

The Cornell Weight Loss Surgery Program:

Dietary Guidelines for Laparoscopic Adjustable Gastric Band

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“Lap Band Basics”

- * Consume only the foods allowed on the puree diet (approximately 4 weeks after surgery) until otherwise informed by RD/MD
- * Eat slowly and chew thoroughly- at least 25 times!
- * Avoid concentrated sugars, especially those in liquid form. They are filled with calories and slow down weight loss (see pg 8)
- * Limit fats and fried foods; they are a concentrated source of calories
- * Remember the amount of food that the stomach can hold during the first month will vary. This is due to something called edema, or swelling in the area of the stomach
- * Avoid carbonated beverages and drinking out of straws for the first 4 weeks
- * Do Not Overeat!
Stop eating when you feel comfortably satisfied- if ignored, vomiting will follow and you can stretch the size of the stomach or cause your band to ‘slip’. 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 calorie free beverages such as water and diet drinks
- * Drink at least 6 - 8 cups (8oz) of fluid per day (or ~3 oz every hour) 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 at least 15 minutes before meals and resume drinking 45 minutes after meals
- * Eat 3 small nutrient dense meals, 1 high protein snack. Avoid additional snacks
- * Meals should include: protein first, then fruits and vegetables, and then whole grains
- * Set up a schedule for supplements (vitamins, minerals and protein shakes / skim milk; refer to supplement page) and medications. Remember all medications (talk to your primary doctor about those that are time-released) will need to be crushed for the first 4 weeks. You will need to purchase a pill crusher.
- * 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
- * Exercise! This is the key to long-term weight loss and maintenance. Walking should be your main exercise for the first 6 weeks. Between 6-8 weeks, more strenuous exercises should be added

Your diet progression during and after your hospital stay:

Bariatric Surgery Clears (in hospital) – In the hospital you will receive clear sugar free liquids after the results of your “swallow test” are back.

- You will be drinking water, tea, broth, sugar free Jell-O, and Gatorade*
- Try to sip fluids at the rate of 1 oz per 20 minutes (~ 3 oz per hour)
- Sipping fluids out of bottles or straws may cause gas or discomfort.

*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 Home Full Liquids (2 days at home) – Once you leave the hospital and are tolerating clear liquids, begin following the Bariatric Surgery Full Liquid Diet at home for 2 days.

- Please see the next page for more on this diet

Bariatric Surgery Home Pureed Diet (day 3 to 4 weeks) – You will progress to a diet composed of pureed foods low in fat and with no sugar after two days of the full liquids until ~ 1 month post surgery. Please see the next page for more food suggestions.

- Blenderized (food processor / blender) meat and poultry
- Thoroughly mashed (with a fork) tuna salad /moist fish, eggs / egg salad
- Low fat cottage cheese, sugar free puddings, sugar free yogurt
- Unsweetened applesauce, pureed canned peaches (not in syrup), mashed ripe bananas
- Vegetables: cooked and blended or overcooked and mashed with a fork
- Oatmeal, grits, farina (made with skim milk or skim plus)

Bariatric Surgery Solids – If you can tolerate the items in the puree diet after 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. (This will be discussed at your 4-week follow up visit. Call and make an appointment with a nutritionist at 212-746-5294.)

Bariatric Surgery Home Full Liquids (2 days at home)

Please follow your surgeon's and nutritionist's advice for what to do after you are discharged home from the hospital. Most will follow a full liquid diet for 2 days at home. Remember to include liquids that contain protein to help meet your body's needs for wound healing, maintenance of muscle mass and organ function. Examples of the types of foods and beverages which are appropriate on this diet are as follows:

Low fat milk, skim milk, Skim Plus or Lactaid ®, low fat strained cream soups, sugar free puddings made with low fat or skim milk, No Added Sugar Carnation Instant Breakfast ® powder mixed with milk, protein shakes (less than 6 g of sugar).

Below is a 2 day sample menu plan; the times listed are only suggestions. Remember to drink water or other sugar free, un-carbonated beverages such as iced tea in between your meals.

Breakfast 8 AM	Breakfast 8 AM
1 Tbsp farina/cream of wheat (make "thin" with at least 2/3 cup milk)	1 Tbsp farina/cream of wheat (make "thin" with at least 2/3 cup milk)
Milk / Protein Shake	Milk / Protein Shake
1 cup skim plus or skim Lactaid milk or protein shake	1 cup skim plus or skim Lactaid milk or protein shake
Lunch 12 PM	Lunch 12 PM
¼ - ½ cup of cream of potato soup - strained	½ cup of sugar free vanilla or lemon yogurt (no fruit) sugar free ice pop
Snack 2 PM	Snack 2 PM
½ cup of sugar free coffee or banana yogurt (no fruit)	½ cup vanilla sugar free instant pudding
Dinner 6:00 PM	Dinner 6:00 PM
¼ - ½ cup low fat cream of spinach soup- strained	¼ - ½ cup low fat cream of tomato soup- strained

Why do I need to blend/puree my foods at home for the first 4 weeks?

The band needs to settle into position without any strain on it; eating solid foods may:

- 1) cause an obstruction at the narrow opening into the rest of the stomach
- 2) lead to enlargement of the stomach above the band
- 3) cause vomiting which will move the band from its position, called a “slip.”

These are all undesirable situations and could require another operation in order to fix.

Remember: Use a blender or food processor to puree your foods. You can also choose to use high protein / low sugar baby foods.

Band Adjustments:

Proper band adjustment is crucial to your long term success. The timing of a band adjustment and the number of adjustments will vary from person to person. It will take an average of 5 adjustments until you reach your appropriate spot or “sweet spot”. You will not have your first adjustment for at least 4-6 weeks. Your surgeon will decide when is the appropriate time for you to schedule an adjustment, based on information from you and from your nutritionist. To determine if you are in need of an adjustment, your surgeon / nutritionist will consider:

- The variety of foods that you can comfortably eat

Situation 1: If you are able to tolerate a large variety of foods without any feeling of restriction, we recommend that you contact us.

- If you are vomiting often

Situation 2: If you are vomiting more than 2 times per week, even though you are chewing thoroughly while eating appropriate foods / textures, we recommend that you contact us.

- Your weight loss / weight maintenance





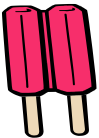
Situation 3: If you are not losing weight for 3 consecutive weeks, we recommend that you begin to keep daily food records and make a follow-up appointment with your nutritionist.

After a Band Adjustment: After a band adjustment follow these guidelines:

- Follow the Bariatric Surgery Full Liquid Diet for the rest of that day and the following day.
- If you are able to tolerate the above full liquid diet, advance to Bariatric Surgery Puree Diet for 1 day
- Day 4: If you are able to tolerate the above puree diet, and are not vomiting or uncomfortable, continue eating the foods you were enjoying before your band adjustment
- You may be more comfortable taking chewable vitamins and crushing medications for the first few days after your band adjustment.

**Remember to include protein-containing foods every day*

Lap Band
Food Suggestions for Bariatric Surgery Puree Diet
 (First 4 weeks after surgery)

Food Group	Food Choices
<p><i>Bread, Cereal, Pasta, and Rice</i> 1-2 serving/d 1= ¼ cup</p>	<p>Hot cereal – unsweetened oatmeal, cream of wheat, and grits (make with milk).</p>
<p><i>Fruit</i>  1-2 serving/d 1 = ¼ cup</p>	<p>Unsweetened applesauce, any fruit pureed with out the skin (if jarred/canned choose fruits not in syrup), mashed ripe banana.</p>
<p><i>Vegetable</i>  2-3 serving/d 1 = ¼ cup</p>	<p>Any vegetable (except corn) cooked soft (“overcooked”) and blended or mashed thoroughly with the back of a fork.</p>
<p><i>Meat, Poultry, Fish, Nuts, Beans and Eggs</i>  3-4 serving/d 1 = ¼ cup</p>	<p>Chopped up soft poached eggs or scrambled eggs. Blenderized moist meat, poultry, and seafood (add fat free chicken broth, BBQ sauce or Italian dressing). Mashed soft fish. Silken tofu.</p>
<p><i>Milk, Cheese, and Yogurt</i>  1-2 serving/d 1 = ¼ cup</p>	<p>Low fat or non fat cottage cheese or ricotta cheese, sugar free custards and puddings, non-fat unsweetened / sugar free yogurt, sugar free frozen yogurt, and sugar free fat free ice cream.</p>
<p>Fats and Oils</p>	<p>Limit all (butter, margarine, oil)</p>
<p>Miscellaneous  2-3 servings/d 1 = ¼ cup</p>	<p>Blended soups (no chunks of vegetables or meat) - limit cream soups to low fat versions– Healthy choice ®, Progresso Lite ®, and Healthy Request ®, egg drop soup and miso soup.</p> <p>Sugar free Jell-O, sugar free popsicles (Dole ® or Starburst ®), Pedialyte ® popsicles, sugar free/fat free ice cream.</p>
<p>Liquids (sip as much liquid as you can tolerate. Do not drink during meals. Try to drink at least 6 to 8 8oz cups of fluid per day)</p>	<p>Flat Diet soda, Skim milk or Skim Plus ®, Crystal Light ®, decaf coffee and tea, broth, any sugar free beverages: sugar free Kool Aid ® and sugar free Tang ®, and water! Acceptable sweeteners: Nutrasweet ®, Sweet and Low ®, Splenda ®.</p>

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

Lap-Band Sample Menus

(First 4 weeks after surgery)

Breakfast 8:00	Breakfast 8:00	Breakfast 8:00
$\frac{1}{4}$ - $\frac{1}{2}$ 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 poached, chopped up egg $\frac{1}{4}$ cup unsweetened applesauce
10:00 am	10:00 am	10:00 am
$\frac{1}{2}$ cup skim plus, skim milk or protein shake	$\frac{1}{2}$ cup skim plus, skim milk or protein shake	$\frac{1}{2}$ cup skim plus, skim milk or protein shake
Lunch 12:00 pm	Lunch 12:00 pm	Lunch 12:00 pm
$\frac{1}{4}$ - $\frac{1}{2}$ cup low sugar yogurt $\frac{1}{4}$ cup pureed fruit	$\frac{1}{4}$ - $\frac{1}{2}$ cup blended soup (with protein) $\frac{1}{4}$ cup egg salad with low-fat mayo	$\frac{1}{4}$ - $\frac{1}{2}$ cup blended soup (with protein) $\frac{1}{4}$ cup tuna fish with low fat mayo
Snack 2:00pm	Snack 2:00pm	Snack 2:00pm
$\frac{1}{4}$ - $\frac{1}{2}$ cup sugar free pudding made w/skim or skim plus milk 1 sugar free popsicle	$\frac{1}{4}$ cup cottage cheese 1 sugar free popsicle	$\frac{1}{4}$ - $\frac{1}{2}$ cup low fat ricotta cheese with cinnamon
Dinner 6:00pm	Dinner 6:00pm	Dinner 6:00pm
$\frac{1}{4}$ - $\frac{1}{2}$ cup blended chicken (with sauce) or bean soup $\frac{1}{4}$ cup pureed fruit	$\frac{1}{4}$ - $\frac{1}{2}$ cup chicken soufflé $\frac{1}{4}$ cup mashed potato	1-2 oz soft well-mashed fish w/low fat mayo $\frac{1}{4}$ cup puree vegetable

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- so 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 recommended 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



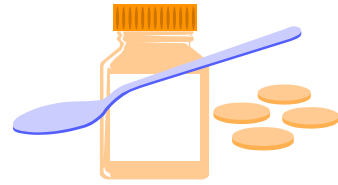
Diet Progression for Adjustable Gastric Band

These are general guidelines regarding when to introduce various foods. Everyone is different and may not progress at the same rate. Your nutritionist will review and provide written materials regarding the advancement of your diet at your 4 week post-op visit.

- **Day 1 Post-op:** Bariatric Surgery Clears (after Upper GI)
- **2-4 Days Post-op:** Progress from Bariatric Surgery Clears (Clear liquids, No concentrated Sweets) to Bariatric Surgery Full Liquids (high protein liquids). Try to consume 3 oz of fluid for every hour you are awake (not during meal time).
- **4 Days to 4 Weeks Post-op:** Bariatric Surgery Home Puree Diet (high protein foods). Try to consume 4-6 oz of fluids every hour. You should be consuming approximately 550-700 calories and ~ 50 grams protein.
- **4 Weeks-6 Weeks Post-op:** Bariatric Surgery Solids – Foods previously tolerated, tofu, fish and seafood, 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 weeks-8 weeks Weeks Post-op:** Diced Poultry (no skin), vegetable burgers, soft cooked vegetables, soft fruits (watermelon, honeydew, peaches, plums), well cooked pasta.
- **2-3 Months Post-op:** Slowly begin to incorporate the following: moist poultry (w/o skin), veal, beef, pork (choose poultry and fish more often in view of lower fat content); rice, un-toasted bread, raw fruits and vegetables including salads.

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

Supplement Rx



*We recommend you take supplements for the rest of your life. Remember, you are eating much less food and it will be harder to get the proper nutrition each day.

The first 4 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)
- Vitamin D: As prescribed by MD/RD, only if your preoperative levels are low.

Immediately after surgery it can be difficult to get enough protein each day. Therefore, we recommend 1 protein shake or 1-2 8 oz glasses of Skim Plus or Skim Milk. You will most likely only need these for the one month following surgery.

- Protein shakes: These must be high protein (15 to 25 grams/serving) AND low sugar (less than 6 grams/serving). Please 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, Maxihealth Naturemax Plus**

*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 4 oz servings.

** These products are Kosher

Supplements after 4 Weeks:

Vitamin / Mineral / Supplement	Suggestions
1-2 Adult Multi-Vitamin with minerals (e.g. Iron)	Centrum with Iron, Geritol Complete, Adult chewables
600 mg calcium / day (men) 1200 mg of calcium / day (women) (Best to take no >600 mgs at a time)	Citracal with D, Tums, Solgar Calcium Citrate with D, Caltrate
Vitamin D	As prescribed by MD/RD, only if your preoperative levels are low.

- Labs will be followed and other supplements may be prescribed as needed. Labs that monitor your nutrition should be drawn prior to your 3-month visit, so we can review your results together. It can take 7-10 days before your lab results come back so please have them drawn 2 weeks before your 3-month visit.



How to be Successful with Your Band

After 4 weeks

You should slowly transition yourself to more solid foods. Please schedule an appointment with your nutritionist to discuss how to advance your diet appropriately. You will receive an additional packet with written information to better guide you. Remember that progressing too quickly can cause vomiting. If you do not tolerate a food at first, you can try to reintroduce it a week later.

Lifelong Nutrition Habits

Liquids should always be calorie free. Why? Because beverages do not satisfy us the way that food does. The goal is to always choose the most satisfying foods to prevent you from overeating at meal time as well as snacking throughout the day. This will not only help you to lose weight but to keep it off for good. Try to avoid the following foods / drinks as much as possible.

Liquids to Avoid	Soft Foods to Avoid
Fruit juices	Ice cream
Vegetable juices	Yogurt
Alcohol	Soups
Non diet drinks such as soda	Mashed potatoes
Whole milk	Applesauce

Problematic Foods

It is possible that once your band is at the “sweet spot,” you may find the following foods are difficult to tolerate. **Bread / bread products, steak, rice and pasta.**

Pack your Meals with Protein and Fiber

You should always choose foods that have protein and fiber. Since you will only be eating small amounts of food, you need to make sure you are getting in the right nutrients. In addition, protein and fiber help to keep you satisfied, an important characteristic of food when trying to lose weight.

Good protein choices include: fish, chicken, turkey, lean meat, eggs, nuts and tofu. Remember that food preparation is important – grilling, baking, broiling and boiling without added fats is recommended. Avoid frying. Remove all visible fat and skin from meats before cooking them.

Foods high in fiber include: fruits, vegetables and whole grains. Fruits and vegetables should be fresh, frozen or canned (without added sugar or syrups). Aim for 1-2 pieces of fruit and 2-3 types of veggies daily. We recommend you choose up to 3 servings a day of whole grains. One serving = a slice of wholegrain bread, ½ cup of oatbran cereal or ½ cup of brown rice.

Snacking

We encourage you to follow a 3 meal, 1 snack food plan each day. Eating mini meals or snacking throughout the day, will prevent you from reaching your weight loss goals and possibly cause you to re-gain all of the weight you worked hard to lose.

Ultimate Success

Getting to your weight loss goal will take some work on your part. Having surgery is only the first step. How carefully you follow the dietary guidelines and how much physical activity you get, will determine your success.

*** Please follow-up with your nutritionist regularly during the first year after surgery to ensure that you form lifelong healthy habits that will stick with you!**



FOOD LOG (1)

Date:

Name:

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

FOOD LOG (2)

Date:

Name:

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