



Diet for Laparoscopic Adjustable Gastric Banding (LAP-BAND)

A “Tool” for Weight Loss

Gastric banding works by reducing the amount of foods and liquids your stomach can hold, so you can eat less and lose weight. The banding reduces the stomach size from approximately 1 quart (32 ounces) to 2 tablespoons (1 ounce), roughly the size of a small egg or golf ball.

Gastric banding is not a cure for obesity, nor is it a procedure that will easily transform you into a thin person. The surgery provides you a tool for weight loss—a new, smaller stomach that helps you eat less. The rest is up to you. You must make lifelong changes in order to lose weight and keep it off. You must choose low-fat, healthful foods, limit portions, eat slowly, and exercise for the rest of your life. You also must change behaviors that contribute to weight gain, such as being sedentary, eating when stressed or bored, and frequent dining out. Your chances of a long-term successful outcome increase if you:

- Exercise 40 minutes four days a week or more.
- Eat three well-balanced, low-fat, high protein meals.
- Drink water instead of juice, carbonated, or alcoholic beverages.
- Take multivitamin and mineral supplements as advised.
- Sleep at least 7 hours a night.
- Attend support group meetings regularly.
- Maintain contact with the Nutrition counselor.

Eat and Drink Small Amounts Slowly

Because your stomach pouch is very small and empties more slowly, you will need to eat very small portions slowly and drink beverages separately from meals.

- Eat until a feeling of fullness (or until you are no longer hungry.) Do not over eat. This typically works out to 2 to 6 ounces (1/4 to 3/4 cup) at a meal when your band is tightened to its “sweet spot.” This is when you are in the “green zone” and you are not hungry between meals, have good weight loss and are full on the above portion sizes.
- Eat 1 ounce (2 tablespoons) over 10 minutes. (A 4 ounce yogurt should take you 30 to 40 minutes to consume.)
- Do not consume beverages, including water, at meals. Drink beverages 1/2 to 1 hour before and 2 hours after meals only. Drink slowly, one sip at a time.
- **Never** overeat! Overeating results in stretching of the pouch and can create serious complications. Overeating will slow or prevent your weight loss, and even cause you to gain back the weight that was lost.

Good Nutrition

Eating all the nutrients you need can be a challenge with LAP-BAND simply because you are less hungry and eat less. If you fill up your pouch with poor food choices, you will deprive your body of the nutrients it needs to safely lose weight. A poor diet may slow your weight loss and may cause you to regain lost weight. You should be choosing only the most nutritious foods and beverages to eat to give your body the nutrients it needs to be healthy.

- What to eat:
 - Low-fat, protein rich foods at every meal: fat-free milk, cottage cheese, yogurt and low-fat cheese; baked chicken and turkey breast; broiled fish; extra lean beef and pork; beans; tofu, tempeh; egg substitute and egg.
 - Fresh or frozen vegetables.
 - Fresh fruit or canned in its own juice or lite syrup. No heavy syrups. Do not drink fruit juice.
 - Water and herbal teas.
- Avoid:
 - Foods and drinks sweetened with added sugar, honey or corn syrup such as bottled teas and drinks; smoothies, soda, shakes, and sweet

coffee drinks. Avoid naturally sweetened beverages like juice. Sugar substitutes such as NutraSweet (aspartame), Sweet 'n Low (saccharin) and Splenda (sucralose) can be used.

- Alcohol: In moderation.
- Coffee and tea: May interfere with the absorption of certain nutrients, and may also fill you up so that you don't eat enough nutritional food.
- Carbonated beverages: Including diet soda and sparkling water if not tolerated. These beverages may cause increased gas.
- High-fat foods: regular cheese, whole milk, cream, butter, margarine; fast foods; pizza; bologna, cold cuts, salami, sausages and creamy sauces. Fried foods: chips, fried chicken and fish, donuts, french fries.
- Desserts, ice cream, frozen yogurt, and other sweets (even if sweetened with sugar substitute).

Hydration:

If you are not drinking with meals it is easy to forget to drink. Be sure to drink between meals. Your body will tell you when you need fluids. If you are thirsty or have dry mouth, be sure to drink. If your urine is dark, you probably need more fluids. Drink calorie free beverages such as water or calorie-free, flavored water (such as Crystal Light) each day **to avoid dehydration**. Drink water in sips. It can be helpful to leave two or three filled water bottles where you spend most of your time (work, car, living room, computer, in your purse, etc.)

Vitamin and Mineral Supplements

Since your stomach pouch is too small to allow adequate intake of vitamins and minerals, it is necessary for you to not only eat wisely but also to take vitamin and mineral pills. **You must take these daily for the rest of your life** to prevent nutrient deficiencies that can lead to disease, such as anemia and osteoporosis.

Start taking supplements prior to surgery:

- Multivitamin with minerals: Adult dose (chewable) with 100% RDA for most nutrients. You may need one or two tablets, depending on the recommended adult dosage. Check the label. The

supplement is chewable or liquid for easy digestion. Consume it with a meal to improve the supplement's absorption and to reduce the likelihood that it will cause stomach upset.

- Calcium: 1,000 to 1,200 milligrams of calcium per day. Tums, Viactiv, and Citrical are examples. Check the label to see how many tablets you need to meet the minimum 1,000 milligrams per day requirement. Since the body can only absorb 500 mg of calcium at one time, take 2-3 times per day. Also, do not take at the same time as the multivitamin.

Some vitamins are specifically designed for lap band patients. Try Bariatric Advantage (www.bariatricadvantage.com) 1-800-898-6888 or Celebrate Vitamins (www.celebratevitamins.com.) toll free at 949-231-5599.

Food Tolerance

- Vomiting and “Sticking”
 - Vomiting or the sensation of food sticking in your stomach or chest may be due to:
 1. Overfilling your pouch by eating too quickly.
 2. Eating too much.
 3. Not chewing thoroughly.
 - Remember to eat and drink slowly. ***A 1/2 cup of food or beverage should take you 40 minutes to consume!*** If after following the eating recommendations discussed previously you are still vomiting or having “sticking”, contact your physician.
 - Bread, bagels, pasta, rice and other “starchy” foods are poorly tolerated after surgery. In addition, these foods supply very little nutrition, so it is recommended that you avoid them and eat vegetables and low-fat protein foods instead.
- Stomach Discomfort and Gas
 - Avoid carbonated beverages. The bubbles in carbonated drinks can cause discomfort and stomach pressure in many LAP-BAND patients. You may have these beverages if they are sugar-free and “flat” or thoroughly de-fizzed.
 - You may experience more belching, burping, or flatulence after surgery than you did before surgery. This is normal. If these are a problem for you or cause pain, please talk to your surgeon, who may prescribe anti-gas medication such as Gas-X.

- Nausea
 - Nausea, often referred to by patients as a “gnawing feeling” in the stomach, may occur between meals when your stomach is empty. Eating a bite or two of food may alleviate the problem. Also, be sure to take medications including vitamins and minerals with food, never on an empty stomach (unless otherwise directed by your physician) and space them out over the day.
- Tips
 - If your appetite is poor during the first month after your surgery, you may not feel like eating the recommended three meals a day. If this is the case, at your regular meal times simply eat or drink just a taste or two. Focus on high-protein choices, like milk and soy products, meats and fish, and liquid nutrition drinks instead of fruit, applesauce, vegetables, or starches, which are low in protein.
 - If you have trouble digesting milk, it may be due to the naturally occurring sugar lactose. Try lactose-free milk (Lactaid) or switch to plain soymilk.
 - Keep a daily food record. Make note of any foods you do not tolerate.

LAP-BAND DIET STAGES

The post-surgical LAP-BAND diet is broken down into four stages (I, II, III, and IV) and moves from liquids to solids as tolerated over a one-month

period. See the following for allowed foods and sample menus.
Approximately one month after surgery, you will see the nutritionist and your diet will be gradually advanced.

STAGE I

Begins: Day of surgery
Duration: One Day

The very first stage of the LAP-BAND diet is water. Sip Slowly. Do not have more than one swallow every 5 minutes.

STAGE II

Begins: One day after surgery
Duration: One day

You will have a barium swallow (X-ray) of your stomach prior to your discharge in the morning to make sure the band is functioning properly. Most patients do not feel up to having a whole breakfast tray at this time and may only take a juice or jello. Patients are allowed the following fluids at home.

**Consume no more than 2 to 4 ounces (1/4 to 1/2 cup) at a meal.
Allow 10 minutes or longer to consume each ounce.**

Foods and beverages allowed:

- Diet gelatin, any flavor
- Bouillon or broth
- 100% apple or grape juice_or diet cranberry juice
- Sugar-free popsicles
- Sugar-free Carnation Instant Breakfast made with fat-free milk

Sample Meal Plan-Stage II:

7 a.m. Breakfast sugar-free gelatin
 Apple juice or sugar-free CIB (Carnation Instant
 Breakfast)

| | |
|---------------|--|
| 9 a.m. Snack | grape juice or sugar-free CIB |
| 12 noon Lunch | sugar-free gelatin or bouillon Diet cranberry juice or sugar-free CIB |
| 3 p.m. Snack | grape juice or sugar-free CIB |
| 6 p.m. Dinner | sugar-free gelatin or bouillon Grape juice or sugar-free CIB |

STAGE III

Begins: Two days after surgery
Duration: Fourteen (14) days, or until you meet with your surgeon.

In Stage III, you will begin to eat more than just liquids. Stage III foods include those listed below. **Consume 16 ounces of a protein drink per day.** Eat no bread, crackers, rice, or pasta.

Food and Beverages Allowed

- Flavored yogurt (no added sugar, low-fat or fat-free) No chunks yet.
- Fat-free or 1% small-curd cottage cheese
- Cream of wheat made with fat-free milk instead of water
- Cream of rice made with fat-free milk instead of water
- Oatmeal made with fat-free milk instead of water
- Strained or pureed low-fat or fat-free soups
- Fat-free milk or Lactaid milk
- Plain soymilk
- V8 juice or tomato juice
- No-sugar-added, high protein, low-fat drinks: no-sugar-added Carnation Instant Breakfast (CIB) (in a blue box), UNJURY (To order: E-mail: Nutrition@UNJURY or visit www.UNJURY.com, or Telephone: 1-800-517-5111 or 1-703-925-9390) or Ultra Pure Protein Shake (Available at GNC, Trader Joe's or other nutrition stores.)
- No-sugar-added protein powder (as needed to meet your protein needs): whey protein, egg white protein, or soy protein. (No-sugar-added protein powders are available at GNC or other nutrition stores.)

Protein

- **50 grams (women) -70 grams (men) minimum** is needed for healing, a healthy weight loss, and the best outcome from this surgery.
- To meet the 50-70 gram a day protein goal, choose from these Stage III foods.

| Food | Amount | Protein (grams) |
|--|---------------|------------------------|
| Cottage cheese | 1/2 cup | 13 |
| Ultra Pure Protein Shake (or similar) (UNJURY) | 4 ounces | 10-12 |
| CIB, no-added-sugar, made with milk | 4 ounces | 7 |
| Soymilk | 4 ounces | 4-5 |
| Glucerna_Shake | 4 ounces | 5 |
| Fat-free milk | 4 ounces | 4 |
| Yogurt, no-sugar-added | 4 ounces | 4 |
| Low-fat cream of chicken, mushroom, or broccoli soup (canned condensed, then reconstituted with fat-free milk) | 4 ounces | 3 |
| Whey Protein Powder (available at GNC) (Add to foods or shakes) | 1 scoop | 21 |

Sample Meal Plan-Stage III

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|--------|-----------|--|
| 7 a.m. | Breakfast | cream of rice, Cottage cheese or yogurt |
| 9 a.m. | Snack | CIB + 1 scoop of protein powder |

| | | |
|---------|--------|---|
| 12 Noon | Lunch | cottage cheese or Yogurt |
| 3 p.m. | Snack | CIB + 1 scoop of protein powder |
| 6 p.m. | Dinner | strained cream Soup, cottage cheese, or yogurt |

Stage IV

Begins: 14 days after surgery

Duration: 14 days, or until you meet with the surgeon or dietitian

In Stage IV you will begin to eat pureed foods. Pureed foods should be the consistency of baby food, with no lumps or pieces. Most foods, from fruits to meats, can be pureed easily with a blender or food processor. Cottage cheese, smooth natural applesauce, tofu, and scrambled eggs do not need to be pureed. Commercial baby food (such as Gerber) offers a convenient way to have pureed foods if you don't want to puree your own. **Consume 16 ounces of a protein drink per day.** Avoid bread, crackers, rice, and pasta.

Food and Beverages Allowed

- Pureed lean beef, poultry, fish, or shellfish
- Pureed beans (hummus, Mexican beans)
- Tofu
- Scrambled egg or egg substitute
- Smooth peanut butter (try thinning down or adding to a shake)
- Flavored yogurts (no-added-sugar, low-fat or fat-free)

- Fat-free or 1% small-curd cottage cheese
- Cream of wheat made with fat-free milk instead of water
- Cream of rice made with fat-free milk instead of water
- Oatmeal made with fat-free milk instead of water
- Strained or pureed low-fat or fat-free soups
- Fat-free milk or Lactaid milk
- Plain soymilk
- V8 or tomato juice
- Pureed cooked vegetables
- Pureed fresh or cooked fruits
- No-sugar-added, high protein, low-fat drinks: No-sugar added Carnation Instant Breakfast (CIB), UNJURY (To order: E-mail: Nutrition@UNJURY or visit www.UNJURY.com, or Telephone: 1-800-517-5111 or 1-703-925-9390) or Ultra Pure Protein Shake (Available at GNC, Trader Joe’s or other nutrition stores).
- Protein powder (as needed to meet your protein needs): whey protein, egg white protein, or soy protein. (No-sugar-added protein powders available at GNC or other nutrition stores).

Protein

- **50 grams (women) -70 grams (men) of protein per day** is needed for healing, healthy weight loss, and the best outcome from this surgery.
- At each meal and snack, consume the high-protein item (s) **first**, before eating anything else.
- To meet the 50-70 gram a day protein goal, choose from these Stage IV foods:

| Food | Amount | Protein (grams) |
|--|--------------------------------|------------------------|
| Meat, fish, poultry-cooked and pureed | 2 oz. Weighed (1/4 cup pureed) | 14 |
| Cottage cheese | 1/2 cup | 14 |
| Ultra Pure Protein shake (or similar) (UNJURY) | 4 ounces | 10-12 |

| | | |
|---|----------------|-----|
| No-sugar-added CIB made with fat-free milk | 4 ounces | 7 |
| Egg scrambled | 1 egg | 7 |
| Egg substitute | 1/4 cup liquid | 7 |
| Soymilk | 4 ounces | 4-5 |
| Fat-free milk | 4 ounces | 4 |
| No-sugar-added yogurt | 4 ounces | 4 |
| Tofu, firm | 2 oz. Weight | 4 |
| Peanut butter | 1 tablespoon | 4 |
| Tofu, extra firm | 2 oz. Weight | 4 |
| Beans, pureed | 1/4 cup | 3 |
| Whey protein powder (available at GNC) (add to foods or shakes) | 1 scoop | 21 |
| Dry milk powder | 1/4 cup | 9 |

Sample Meal Plan-Stage IV

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|---------|-----------|------------------------------------|
| 7 a.m. | Breakfast | egg substitute, cooked |
| 9 a.m. | Snack | CIB + 1 scoop of protein powder |
| 12 Noon | Lunch | Pureed chicken Butternut squash |

| | | |
|--------|--------|------------------------------------|
| 3 p.m. | Snack | CIB + 1 scoop of protein powder |
| 6 p.m. | Dinner | pureed beef stew |

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Web sites with more information:

- www.massweightloss.com
- www.lapband.com
- www.bariatricedge.com

Questions or concerns? Call us!