



Allegheny
Health Network

Bariatric and Metabolic Institute


Nutrition Guidelines
for Weight Loss Surgery



Visit our website



ahn.org/weightloss

Find us on 



www.facebook.com/BMI/atAHN



Table of Contents

- | | | | |
|----|--|----|--|
| 4 | Introduction | 16 | Protein
A necessary part of your diet |
| 8 | Nutrition Guidelines | 18 | Protein Supplements
They aren't all the same! |
| 9 | Phase I
Liquids | 19 | Foods That May Be Difficult
to Tolerate after Surgery |
| 11 | Phase II
Soft foods | 21 | Long-term Diet after
Weight Loss Surgery |
| 14 | Phase III
"Regular" bariatric diet | 22 | Vitamin and Mineral Supplements |



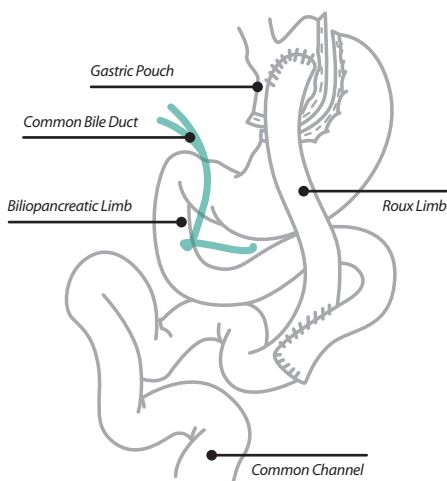
Introduction: Review of Bariatric Surgery: Types of Procedures

Understanding the surgery is an important part of the process. Work with your bariatric team to decide which operation is best for you. Remember that ALL surgeries are only a tool, and you need to make healthy diet and exercise changes. Below is a basic overview about each procedure.

Roux-En-Y Gastric Bypass

This is the most common type of bariatric surgery. It is both restrictive and malabsorptive. This means that the small pouch created will decrease the amount of food you can consume at one time. The “bypass” causes food to be rerouted past most of the stomach and part of the small intestine.

This prevents some absorption of calories and fat but also of important vitamins and minerals. Because of this change in your digestive tract, you will get sick (dumping syndrome — for more information see page 18) if you consume items too high in sugar or fat. This surgery is known to have a beneficial effect on diabetes.

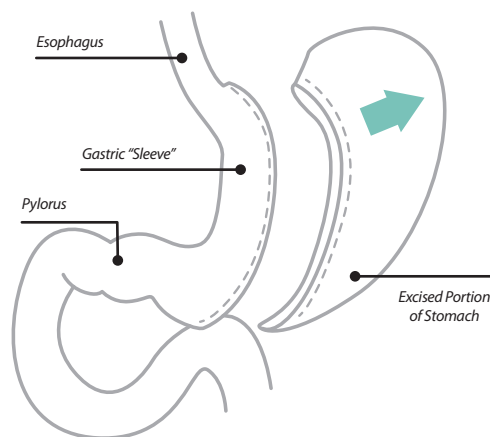


Sleeve Gastrectomy

This surgery is performed by removing approximately 80% of your stomach. The remaining stomach is a tubular pouch that resembles a banana.

This will decrease the amount of food you are able to eat. It also affects the hormones that impact a number of factors, including hunger and blood sugar control.

Studies show the sleeve is as effective as other bariatric procedures in terms of weight loss and improvement or remission of diabetes. This procedure may be recommended to you by the surgeon for certain medical problems.





What Should I Start Eating Now?

Starting now, you should begin to make dietary changes in order to get ready for a healthy lifestyle after surgery. The sooner you make these changes before surgery, the easier it will be to choose healthy meals once you have completed the liquid and soft food phases immediately following your surgery.

1. For every meal, you should include a source of lean protein.

The following is a list of lean protein. Lean meats should be grilled, baked, broiled, or roasted.

- Chicken, turkey (not fried)
- Fish, shellfish (not fried)
- Beef — round, sirloin, flank, tenderloin, roast, ground (93% or leaner)
- Pork — loin chop, tenderloin, ham, Canadian bacon
- Lean deli meats such as baked ham, turkey breast, or roast beef
- Game meats such as venison, pheasant
- Buffalo meat (bison)
- Eggs, egg whites, egg substitutes
- Skim, 1%, Superskim, Ultraskim milk, soy milk, lactose-free milk
- Low-fat cottage cheese made from skim or 1% milk
- Protein shakes or bars — the first ingredient should read whey or soy **“protein isolate”**
- Low-fat or fat-free cheese
- Low- or no-sugar, low- or no-fat yogurt (e.g., Dannon Light & Fit® or store brand), and/or Greek yogurt
- Tofu, soy products
- Nut butters (look for “natural”), nuts
- Beans (black, kidney, garbanzo, navy, etc.), lentils, legumes (also count as starch)

2. For every meal, add a vegetable and/or fruit. This is the **fiber** portion of your meal. Vegetables and fruits can be fresh, frozen, or canned; the point is to eat them. Look for reduced-salt or no-salt varieties, if canned vegetables.

Fruit should be “in its own juice,” with no syrup or added sugar. Keep fruit choices to 1/2 cup or 1 piece. Potatoes and bananas are the starchiest of the bunch; limit these.

Vegetables

- Salad greens/lettuces, kale
- Spinach
- Mushrooms
- Radishes
- Cucumbers
- Onions
- Peppers
- Zucchini
- Squash
- Broccoli
- Cauliflower
- Eggplant
- Asparagus
- Brussel sprouts
- Carrots
- Tomatoes
- Green beans
- Wax beans
- Celery
- Cabbage
- Okra
- Artichokes

Fruits

- Apple, 1 (4 oz)
- Applesauce, unsweetened 1/2 cup
- Apricots, 4 fresh, 1/2 cup canned
- Blackberries, 3/4 cup
- Blueberries, 3/4 cup
- Cantaloupe, 1 cup cubes
- Cherries, 12
- Dates, 3
- Figs, 2
- Fruit cocktail, 1/2 cup
- Grapefruit, 1/2
- Grapes, 15
- Honeydew melon, 1 cup cubes
- Kiwi, 1
- Mandarin oranges, 3/4 cup
- Mango, 1/2 cup
- Nectarine, 1 small
- Orange, 1 small
- Papaya, 1 cup cubes
- Peach, 1 medium fresh, 1/2 cup canned
- Pear, 1 medium, 1/2 cup canned
- Pineapple, 3/4 cup fresh, 1/2 cup canned
- Plums, 2 small
- Prunes, 3
- Raisins, 2 Tbsp.
- Raspberries, 1 cup
- Strawberries, 1 cup sliced
- Tangerine, 2 small
- Watermelon, 1–1/4 cup cubes

A Word about Carbohydrates

This category of foods can contribute to your protein and fiber intake, but they can be — and usually are — the highest in added fats, sodium, sugars, and calories. Therefore, the point is to choose them carefully and limit both how often you eat them and the portion size when you do.

What you should look for are carbohydrates that are whole grains and minimally processed versus highly processed. For example, a highly processed choice would be “enriched wheat” in a slice of white bread, pasta or pretzels, “bleached” as in rice, or any food that has sugar or high fructose corn syrup as one of the first few ingredients. These are also referred to as “empty” carbs because they contain little or no nutritional value.

Avoid these.

A whole grain, minimally processed item would actually have the word “whole” in front, such as whole grain oats or whole wheat. These you can include in your meal plan in small amounts. Carbohydrates should be eaten last and not consumed if you feel full.

Here are some examples of acceptable choices:

Whole grain brown rice — ½ cup serving

Whole grain pasta — ½ cup serving

Sweet potato — ½ cup serving

Starchy vegetables such as corn, peas, beans (black, kidney, garbanzo, navy, etc.), legumes, lentils — ½ cup serving

Whole grain cereal, such as Shredded Wheat®, Cheerios®, Wheaties®, All Bran® — serving size as listed on box

Oatmeal, whole grain Cream of Wheat® — ½ cup or 1 packet

Whole grain bread, English muffins, wraps, pitas, crackers
1 serving is equal to 15 grams of carbohydrate. Read your labels.

Fats

Decrease the amounts of full-fat items such as sour cream, mayonnaise, ranch dressing, and cream cheese to reduce calories.

Here are some better choices:

Olive oil, canola oil

Low-fat or fat-free salad dressings, if creamy

Salad dressings, marinades with an olive oil base

Lower-fat margarine or spreads such as Promise Light® or I Can't Believe It's Not Butter®

Some Additional Tips

1. Start moving away from instant, pre-packaged processed foods, fast food, and take out. Home cooked, real food is always the best choice. Even though these are processed pre-packaged meals, selections such as Lean Cuisine, Healthy Choice, and Weight Watchers can lead you away from impulse decisions when things don't go as planned and there's just no time. This could at least be a better choice than running through the drive-thru. Think of it as a “back-up” plan. Just remember to look for an entrée that has lean protein and vegetables (fiber) and not just any low-calorie pizza or pasta. Remember these are the empty carbohydrates you are avoiding.

Soup is another quick choice. Avoid creamy and cheesy varieties and again look for protein and vegetables such as lentil, chili, or vegetable beef.

2. Start paying attention to how you eat. Begin with small bites and take one bite at a time. Taste your food; you want to enjoy your food longer while at the same time eat less. Put your utensil down after every bite and chew your food thoroughly. Aim for 20–30 minutes to eat your meal. The slower you eat, the more time you have to realize you have had enough. Break the habit of eating everything on your plate.

Eat the protein and vegetable portion of your meal first and if you start to feel full, leave behind the carbohydrate.

3. Eat 3 meals per day. Break the habit of skipping meals. This often leads to overeating when you do eat and grabbing unnecessary snacks and “grazing.”

4. Drink plenty of fluids. Anything that is sugar-free, non-carbonated and decaffeinated can help you meet your fluid needs. Keep in mind that plain water is best. Aim for at least 64 ounces per day.

Here are some acceptable choices:

Crystal Light, Sugar-free Koolaid, etc. (store brands are fine)

MiO flavor enhancers

Aquafina Splash

Brewed decaf tea (may use artificial sweetener)

Diet green tea

Sugar-free sports drinks



Nutrition Guidelines

after Weight Loss Surgery

Purpose: This diet is designed to restrict caloric intake to produce desired weight loss, to help develop appropriate eating habits, and to prevent disruption of staple lines and obstruction within the stomach. It is important to follow the diet progression to allow your new digestive system to heal and the swelling to subside. Vitamin and mineral supplements are needed daily as well.

Main Focus

- Drink enough fluid to keep your body hydrated.
- Eat adequate amounts of protein.
- Take required vitamin and mineral supplements.

Diet Principles

Drink 64 fluid ounces (8 cups) of liquid per day:

***Note: If your urine is dark and your mouth is dry, you are not drinking enough!**

- Sip one cup of liquid over an hour.
- Don't drink with a meal and resume 30 minutes after a meal.
- Sip allowed beverages slowly.
- Avoid the use of a straw when drinking.
- High calorie foods, beverages, and snacks are omitted.

When your doctor gives you permission, supplemental multivitamins, vitamin B12, calcium, and vitamin D are **REQUIRED** daily. Patients, especially young women, may also be instructed to take additional supplements such as iron and vitamin C.

Foods need to be thoroughly chewed to prevent vomiting and obstruction in your new stomach.

The diet will be advanced gradually, depending on your tolerance. This allows your body to heal. Keep in mind that everyone advances at a different speed.

It is important not to advance too quickly.

Phase I

Liquids



Phase II

Soft Foods



Phase III

Regular Bariatric Diet



Phase I

Liquids

7 to 10 days

The most important aspects of the first months after surgery are proper hydration and protein. Aim for 64 ounces of water and other fluids daily by constantly sipping liquids. Do not gulp! Do not include high calorie or sugary beverages. You will be on this phase for about the first 7–10 days after surgery, depending on your type of surgery and surgeon's instructions. It is important to drink plenty of fluids during Phase II and Phase III as well.

Remember, your stomach is still recovering from surgery, so it is important that you do not try to advance until your stomach is ready. It is not uncommon for you to experience nausea and/or vomiting at this point. This may simply be your stomach's reaction to the surgery and should not discourage you from hydrating yourself.

The key goal of this phase:

Keep yourself well hydrated by drinking 64 ounces of fluid each day. Liquid sources of protein are also included at this time to ensure proper healing.



Acceptable Liquids

Continue to sip throughout the day (about 1–2 ounces over 30 minutes):

EXAMPLES:

- Water
- Sports drinks (Gatorade, Powerade) slightly diluted with water
- Sugar-free sports drinks such as Powerade Zero or Propel
- Broths: clear beef, chicken and vegetable (low or reduced sodium broths would be best)
- Sugar-free gelatin
- Sugar-free popsicles
- Tea: unsweetened, artificially sweetened, or lightly sweetened with 1–2 teaspoons of sugar; iced or hot; black, green, or herbal (limit caffeine to 16 oz (1–2 cups) daily)
- Coffee: unsweetened, artificially sweetened, lightly sweetened with 1–2 teaspoons of sugar (limit caffeine to 16 oz (1–2 cups) daily); can add a small amount of cream or milk, decaffeinated is best
- Skim milk, 1% milk, Ultraskim, or Superskim milk**
- Sugar-free, fat-free hot cocoa (made with milk)
- Fat-free or low-fat soy milk, Lactaid, or Dairy Smart (if lactose intolerant)
- No Sugar Added Carnation Instant Breakfast (blue box)
- Protein powders or protein supplements such as Unjury, Bariatric Advantage
- Condensed, strained cream soups (low fat, reduced sodium) such as tomato soup, cream of mushroom, cream of chicken, etc.
- Protein isolate water

Goals of this phase are to:

- Meet your fluid goal of 64 ounces (8 cups) per day. Drink enough fluid to keep your urine a clear, pale yellow color. If your urine becomes cloudy, dark, or foul-smelling, you need to drink more!
- Limit high-sugar beverages. All beverages should have less than 15 grams of sugar per 8 ounce serving to prevent *dumping syndrome* (see page 18 for more details about dumping syndrome).
- Avoid drinking carbonated beverages during this phase. They produce a lot of excess gas which may be uncomfortable.
- Get in the habit of always carrying a beverage with you. Pre-freeze or refrigerate plastic bottles of your choice beverage taking small, frequent sips throughout the day. You should never go a few hours without drinking anything. Constantly sip to avoid becoming dehydrated.
- It is okay to have a little bit of real sugar in some liquids. A small amount of real sugar in tea, G-2, etc, helps to prevent episodes of extreme fatigue, headaches, fruity taste, and low blood sugar. When you go completely “sugar-free,” you may feel nauseated, fatigued, and sick.
- Your long-term protein goal is 60–80 grams/day. This may not be possible during this phase. A more realistic and obtainable protein goal is 30–40 grams/day (approximately 1 protein shake per day).

****Note: You may become lactose intolerant after weight loss surgery. This occurs when you are not able to fully digest lactose (the natural sugar found in milk and dairy products). Symptoms may include gas, bloating and diarrhea after consuming dairy products. If this happens, your dietitian will work with you to find other foods you can substitute.**

PHASE I SAMPLE MENU	
8 a.m.	8 oz water
9 a.m.	8 oz skim milk + one serving of approved protein supplement
10 a.m.	8 oz decaf coffee w/ artificial sweetener or 1 teaspoon sugar
11 a.m.	8 oz Crystal Light
12 p.m.	8 oz chicken broth
1 p.m.	8 oz skim milk + one serving No Sugar Added Carnation Instant Breakfast
2 p.m.	8 oz water
3 p.m.	½ cup sugar-free gelatin
4 p.m.	8 oz sports drink of your choice
5 p.m.	8 oz sports drink of your choice
6 p.m.	8 oz condensed tomato soup made with skim milk
8 p.m.	8 oz Crystal Light
9 p.m.	Sugar-free popsicle

Do not move into Phase II until initial post-op visit.

Phase II

Soft Foods

4 – 6 weeks

Expect to be in this phase for about four weeks. This phase includes soft, easily digestible foods. These may be *slowly* introduced into your diet and must be *chewed well*. Choose soft meats and fish, soups, cooked vegetables and canned fruit (in juice or water). Remember to choose low-fat or fat-free dairy, lean meats, and low-sugar items.

Follow these rules:

- Begin eating only 3 small meals a day. Do not snack or “graze” throughout the day.
- Eat the protein portion of your meals first. If you are unsure which foods are high in protein, talk to the dietitians.
- Get in the habit of eating at least 2 ounces of protein rich food at each meal. Aim for **60–80 grams** of protein every day.
- Eat slowly. Put your fork down between each bite and chew your food very thoroughly (to a mushy consistency).
- Take small bites (size of a pencil eraser) of tougher foods (chicken, meats, fish).
- Stop eating as soon as you feel full, which initially may be after only 2 or 3 bites of food. Indications of fullness include feeling pain or pressure in the center just below your rib cage, nausea, or pain in your shoulders or upper chest. Do not eat to the point of discomfort.
- Your meals will be 3–4 ounces (1/2 cup) in total size. Use small plates and cups instead of large plates and bowls for your meals.
- Remember, do not drink liquids at meal time and for 30 minutes after meals.
- If you are having difficulty with soft foods, return to just liquids for 1–2 days, then try again.
- If you experience an episode of vomiting, rest your pouch by returning to a liquid diet for 1–2 days.



Suggested Food Lists

Try the foods at the top of the list first as they may be easier to tolerate. Remember to introduce just one new food at a time. Keep in mind that everyone's tolerance is different and you may have more difficulties with some foods than others. Moist foods are usually tolerated better, and make sure to go slowly. Remind yourself how small your new stomach is.

PROTEIN SOURCES*	
Cottage cheese (low-fat, small curd)	Ricotta cheese (low-fat)
Yogurts with less than 15 grams of sugar per serving	Greek yogurt with less than 15 grams of sugar per serving
Sugar-free pudding/custard	Eggs, egg whites, or Egg Beaters (poached, soft-boiled, or moist scrambled)
Fat-free refried beans	Low-fat tofu
Chicken, turkey (prepared in a slow cooker or crock pot)	Baked fish that flakes easily with a fork (cod, salmon, tilapia, crab meat)
Canned/vacuum packed tuna, salmon, chicken (in water only)	Thinly sliced lean luncheon meats (turkey breast, roast beef, ham)
Lean ground beef, pork, buffalo (bison), or turkey (93% lean or better) in chili, meatball and meatloaf form	Soups (lentil, etc.), chili

*Add extra protein to food by mixing in a tablespoon of protein powder or non-fat dry milk powder to beverages or pureed items.

VEGETABLES – SOFT COOKED, MUSHY	
Carrots	Green beans
Broccoli (no stems)	Cauliflower (no stems)
Spinach (not stringy)	

FRUITS	
Diced pears, apricots, or peaches	Unsweetened applesauce

If using canned fruit, choose products with less than 15 grams of sugar per serving.

PHASE II SAMPLE MENU

Breakfast:	7:30 a.m. – 8 a.m.	¼ – ½ cup low-fat small curd cottage cheese 2 tbsp unsweetened applesauce	1 multivitamin 1 calcium citrate
	8:30 a.m. – 11:30 a.m.	16 oz of water or sugar-free beverages, protein water	
Lunch:	12 p.m. – 12:30 p.m.	¼ – ½ cup tuna blended with plain non-fat Greek yogurt and smashed avocado	1 multivitamin 1 calcium citrate
	1 p.m. – 4:30 p.m.	16 oz of water or sugar-free beverages, protein water	
Dinner:	5 p.m. – 5:30 p.m.	3 oz lentil soup or chili (slightly mashed)	Vitamin D B12 sublingual
	6 p.m. – 9:30 p.m.	16–24 oz of water or sugar-free beverages	

Phase III

“Regular” Bariatric Diet Maintenance

During this phase, you will be able to eat foods of a regular consistency. However, this does not mean that you should go back to your old eating patterns.

Continue to eat nutrient-rich foods such as lean meats, poultry, pork, low-fat dairy products, vegetables, fruits, and whole grains. These foods contain the energy, protein, vitamins, and minerals that your body needs. Since you will only be able to tolerate limited amounts of food at a time, it is very important that you choose quality foods. Include only nutrient-dense foods, rather than empty-calorie foods that are high in sugar or fat content but do not contain any nutritional value.

Although you will be trying to eat vitamin- and mineral-rich foods, it is important to continue to take a vitamin and mineral supplements since you will not be able to eat large enough amounts to meet your needs, and some nutrients are not absorbed as well.

The goal of this phase:

Eat 3 well-balanced, nutritious meals each day, avoid excessive snacking or grazing between meals, and maintain small portion sizes.

This includes adequate amounts of protein and fluid as well as your vitamin and mineral supplement regimen. You may not be able to tolerate the amount of food listed below. Remember, stop eating as soon as you start to feel full, do not drink with meals, and limit your meal times to 20–30 minutes to eat each meal.

Long-term after bariatric surgery, you are able to eat any type of food. You just have to be mindful of portion size and choices.

PHASE III SAMPLE MENU

Breakfast:	7:30 a.m. – 8 a.m.	2 slices turkey sausage	1 multivitamin 1 calcium citrate
	8:30 a.m. – 11:30 a.m.	16–24 oz of water or sugar-free beverages 8 oz skim milk	
Lunch:	12 p.m. – 12:30 p.m.	2–3 oz grilled chicken strips ¼ – ½ cup salad greens 2 tbsp regular Italian dressing	1 multivitamin 1 calcium citrate
	1 p.m. – 4:30 p.m.	16–24 oz of water or sugar-free beverages 8 oz skim milk	
Dinner:	5 p.m. – 5:30 p.m.	3 oz shredded pot roast with low fat gravy ¼ cup cooked carrots	Vitamin D B12 sublingual
	6 p.m. – 9:30 p.m.	16–24 oz of water or sugar-free beverages	Iron pill

During this phase, you should be able to meet protein needs with the suggested food servings above. However, it is recommended that you keep track of your daily protein intake and supplement with protein powder or protein drinks, as needed, when you fall below your daily needs.

Remember to avoid drinking with your meals. Use only low-fat cooking methods and do not overeat. Chew thoroughly and avoid eating too quickly.



Protein

A Necessary Part of your Diet

The protein you need is measured in grams. You will hear this term often. The amount of protein you will need depends on your body size, your nutritional status, and if you have any increased needs for protein, such as fighting an infection. You will need a minimum of 60–80 grams of protein per day after surgery.

What is protein?

Everyone needs protein, but it is most important to have protein in your diet in the early stages after your surgery. Your body needs protein to:

- Heal your incision and your new stomach pouch.
- Retain your muscle mass while you are losing weight.
- Prevent poor healing, hair loss, and a feeling of low energy.

Here is a list of lean, high protein foods to include in your meal planning:

Foods highest in protein

- Non-fat dairy products
- Moist, cooked lean meats
- Skinless poultry
- Cooked fish and seafood
- Eggs, egg substitutes

Other protein foods

- Cooked legumes (lentils, pinto beans, kidney beans)
- Soy foods (tofu, soy milk, veggie burgers)
- PB2

After several months, your new pouch or sleeve will be healed and you will be able to tolerate more types of food. It will always be important for you to make sure you are getting the protein your body needs. Choose lean or low-fat sources to prevent unwanted weight gain. When preparing your foods, avoid frying or adding extra fat to avoid the excess calories and possible stomach discomfort. “Nutrition Facts” on food labels provide information on the grams of protein in most foods.

How do you know if you are getting enough protein?

Since you will be eating only small amounts of food at a time after surgery, you need to choose high-protein foods first at each meal, before you eat other foods. Total your grams of protein from foods and beverages to ensure you are meeting your 60–80 grams per day goal. Use the nutrition facts label and the list of food sources in this handout as a reference. As a general rule of thumb, each ounce of meat, fish, poultry, or egg contains 7 grams of protein.

Common Measurements

- 3 tsp = 1 tbsp
- 1 oz = 2 tbsp
- 2 oz = ¼ cup
- 4 oz = ½ cup
- 8 oz = 1 cup

PROTEIN SOURCES

Food/Beverage	Serving Size	Protein	Calories
MEAT, FISH, POULTRY			
Baby food meat (plain)	1 jar (2.5 oz)	9–11 g	60–80
Lean ground sirloin	2 oz	14 g	150
Roast	2 oz	12 g	130
Pork chop	2 oz	17 g	109
Tilapia	2 oz	15g	72
Shrimp, boiled	6 large	7 g	33
Tuna, in water	¼ cup	14 g	45
Salmon, baked	2 oz	12 g	115
Perch, flounder, sole, haddock (baked)	2 oz	14 g	65
Lobster	2 oz	15 g	80
Baked ham	2 oz	13 g	100
Chicken, dark, without skin	2 oz	15 g	115
Chicken, white, without skin	2 oz	19 g	90
Turkey, light meat without skin	2 oz	17 g	80
Turkey, dark meat without skin	2 oz	16 g	92
Ground turkey (97% lean)	2 oz	11 g	60

PROTEIN SOURCES

Food/Beverage	Serving Size	Protein	Calories
MILK, CHEESE, YOGURT			
Low-fat cottage cheese	¼ cup	7 g	40
Skim mozzarella	1 oz	6 g	80
Fat-free American cheese	1 slice	7 g	35
Fat-free cheddar, shredded	¼ cup	9 g	35
Skim milk	1 cup (8 oz)	8 g	90
Non-fat dry milk	¼ cup	11 g	110
Yogurt, light	¾–1 cup	5–9 g	80–100
Greek yogurt, non-fat	¾–1 cup	18–22 g	100–120
Egg, large size	1 egg	7 g	65
Egg white	1 egg white	3 g	20
Egg substitute	¼ cup	7 g	50
Tofu	¼ cup	5 g	95
Vanilla soymilk, non-fat	1 cup	6 g	70
STARCHES			
Fat-free refried beans	¼ cup	4.5 g	68
Beans/lentils	¼ cup	4 g	60
Edamame, shelled	¼ cup	8 g	95
SOUPS			
Bean, pea, or lentil soup	1 cup	6–9 g	100–140
Chili	½ cup	15 g	150

Protein Supplements

They Aren't all the Same!

You will likely need a protein supplement initially after surgery. Some people continue to use one if their portions sizes stay very small. Depending on how much protein you are getting from food, you may need 1–3 servings of a protein supplement per day. Try to choose ones that have the lowest calories per gram of protein.

The following guidelines will help you choose the best supplement:

Look for 100% protein isolate, which should be the first ingredient. You may choose whey or soy. Although whey protein comes from milk, patients with lactose intolerance may still use: if bloating, cramping or excess gas occurs after consuming, switch to a soy-based product. Avoid pure concentrate, protein blends, and those made from collagen.

Remember your protein goal is a minimum of 60–80 grams of protein per day (potentially higher), but that includes what you are eating! Below are some recipes to use with your supplement and example products.

Protein powders should contain 20–30 grams per shake. Follow the manufacturer's, instructions to equal this amount.



Be Creative with Your Protein Supplement

Use these recipes to add some variety in flavors. Put all ingredients in a blender or food processor and blend until smooth.

- **Morning Delight:** 1 cup skim milk, 4 ice cubes, 1 teaspoon nutmeg, 1 teaspoon vanilla extract, 1 scoop protein powder.
- **Banana Cream:** 1 cup skim milk, 4 ice cubes, ½ small frozen banana, 1 scoop protein powder.
- **Chocolate Chiller:** 1 cup skim milk, 1 packet sugar-free hot chocolate, 1 scoop protein powder.
- **Fruit Surprise:** ¼ cup skim milk, ¾ cup sugar-free beverage, 1 scoop protein powder. Use ¼ cup or less fruit (canned in juice or water) as an optional additional ingredient for added flavor.
- **High Protein Mousse:** 1 small, sugar-free pudding mix, 16 oz fat-free cottage cheese, 4 oz Cool Whip Light. Blend cottage cheese until smooth. Add pudding and mix well. Empty into large bowl. Fold in Cool Whip. Caution, this makes several servings.
- **High Protein Pudding:** 1 small, sugar-free pudding mix, 2 cups skim milk, 1–2 scoops protein powder. Add protein powder to mix, follow package directions.

Foods That May Be Difficult to Tolerate after Surgery

Add items such as meat, fruits, and vegetables gradually as tolerated. Starches should be limited. Continue to avoid large quantities of sweetened foods, high-fat foods and high-calorie beverages to avoid weight gain and possible digestive problems. You may also experience some changes in taste, smell, and food preferences. These are all very individual.

Meat & Meat Substitutes:	<ul style="list-style-type: none"> • Chicken – needs to be moist • Steak – filet mignon tolerated well • Hamburger – turkey burger may be tolerated easier at first • Tough, gristly meat like pork • Fried or fatty meat, poultry or fish
Starches:	<ul style="list-style-type: none"> • Bran, bran cereals • Granola • Whole-grain or white bread (non-toasted) • Whole-grain cereal • Rice • Pasta
Vegetables:	<ul style="list-style-type: none"> • Fibrous vegetables (dried beans, celery, corn, cabbage, romaine hearts, artichokes) • Raw vegetables
Fruits:	<ul style="list-style-type: none"> • Dried fruits • Coconut • Orange and grapefruit membranes • Skins and seeds (peel all fruit and de-seed)
Miscellaneous:	<ul style="list-style-type: none"> • Carbonated beverages • Highly seasoned and spicy food
Sweets:	<ul style="list-style-type: none"> • Candy • Desserts • Jam • Jelly • Ice cream • Sweetened fruit or juice • Sweetened beverage, soda

Potential Problems	Causes	Suggestions
Nausea and vomiting	Nausea and vomiting may occur commonly within the first 2–3 months after surgery and is usually due to: <ul style="list-style-type: none"> • Eating too quickly • Taking bites that are too large • Not chewing adequately • Consuming too large of a volume at one time • Eating foods that are too dry or tough 	If nausea and vomiting occur after eating a new food, wait several days before trying it again. It may be necessary to return to liquid or pureed foods temporarily. Avoid cold beverages and those with caffeine or carbonation.
Dumping syndrome	This occurs most commonly with the gastric bypass, but may also occur with sleeve gastrectomy. <ul style="list-style-type: none"> • Occurs in response to the presence of digested food and simple carbohydrates. • Symptoms include abdominal fullness, nausea, weakness, rapid pulse, cold sweat, or diarrhea 	Avoid all high-sweetened foods and beverages, and high fat or greasy foods. If dumping occurs, lying down for 20 to 30 minutes may help slow the transit to the small bowel.
Pain in shoulder or upper chest area	May occur when you eat too much or eat something hard to digest.	Stop eating if pain occurs during eating and try to eat later after pain has resolved. Contact your doctor if symptoms persist or worsen as they may be related to other conditions.
Dehydration	Dehydration can occur with inadequate fluid intake, persistent nausea, vomiting, or diarrhea.	It is important to drink at least 64 ounces of fluid a day, especially during the first few months of rapid weight loss.
Lactose intolerance	Some patients experience a new intolerance to milk and milk products after surgery.	Use lactase-treated milk and lactase enzyme tablets. Try Lactaid 100% or Dairy Ease 100%.
Constipation	Occurs commonly, especially if taking an iron supplement.	Drink plenty of water daily. Eating fruits and vegetables reduces the risk of recurrent constipation. Daily use of Miralax may be required.
Diarrhea	May be related to certain foods, especially greasy or fried foods.	If you develop an illness causing diarrhea, drink fluids to keep hydrated.
Heartburn or reflux	Can be related to certain foods (citrus, spices). May develop if you have a hiatal hernia Ulcers can cause heartburn.	An antacid may be required. Keep track of your symptoms and report them to your surgeon if no improvement.
Bloating		Limit liquids to 2 ounces at one time and sip slowly.
Blockage of the stoma or new stomach	The stoma or new stomach may be temporarily blocked if foods with large particle size are eaten too quickly or without thorough chewing.	You can try a few sips of a carbonated beverage such as ginger ale to help clear the blockage. If symptoms of pain, nausea, and vomiting persist, a physician should be contacted. Do not progress to solid foods without physician or dietitian approval.
Rupture of the staple line	Rupture of the staple line is unlikely.	Follow the post op diet progression and avoid eating an excessive quantity of food at one time.
Stretching of the stomach pouch, sleeve, or stoma dilation	This can be caused by eating large portions of food at one time and advancing your diet without permission from your physician or dietitian.	Avoid large portions of food and modify the texture of foods only gradually in the early postoperative weeks. Follow recommendations for advancing your diet to prevent stretching.
Weight gain or no further weight loss	Eating high calorie foods or beverages.	Keep a record of all foods, beverages, and snacks consumed. Measure portion sizes. Use only low calorie beverages in addition to skim milk.
Gas		Limit intake of gassy vegetables, high fat and greasy foods. Discuss over-the-counter charcoal tabs or internal deodorant with your physician.
Low blood sugars (Hypoglycemia)	Low blood sugars can occur if you have not eaten for several hours. Reactive hypoglycemia can also cause low blood sugars. This typically occurs 1 hour or so after a meal if starches (bread, potatoes, pasta) were consumed. The starch is digested, turned into sugar and causes an initial high blood sugar. The pancreas then releases too much insulin, resulting in the episode of low blood sugar.	Keep a food log of your meals, meal times, and time of symptoms. If this is occurring, then starches should be avoided. The medication Precose helps to prevent the conversion of starch to sugar and can be used to help prevent these episodes of hypoglycemia.

Long-term Diet after Weight Loss Surgery

Eat Small, Healthy Meals — Slowly!

Following the Phase III diet is important in the long run. It is important to eat properly to achieve the best weight loss and nutrition. You need to take the recommended vitamin and mineral supplements daily for the rest of your life to avoid complications.



You may gain weight after the first year anniversary of your weight loss surgery. Patients who succeed in keeping off their weight tend to pay attention to their food choices and portion sizes as well as increase their physical activity. Long-term follow-up at the *Bariatric and Metabolic Institute* is important to maintain weight loss and to help prevent complications. Keeping a food diary, or using an app such as MyFitnessPal, is a simple method for patients to keep track of their diet and be accountable.

Some patients will avoid long-term follow-up appointments because they are embarrassed or frustrated that they have gained weight. You need to follow up! The bariatric surgery staff is here to help.

Certain habits that patients think are good may actually be hurting them. Snack foods such as pretzels, popcorn, and bananas sound healthy but have a lot of carbohydrate calories. The carbohydrate calories will turn into fat if the calories are not burned off with exercise or activity. Nuts, vegetables, and protein snacks would be a much better choice.

Vitamin and Mineral Supplements

You will not be able to meet certain vitamin and mineral needs without supplementation because of the small amounts of food that you will eat and because your body may have difficulty absorbing them. Required daily are multivitamins, calcium, vitamin D, and vitamin B12. Required for some are iron, vitamin C, and zinc.

All of the required vitamin supplements are available over the counter at your local pharmacy. If you have difficulty locating or tolerating any of the supplements, call your dietitian, nurse practitioner, or surgeon for suggestions.

Patients need to be on a chewable form of vitamins for approximately 3–4 months after surgery. Then you can switch to a solid pill form when you are able to tolerate solid foods and have no difficulty with swallowing bigger pills.

VITAMIN AND MINERAL SUPPLEMENTS			
Vitamin	Dose	Appropriate Brands	Helpful Tips
Multivitamin with minerals	1 chewable/ tablet twice per day	Bariatric-specific brands (i.e., Bariatric Advantage, Bariatric Fusion) Centrum One-A-Day	Some vitamin tablets contain iron. When purchasing a multivitamin, be sure that it contains minerals (i.e., Selenium, Zinc, Copper) NO GUMMY MULTIVITAMINS!
Calcium citrate with vitamin D	1000–1500 mg daily	Bariatric-specific brand (i.e., Bariatric Advantage, Bariatric Fusion) Citracal®	**Must be calcium citrate if gastric bypass patient (i.e., Citracal® but NOT Caltrate®) Do not take at the same time as Iron. (Must be separated two hours apart from iron.) Can be taken without food.
Vitamin D3	2000 IU daily	Any vitamin D3	Doses may vary depending on blood work results. If you were or become vitamin D deficient, you may also be instructed to take Vitamin D2 (50,000 IU tabs weekly).
Vitamin B12 sublingual via blood stream	Sublingual 1000 mcg daily	Any sublingual B12	Sublingual drops or lozenges MUST dissolve completely under the tongue.
-OR-			
Vitamin B12 nose spray	One spray, one nostril, once weekly	Nascobal	Prescription which can be written out by physician assistant or doctor.
-OR-			
Vitamin B12 injection	Once a month injection		Prescription which can be written out by physician assistant or doctor.
Iron — men/ post-menopausal women	18–30 mg elemental iron/day	Bariatric-specific brands (i.e., Bariatric Advantage, Bariatric Fusion) GNC Iron 18 Fergon	You may not be required to take iron. Refer to instructions from your bariatric team. Do not take with calcium. If you are taking tablet Iron, you may be instructed to take vitamin C with this.
Iron — pre-menopausal women	50–65 mg elemental iron/day	Bariatric-specific brands Ferro-Sequels (contains stool softener as well)	

Use the following list for proper doses if you are purchasing vitamins separately.

SUPPLEMENTS REQUIRED FOR EACH SURGERY

Vitamin/Mineral	Gastric Bypass	Sleeve Gastrectomy
Multivitamin with minerals	2 servings	1 serving
Calcium	1000–1500 mg per day calcium citrate only!	1000–1500 mg per day can be calcium carbonate form
Vitamin D	2000 IU per day	2000 IU per day
Cyanocobalamin (vitamin B12)	1000 mcg per day	1000 mcg per day
Ferrous sulfate (iron)	As instructed	As instructed

Be aware of adding extra zinc supplements; if taken over a long period of time, it may compromise copper absorption.

- Start vitamins in phase II.
- Add iron (if required) in phase III or as soon as you can tolerate meats and vegetables.
- Remember to take vitamins and minerals for the rest of your life.
- All options will be discussed at the pre-operative visit or class.





Allegheny Health Network

Bariatric and Metabolic Institute

Our Physicians

George M. Eid, MD, FACS
Tunc Aksehirli, MD, FACS
Brendan Marr, MD, FACS
Kellen Hayes, MD

Our Locations

West Penn Hospital

Mellon Pavilion
4815 Liberty Avenue, Suite 215
Pittsburgh, PA 15224
412-235-5900

Jefferson Hospital

565 Coal Valley Road
Jefferson Hills, PA 15025
412-469-7110

Peters Township Health + Wellness Pavilion

138 Gallery Drive
McMurray, PA 15317
412-235-5900

Saint Vincent Hospital

145 West 23 Street, Suite 303
Erie, PA 16502
814-452-7800

Wexford Health + Wellness Pavilion

12311 Perry Highway
Wexford, PA 15090
412-235-5900

Forbes Hospital

Professional Office
Building Two
2580 Haymaker Road, Suite 304
Monroeville, PA 15146
412-235-5900


AHN Outpatient Center-Westmoreland

118 Nature Park Road, Suite 300
Greensburg, PA 15601
412-235-5900

Visit our website



ahn.org/weightloss

Find us on 



www.facebook.com/BMI/atAHN