

Nutrition After Bariatric Surgery

The UW Health Bariatric Surgery Nutrition Program is designed to help you get the nutrients you need into your new stomach pouch of very limited size. Our nutrition program is intended to help you reduce unpleasant side effects and make sure you safely realize the maximum benefit of having taken the major life-improving step of Bariatric or weight loss surgery. The following is a brief overview of what you can expect.

The **laparoscopic adjustable gastric band** procedure ultimately works by restricting the amount of food that you can eat at one time. A small egg sized pouch of stomach is above the band itself. As we gradually increase the amount of fluid in your band, this pouch will empty more slowly while you eat, and after meals. When your pouch is full you should not be hungry, and you will not be able to eat anything more without discomfort. For at least the first 4 weeks after surgery your band will be empty. During this time you may not notice any difference in how much you can eat, unless you eat too quickly or do not chew thoroughly. The restricted feeling and difference in how much you can eat comes gradually over time as we fill the pouch about every 4 weeks or until you reach the point of appropriate restriction.

Unlike the laparoscopic adjustable gastric band, after the **gastric bypass** procedure your pouch will be smallest and have the most restriction in the weeks after surgery. The initial size of the pouch is less than one ounce. As the new pouch heals it will expand to about 6-8 ounces (3/4 to one cup) by about 6 months after surgery. Because you will eat dramatically less immediately following surgery, and because you will not readily absorb all that you eat after this procedure, following the nutrition guidelines described below is very important for your health and safety.

Living with a bariatric surgery will require that you make some permanent changes in how, what, and why you eat. Failure to follow these guidelines may result in inadequate weight-loss and even cause weight regain over the years following surgery. Both surgical procedures provide a physical limitation to the amount of food you can eat; it is your responsibility to change what or why you choose to eat. It is important to evaluate the role food plays in your life and how you may use food to cope with stress, boredom, emotions, etc. You may need to develop new coping skills since after surgery you will no longer be able to use food to comfort or cope.

Step 1: Sugar-Free Clear Liquids

Immediately after surgery in the hospital, you will not be allowed anything by mouth. The first meal you receive will be a clear liquid diet. Please do not use a straw to drink liquids.

The following are examples of the clear liquids you may receive:

- Sugar-free Popsicles
- Sugar-free Crystal Light
- Water
- Sugar-free Jello

Step 2: Pureed or Mushy Foods

The portions will be small. Examples include:

- 1 oz. pureed meat
- ¼ cup pureed vegetables
- Whey protein isolat

This pureed diet will continue for 4 to 6 weeks after a gastric bypass or 3-4 weeks after the adjustable gastric band. It takes time for the healing and swelling of your new pouch to subside. It is very important that everything you eat during this interval has been blended to a smooth consistency (like applesauce) in order to minimize stress on your new stomach pouch.

Your new stomach pouch will hold only about an ounce at a time. In order to get all the nutrients that you need to be healthy during weight-loss, plan on eating small and frequent meals. At first you may feel that you are spending your whole day eating and drinking to accomplish this. Usually people develop a routine that relieves this feeling after the first few weeks.

Helpful Tips:

- Sip your liquids and eat your meals very slowly.
 - Each small meal should take you 30 minutes or more and it will take 30 minutes to drink 4 ounces of liquid.
- It is important to chew foods—even pureed foods—very thoroughly.
- Focus on protein, protein, protein.
 - You need a minimum of 60 grams of protein each day
 - Protein is very important to maintain health during rapid weight loss and to heal properly from surgery.
 - At least in the beginning it will be essential to drink a high protein beverage to meet protein needs.
- Drink at least 8 cups of water or other sugar-free liquid between meals every day (over the course of the whole day).
- It is important to separate liquids from your meals and drink only between meals.

Step 3: Soft Solid Healthy Foods

- After successfully completing Step 2, you may introduce soft solid foods into your diet
- Continue to eat 3 small meals each day
- Add one solid food item per meal per day as tolerated
- All new foods should be soft, cooked or canned
- Chew well so food is nearly pureed by the time you swallow
- Your portions must continue to be small (1 cup or less per meal or snack)
- Continue a protein supplement between meals
- Examples of soft foods include cottage cheese, fish, eggs, well cooked vegetables, soft fruits.

Step 4: Healthy Eating for Life after a Bariatric Surgery Procedure

- Eventually you will be able to eat most foods, just in smaller portions.
- It will take time and effort to reintroduce regular foods into your diet. You will need to start with soft, well chewed, easily digestible foods in small amounts.

The dietitian will work with you to make this transition while maintaining healthy eating goals.

Why is it Important to Separate Liquids from Meals?

- Separating liquids is a permanent, critical part of your weight loss success. Initially we ask you to separate them by 30 minutes, however over time that will increase to 1½ - 2 hours after eating.
- You do not want to over expand your pouch or rapidly wash the food out of the pouch.

Things to Avoid Permanently:

- Do not drink with a straw
 - Drinking through a straw may overfill your stomach with fluid and air.
- Avoid beverages with alcohol
 - You will feel the effects of alcohol more severely and it is an unwanted source of calories.
- Avoid or limit caffeine
 - Caffeine can impair iron absorption and lead to dehydration.
- Avoid carbonated beverages
 - The carbonation may lead to unpleasant side effects and will also fill your pouch with air.

Supplements

You will need to begin your supplements when you get home from the hospital. These are very important because of the radical change in your diet, and because you won't absorb some vitamins and minerals as efficiently as you used to. Specifically, we recommend each of the following:

After the Gastric Bypass Procedure

- Chewable multivitamin, 2 per day
- Calcium, 1,200 – 1,500 mg daily as calcium citrate with Vitamin D
- Vitamin B12 supplement – 500 mcg per day
- Vitamin B Complex or B-50 once a day
- Iron

Iron and calcium must be taken about four hours apart

After the Adjustable Gastric Band Procedure

- Chewable multivitamin, 1 per day
- Calcium, 1,000 mg daily as calcium citrate with Vitamin D
- Vitamin B Complex or B-50 once a day

Some Problems You May Encounter

Both Gastric Bypass and Adjustable Gastric Band

Lactose Intolerance

Some patients will develop a lactose intolerance (unable to tolerate milk and milk products without unpleasant side-effects) after surgery. The symptoms are bloating, gas and abdominal cramping after drinking milk or eating milk products. You may become lactose intolerant even if you weren't before surgery.

Vomiting

There are many reasons patients may vomit after surgery. These include:

- Eating too fast
- Not chewing food well enough
- Eating after your pouch is full
- Laying down too soon after surgery
- Drinking fluids with meals

Gastric Bypass Procedure

Dumping Syndrome

Symptoms of dumping syndrome may include abdominal cramping, cold sweats, light-headedness, nausea and diarrhea. Eating foods high in sugar, eating foods high in fat, eating too much food, or eating too fast causes this set of symptoms. Before your gastric bypass surgery, food was gradually released in small amounts from your stomach and into your small intestine. Undigested food can “dump” into your small intestine after quickly passing through your small newly-created gastric pouch. Consuming very large food molecules (like sugar) in your small intestine leads to the symptoms experienced in dumping syndrome. Symptoms of the dumping syndrome typically occur about 15 minutes after eating. ***To avoid the dumping syndrome; stay away from concentrated sweets, use a sugar substitute, and dilute fruit juice with water.***

Stenosis

In some patients, the new connection between the stomach pouch and the small intestine scars as it heals. In 5 to 10 percent of cases this connection scars to such a degree that the patient is unable to empty food from the stomach pouch and into the small intestine. This is called stenosis of the gastrojejunostomy. These patients will find that they are unable to tolerate even liquids with out vomiting. Most of the time these patients do well for the first few weeks after surgery, stenosis symptoms are typically experienced 4 to 8 weeks after their surgery.

If you have any questions or need more information, please contact the UW Health Bariatric Surgery Program Nutritionist at 608-265-7090.