. It helps to prevent gallstones due to rapid weight loss.

* Labs will be followed and other supplements may be prescribed as needed. Labs should be checked before your 3 month visit, so we can review your results together.

Protein Power

Food Name	Portion	Protein (grams)
Beans, Cnd, Baked	1/2 cup	7
Beans, Kidney, Cnd	1/2 cup	8
Beef Eye of Round	3oz.	21
Beef Top Loin	3oz.	21
Cheese, American Fat Free	1 oz.	6
Cheese, Cottage, 1% Fat	1/2 cup	14
Cheese, Cottage Creamed	1/2 cup	13
Cheese, Parmesan, Grated	1/4 cup	12
Cheese, Mozzarella, Part-skim	1 oz.	8
Cheese, Ricotta, Part skim	1/2 cup	14
Cheese, Part Skim Ricotta	1/4 cup	8
Chicken, White Breast Meat w/o skin	3 oz.	26
Chicken, Leg w/o skin	3 oz.	21
Cod, White, Baked	3 oz.	21
Crab, steamed	3 oz.	17
Egg, Hard Cooked	1	6
Flounder	3 oz.	21
Halibut	3 oz.	21
Ham, Lean	3 oz.	21
Hamburger (lean ground beef)	3 oz.	21
Lobster, Steamed	3 oz.	16
Milk, Skim	1 cup	8
Milk, Skim Plus	1 cup	11

Food Name	Portion	Protein (grams)
Peas, Chick, Cnd	1/2 cup	7
Pork Tenderloin	3oz.	21
Pork Loin Chop	3oz.	21
Protein Powder (There are many different brands which vary in amount of protein. Read labels.)	1 scoop	16
Salmon, Baked	3 oz.	21
Shrimp, Steamed	3 oz. (15 large)	18
Soybeans (edemame)	1/2 cup	14.3
Soy Flour, defatted	1/4 cup	12.8
Soymilk, plain	1 cup	6.6
Soynuts	1/4 cup	15
Steak, Sirloin, trimmed	3 oz.	26
Swordfish, Baked	3 oz.	21
Tempeh	1/2 cup	15.7
Texturized Soy Protein	1/2cup	11
Tofu	1/2 cup	10
Tuna, Cnd, Water Packed	3 oz.	25
Turkey, White Meat	3 oz.	21
Veal Loin	3 oz.	21
Veal Leg (top round)	3 oz.	21
Yogurt (sugar free), Frozen, Vanilla	1/2 cup	5
Yogurt, Fruit, Fat Free, low sugar	1 cup	8
Yogurt,w/o Fruit, Lowfat	1 cup	8

FOOD LOG SAMPLE

Date: 3/22/03

Name: Joyce Smith

Amount of time Post-op: 2 Months

Time	Amount (tsp, oz, Tbs, cups)	Food/Condiment/ Supplement (be as detailed as possible- brands, method of cooking, etc.)	Protein (grams)
Breakfast			
8:00 AM	1	Hard boiled egg	
	½ piece	Whole wheat toast	
Lunch			
12:30 PM	2 oz	Tuna, canned in water	
	1 teaspoon	Light mayonnaise	
	3	Low fat Triscuits ®	
	1	Tomato, medium, sliced thin	
Dinner			
6:00 PM	2 oz	Chicken thigh, roasted, in lemon sauce, cut into small pieces	
	2 tablespoons	Carrots, steamed, cut up	
	1 tablespoon	Peas, green, cooked	
Snack(s)			
8:00 PM	½ cup	Lowfat cottage cheese	
	2 pieces	Canned (no added sugar) pears	
Beverages			
7:00 AM	4 oz	water	
9:00 AM	12 oz	Skim Plus milk	
2- 4 PM	20 oz	Crystal Light ®	
7:00 PM	12 oz	Diet Snapple ®	
9:00 PM	16 oz	water	

FOOD LOG (1)

Date:

Name:

Amount of time Post-op:

Time	Amount (tsp, oz, Tbs, cups)	Food/Condiment/Supplement (be as detailed as possible- brands, method of cooking, etc.)	Protein (grams)
Breakfast			
Lunch			
Dinner			
Snack(s)			
Beverages			

FOOD LOG (2)

Date:

Name:

Amount of time Post-op:

Time	Amount (tsp, oz, Tbs, cups)	Food/Condiment/Supplement (be as detailed as possible- brands, method of cooking, etc.)	Protein (grams)
Breakfast			
Lunch			
Dinner			
Snack(s)			
Beverages			