

ROUX-EN-Y GASTRIC BYPASS SURGERY

Nutrition Guide



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INTRODUCTION

Congratulations! You are preparing to have bariatric surgery!

Bariatric surgery is only a tool for weight loss. During this class you will learn about the lifestyle changes that you will need to make in order to be successful in your goals for weight loss.

Why is nutrition important?

Nutrition is very important after surgery. You will only be able to eat small amounts of food. Therefore, you will need to focus on providing your body with the best nutrition that you can in very small portions.

What you eat will affect:

- How quickly you recover.
- How much energy you have.
- The rate at which you lose weight.
- How well-nourished you are.
- Your risk of complications, including:
 - Not having enough of certain nutrients (nutrient deficiencies).
 - Dehydration.
 - Ulcers.
 - Nausea and vomiting.

Bariatric surgery is a tool.

It is one of many tools to help you succeed with weight loss and improve your health! Surgery does not work on its own, you will also need to:

- Reduce the amount of food you eat (dietary intake).
- Increase your physical activity.

Health benefits:

- Improved blood sugar control if you have:
 - Metabolic syndrome
 - Prediabetes
 - Type 2 diabetes
- Improved movement.
- Increase in fertility:
 - Please note: Pregnancy is not recommended for 18 months after surgery. It puts you and the baby at high risk.
- Decreased pressure in joints.
- Improved self-esteem.
- Improved overall health.
- Reduction in amount or number of medicines needed.

Key points after bariatric surgery:

- Follow **diet guidelines** outlined in your book.
- **Drink** enough fluid.
- **Exercise** daily.
- Take **vitamin supplements** multiple times a day, every day **for the rest of your life**.



OVERVIEW OF YOUR SURGERY

Roux-en-Y gastric bypass surgery:

The Roux-en-Y gastric bypass is the “gold standard” for the surgical treatment of obesity. Our center uses a laparoscopic technique. This means the surgeon makes 5 small incisions in the belly and then passes a camera and other surgical instruments through these incisions. This way, the surgery can be done without making a large incision. This is helpful because it:

- Shortens the time spent in the hospital. Most patients leave after 2 days.
- Decreases pain after the surgery.
- Lowers the chance for wound infections.

Description of the procedure:

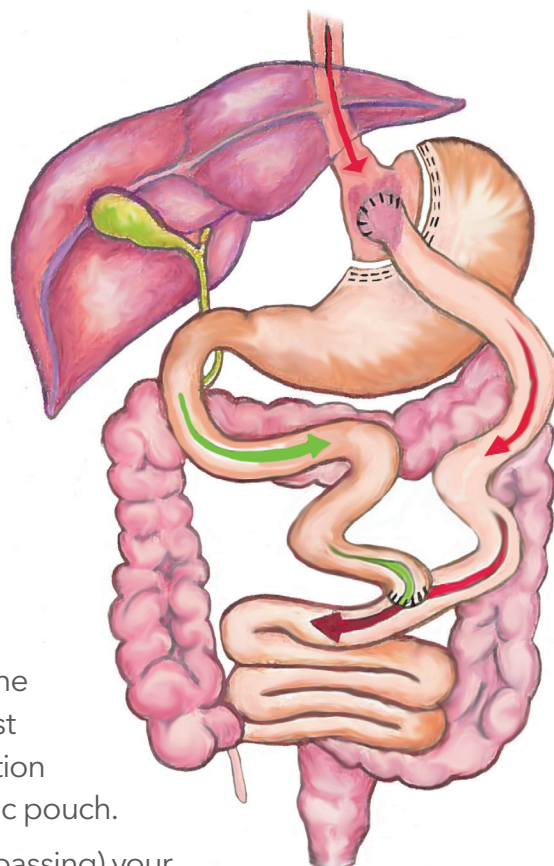
The surgery starts by making a 1- to 2-ounce gastric pouch, about the size of an egg. Next, the surgeon follows down the small intestine about a foot and splits it into 2 parts. The first portion is called the “biliopancreatic limb.” The second portion is called the “Roux limb.” This portion connects to the gastric pouch.

Food travels from the pouch to the Roux limb, skipping (bypassing) your “old” stomach and the first part of your small intestine. Finally, the Roux limb and the bypassed section of the small intestine are connected to create a Y-shaped junction, or connection. The “old” or remnant stomach keeps producing the needed juices for digestion. These juices, along with other enzymes and bile, flow through the bypassed intestine to combine with food at the biliopancreatic limb. Digestion and absorption occur from this “Y” point forward.

How does surgery work?

The Roux-en-Y gastric bypass produces weight loss in 3 ways:

- Restriction: The stomach volume is much smaller after surgery. The stomach can only hold about 2 ounces or 60 ml. The normal stomach can hold about 2,000 ml (2 liters).
- Malabsorption: After surgery, about 100 centimeters of bowel are no longer used for digestion (bypassed). This area no longer absorbs calories, macronutrients and vitamins. This is why it is important for you to take vitamin supplements every day after surgery. We track your nutritional status with yearly blood tests.



- Behavioral: About 70% of patients have “dumping syndrome” after surgery. Symptoms of dumping syndrome include:

- Stomach cramping
- Nausea
- Diarrhea
- Sweating

Increased heart rate after eating high-sugar foods (or sometimes fatty foods) is another symptom. This is actually a good outcome, as this often serves as negative reinforcement. Patients learn to avoid eating these foods.

Results:

Most studies show that patients lose an average of 60% to 70% of their excess body weight in the first year after surgery. They also keep the weight off after several years of follow up. Weight loss usually evens out between 18 and 24 months.

Many patients with diabetes will no longer need diabetic medicine after the surgery, if weight loss is maintained.

Nutrition-related side effects and complications:

If you follow the diet we recommend closely, you will avoid possible side effects and complications that may happen after your surgery. These side effects include:

Dumping syndrome:

The contents of the small pouch travel into your small intestine quickly (or are “dumped”). Common symptoms include:

- Stomach cramps
- Nausea
- Sweating
- Diarrhea
- Vomiting
- Fast heart rate
- Shakiness

About 70% of patients who have gastric bypass will have dumping syndrome. Dumping syndrome occurs when a patient:

- Eats foods or drinks beverages too high in sugar.
- Eats foods high in fat.
- Drinks beverages with meals.

Nausea and vomiting:

This occurs for a variety of reasons. Ways to avoid these symptoms include:

- Follow the diet guidelines.
- Eat each meal over 20 to 30 minutes.
- Take small bites that are the size of a peanut or raisin.
- Chew each bite to baby food consistency.

Diarrhea and constipation:

This can happen from drastic changes in your diet. It is important to drink enough fluids (64 ounces daily) to avoid dehydration. Your doctor, nurse practitioner or dietitian may recommend medicines or fiber supplements to help with these problems.

Dehydration:

You will need to drink very slowly after surgery. An 8-ounce glass of water will take an hour to drink. The fact that you have to drink so slowly will put you at risk of dehydration, so you must sip liquids throughout the day.

**YOU
WILL NEED
TO DRINK VERY
SLOWLY AFTER
SURGERY.**



PREPARING FOR SURGERY

There are many important things that you can do before your surgery to be well-prepared, including:

- Attend support groups to gain knowledge and meet with patients who have had surgery.
- Continue to keep a food diary and look for trends that you can change. Bring your food diary with you to your next clinic visit so we can review it with you.
- Remove beverages that contain calories from your diet. This includes soda, juice, smoothies, vitaminwater, flavored coffee and alcohol. Be sure to read labels. Beverages must have no more than 5 calories per 8 oz.
- Remove carbonated beverages from your diet.
- Remove caffeine from your diet.
- Lower the amount of sugar you eat by limiting candy, cake, cookies and other desserts.
- Lower the amount of fat you eat by limiting fried foods, fast foods, chips, avocado, butter, margarine, salad dressing and oil.
- Limit the amount of low-fiber carbohydrates you eat, such as: breads, pastries, pasta, rice and candy.
- Collect the dishes that you will use after surgery. For example, find a small bowl that holds $\frac{1}{4}$ cup of food, a small spoon (the size of a baby spoon), and a small plate (a bread plate works well). Begin using them for meals.
- Start exercising for 30 minutes every day. Start slowly and work up as needed.
- Drink 64 ounces of water every day. Carry a water bottle everywhere you go. Practice sipping very slowly.
- Eat slowly. Take 1 bite every 2 minutes (use a timer). Meals should take about 30 minutes.
- Chew your food well. Food should be the consistency of baby food before you swallow.
- Start reading food labels. See the label reading section for more information.
- **Begin making changes now.**

Mindful eating:

Mindful eating is about making the time to focus on when, what and how we are eating, and improving your relationship with food.

How to start:

Set aside time to practice mindful eating at 1 meal each day. Then, at 2 meals and then at 3 meals. Practice with your support team. Over time, mindful eating will become a part of your everyday routine. Some tips to practice mindful eating:

- **Sit down and breathe:** Inhale and exhale a few times. Let yourself relax and focus your attention on the present.
- **Understand your emotions:** Become aware of your feelings and emotions at the present time. Is your hunger due to physical hunger? Are emotions causing you to feel “head hunger”? Are you eating out of habit? Answer these questions honestly to understand what is going on within and what you might do instead of eating.
- **Be aware of your surroundings:** Take a look around you. Remove any distractions. These include time constraints, stressful conversations, noise, people, etc. Focus on yourself and the moment.
- **Really look at your food:** Use your senses to experience the food without physically eating it. How does it look? How does it smell? What is the texture like? Are you feeling any strong emotions connected to this food?
- **Study the process of eating:** Use your senses to study your food. Pay attention to the size of the bite and how it feels and tastes in your mouth. Notice the texture. Pay attention to your chewing. Try to keep the food between your teeth so you don’t swallow right away. You decide when to swallow when you’re ready. Savor the flavor.
- **Reflect on your eating experience:** How did that feel? Did you feel rushed or frustrated, or more relaxed? Did you enjoy eating? Was your body in control? Were you able to feel when you were content?



Food journal:

The benefit of keeping a food journal is that it gives you a better idea of:

- What you are eating.
- How much you are eating and drinking.
- Why you may be eating.
- How much you exercise.
- What may be triggering you to:
 - Eat (head hunger or physical hunger).
 - Skip meals.
 - Skip exercise.



WHAT MAY
BE TRIGGERING
YOU TO EAT?

Examples of online food journals or apps:

- baritastic.com
- myfitnesspal.com
- calorieking.com

Goal setting:

Good, appropriate goals follow these SMART guidelines:

- **S**pecific: Make goals as exact as possible (who, what, where, when).
- **M**asurable: How much? How long? How often?
- **A**ttainable: The goal needs to be something you can achieve.
- **R**elevant: Set a goal you are interested in working on at this time.
- **T**ime-oriented: Gives a target date.

Timeout!

Take a moment to write out a goal of your own.

Specific: Who, what, where, when.	
How will you measure it?	
Is this attainable ?	
Why is it important to you to accomplish this?	
When will you reassess this goal or achieve it?	



BASIC NUTRITION

Healthy nutrition after weight-loss surgery.

With limited space in your new stomach, it is important to prioritize what is essential.

Protein:

Protein has many functions, including:

- Build and repair tissue
- Energy
- Enzymes, hormones
- Water balance
- Nutrient use
- Muscle contraction
- Blood clotting
- Immune function
- Muscle sparing

Good sources of protein:

- | | |
|----------------------|---------------------|
| • Beef | • Milk |
| • Pork | • Beans and lentils |
| • Chicken and turkey | • Soy and tofu |
| • Fish | • Cheese |
| • Eggs | • Protein shakes |

Eat
protein
first.

Eat
vegetables
second.

Eat high-fiber
carbohydrates
third.

Carbohydrates:

Carbohydrate function: The main function of carbohydrates is to give you energy. All forms of carbohydrate you eat are turned into sugar during digestion.

Low-carbohydrate foods: Most of the carbohydrates you eat should be non-starchy vegetables.

High-fiber carbohydrates: When it is time to add back high-fiber carbohydrate foods to your diet, try the following:

- Whole-wheat or whole-grain bread
- Quinoa
- Beans
- Lentils
- Corn and peas
- Whole-wheat pasta
- Brown or wild rice
- Whole-wheat tortilla
- Fruit

Low-fiber carbohydrates—limit these foods:

- White bread
- Potatoes
- White pasta
- White rice
- Flour tortillas
- Chips
- Crackers
- Pretzels

Sugars—avoid:

- Soda/pop
- Candy
- Desserts: cakes, cookies, pastries
- Natural sugars: honey, maple syrup, agave, Sugar in the Raw

Fat:

Fat has many functions, including:

- Provides fuel (energy).
- Provides essential fats for hormones, structure.
- Helps with fat-soluble vitamin absorption (vitamins A, K, E and D).

Foods high in fat—eat less often:

- Avocado
- Olive oil
- Peanuts and nuts
- Egg yolks
- Salad dressing
- Olives
- Butter
- Whole-fat dairy
- Mayonnaise



LABEL READING

What to look for on a label.

Serving size:

Keep in mind that your pouch will only hold ¼ to ½ cup of food (per meal) right after your surgery. Compare the portion size on the label to what you will actually be able to eat.

Calories:

When reviewing calories, remember that the number of calories depends on the serving size. Be aware a container may seem like 1 serving but the label may show that it is 2 servings.

Total fat:

For every 100 calories, there should be no more than 3 grams of fat. Limit your intake of saturated fat, trans fat and cholesterol.

Sodium:

A heart-healthy diet recommends less than 2,400 milligrams of sodium per day.

There is no need to count sodium intake. Read labels to get an idea of what foods are high in sodium.

Protein:

Choose foods rich in protein with at least 20 grams of protein per serving. Keep your daily protein goal of 60 to 80 grams in mind. Consider adding a protein powder to foods that don't have enough protein.

Nutrition Facts			
Serving Size		1 Shake (11 fl oz) (325 mL)	
Servings Per Container		1	
Amount Per Serving			
Calories 160		Calories from Fat 25	
% Daily Value *			
Total Fat 3g		5%	
Saturated Fat 1g		5%	
Trans Fat 0g			
Cholesterol 25mg		8%	
Sodium 270mg		11%	
Potassium 310mg		9%	
Total Carbohydrate 4g		1%	
Dietary Fiber 1g		4%	
Sugars 1g			
Protein 30g		60%	
Vitamin A 25%	•	Vitamin C 25%	
Calcium 50%	•	Iron 25%	
Vitamin D 25%	•	Vitamin E 25%	
Vitamin K 25%	•	Thiamin 25%	
Riboflavin 25%	•	Niacin 25%	
Vitamin B6 25%	•	Folate 25%	
Vitamin B12 25%	•	Biotin 25%	
Pantothenic Acid 25%	•	Phosphorus 50%	
Iodine 25%	•	Magnesium 25%	
Zinc 25%	•	Selenium 25%	
Copper 25%	•	Manganese 25%	
Chromium 25%	•	Molybdenum 25%	
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your caloric needs.			
	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Potassium		3,500mg	3,500mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g
Calories per gram:			
Fat	9	Carbohydrate 4	Protein 4



Total carbohydrates:

Dietary fiber—Once you start adding starches to your diet, choose those with at least **3 grams of fiber**.

Sugar—Avoid added sugar. Read ingredient lists carefully! Added sugars usually have names that end in “-ose” such as sucrose.

Foods should have no more than 3 grams of sugar per serving.

The exception to this rule is dairy products (which have lactose) and fruits (which have fructose). Dairy and fruit may contain up to 15 grams of sugar per serving.

Sugars alcohols—Often have names that end in “-ol” such as xylitol. These sugars may cause stomach upset if eaten in large amounts. Include sugar alcohols in the total sugar per serving (total should be no more than 3 grams per serving).

Ingredient list:

Ingredients are listed in order by weight. So the higher it is on the list, the more of that ingredient is in the product!

Watch carefully for added sugars (ending in -ose).

Example: high-fructose corn syrup.

Exception: sucralose (Splenda) is a no-calorie sweetener.

Sugars disguised—avoid the following:

- Agave nectar
- Barley malt
- Brown rice syrup
- Brown sugar
- Cane sugar
- Confectioners’ sugar
- Corn sweeteners
- Corn syrup
- Crystalline fructose
- Dextrose
- Fructose
- Fruit juice concentrates
- Glucose
- High-fructose corn syrup
- Honey
- Invert sugar
- Isomalt
- Lactose
- Maltose
- Maple syrup
- Molasses
- Sorghum
- Sucrose
- Sugar
- Sugar in the Raw
- Turbinado

Nutrition Facts			
Serving Size		1 Shake (11 fl oz) (325 mL)	
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Amount Per Serving			
Calories 160		Calories from Fat 25	
		% Daily Value *	
Total Fat 3g		5%	
Saturated Fat 1g		5%	
Trans Fat 0g			
Cholesterol 25mg		8%	
Sodium 270mg		11%	
Potassium 310mg		9%	
Total Carbohydrate 4g		1%	
Dietary Fiber 1g		4%	
Sugars 1g			
Protein 30g		60%	
Vitamin A 25%	•	Vitamin C 25%	
Calcium 50%	•	Iron 25%	
Vitamin D 25%	•	Vitamin E 25%	
Vitamin K 25%	•	Thiamin 25%	
Riboflavin 25%	•	Niacin 25%	
Vitamin B6 25%	•	Folate 25%	
Vitamin B12 25%	•	Biotin 25%	
Pantothenic Acid 25%	•	Phosphorus 50%	
Iodine 25%	•	Magnesium 25%	
Zinc 25%	•	Selenium 25%	
Copper 25%	•	Manganese 25%	
Chromium 25%	•	Molybdenum 25%	
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your caloric needs.			
		Calories:	2,000 2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Potassium		3,500mg	3,500mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g
Calories per gram:			
Fat	9	Carbohydrate 4	Protein 4

Key points for your nutrition goals:

- **Protein:** Top priority, so eat these foods first.
Choose foods with at least 20 grams of protein.
- **Vegetables:** Fill up on these foods second.
- **Carbohydrates and fruit:** Fill up on these only after protein and vegetables, and remember:
 - Avoid foods with more than 3 grams of sugar (except for milk or fruit-based foods).
 - Aim for 3 grams of fiber or more per serving.
- **Fat:** Limit to 3 grams of fat per 100 calories.

Zero-calorie sweeteners that are appropriate to use in moderation:

- Stevia (Truvia, Pure Via)
- Aspartame (NutraSweet, Equal)
- Acesulfame potassium (Sunett, Sweet One)
- Saccharin (Sweet'N Low)
- Sucralose (Splenda)
- Monkfruit

Sugar alcohols—use in moderation:

- Erythritol
- Lactitol
- Mannitol
- Sorbitol
- Xylitol





DIET GUIDELINES

How to eat after surgery.

While you are getting more familiar with your new stomach, you may find some foods don't go down as easily as they did before surgery. Each stomach adjusts a little bit differently, and some are slower than others. Practice these habits now to help you make a comfortable transition throughout the dietary stages after surgery:

- **Eat slowly:** Plan 20 to 30 minutes for each meal so you can feel when you are full.
- **Chew your food to baby food consistency.**
- **Take pea-sized bites:** This will help you eat slower. Some patients use baby spoons to help with this.
- **Use small bowls or plates:** Using small bowls and plates will prevent over-serving yourself more food than you will be able to eat.

It is strongly suggested that you measure portions right after surgery, and from time to time thereafter. This helps to ensure you are getting enough nutrition to be healthy.

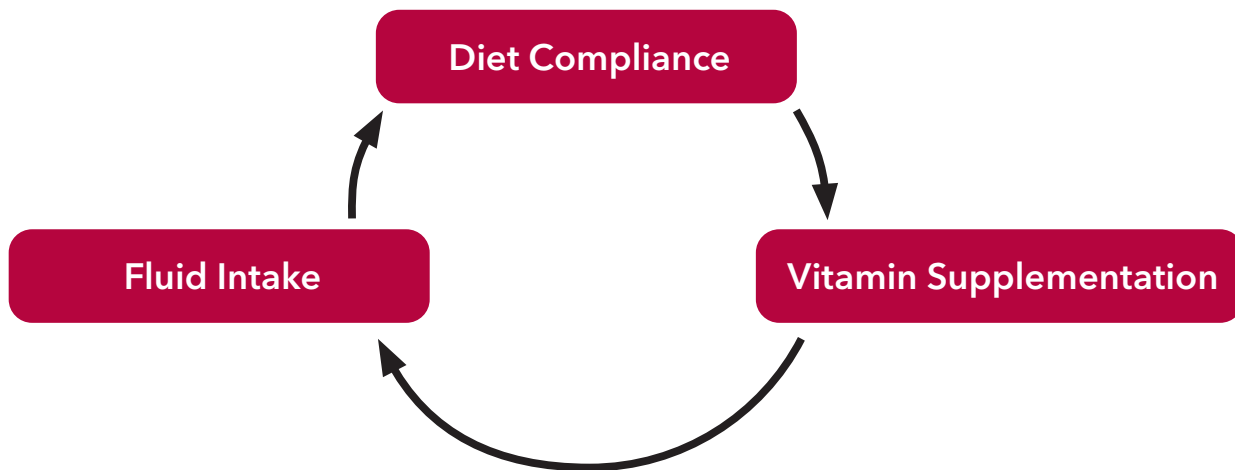
- **Prioritize your protein:** Eating protein first will make sure protein requirements are met and will reduce the chance that other, less nutritious foods are consumed.
- **Avoid snacking and grazing:** Snacking is the easiest way for patients to gain weight back.
- **Make sure food is moist:** Dry foods are often not handled well. It is important to use low-sugar and low-fat condiments, sauces, marinades, etc. to ensure food is moist enough.
- **Do not drink with your meals:** It is best to hold off on all drinks for 15 minutes before eating and 60 minutes after.

Poor eating habits may cause:

- Discomfort
- Pain
- Burping or gas
- Nausea
- Vomiting
- Food sticking
- Less weight loss
- Weight regain
- Dumping syndrome—severe nausea, shaking, diarrhea
- Frothing or sliming of mucus

Diet guidelines after bariatric surgery.

After surgery you will move through the different stages of the bariatric diet. No matter where you are in the process, you will need to focus on the following:



Fluid intake:

You are at risk for dehydration after surgery because you are limited in how much and how quickly you can drink, since your stomach is smaller.

Goal: 64 ounces each day or more.

Sip slowly: Start off drinking 8 ounces an hour. Increase as tolerated.

Avoid eating and drinking together:

- Stop drinking 15 minutes before meals.
- Avoid drinking while eating.
- Avoid drinking for 60 minutes after eating.

Good choices—5 calories or less per 8 ounces:

- Water
- Broth
- Hint water
- POWERADE Zero
- Crystal Light
- MiO liquid water enhancer
- Wyler's Light Lemonade
- Minute Maid Light Lemonade
- Gatorade Zero (not Gatorade or G2)
- Vitaminwater Zero

Beverages to avoid:

- Coffee (decaf or regular) for first 6 weeks.
- Caffeinated drinks—nothing caffeinated for 6 weeks.
- Alcohol.
- Carbonated beverages (soda).
- Juice.
- Smoothies.

Signs of dehydration:

- Dry, sticky mouth
- Headache
- Dizziness
- Lightheadedness
- Trouble passing a bowel movement (constipation)
- Fatigue
- Dark, concentrated urine
- Thirst

Alcohol:

You may find that you can drink less than you used to or that you may become intoxicated or feel intoxicated faster. You may find that you can drink less than you used to or that you may feel the effects of alcohol faster than before. Your blood alcohol level can stay high for longer, as well. This increases your risk of getting a DUI from drinking more than your body can handle. It is best to avoid alcohol for at least the first year after surgery.

The risk of alcohol addiction increases after surgery even if you did not struggle with this before surgery. It is important to follow up with the clinic and a licensed behavioral health clinician if you notice your habits around drinking have changed.

Alcoholic beverages are very high in calories and can lead to weight gain. Mixers including juices, soda and other syrups may cause dumping syndrome.

Type of drink	Portion size (fluid ounces)	Calories	Sugar (grams)
Light beer	12 oz.	100	0 to 1
Regular beer	12 oz.	150	0 to 1
Red wine	5 oz.	120	1
White wine	5 oz.	120	1
Bourbon	1.5 oz.	100	0
Brandy	1.5 oz.	100	0
Gin	1.5 oz.	100	0
Rum	1.5 oz.	100	0
Tequila	1.5 oz.	100	0
Vodka	1.5 oz.	100	0
Whiskey	1.5 oz.	100	0
Gin and tonic	8 oz.	150 to 200	15 to 20
Rum and Coke	8 oz.	150 to 200	15 to 20
Bloody Mary	8 oz.	100 to 150	4
Screwdriver	8 oz.	200	15 to 20
Margarita	8 oz.	350 to 400	10 to 20
Mojito	8 oz.	300 to 350	10 to 20

Note: Mixed drinks are based on a 1.5 ounce liquor pour.

Diet advancement:

After surgery, your diet will move through 5 stages. It is very important that you follow the diet advancement schedule closely. These guidelines are for your safety.

CAUTION

Advancing your diet too quickly
can cause complications!
Follow guidelines closely!

Stage 1–Clear liquid bariatric diet	Day 1 after surgery.
Stage 2–Full liquid bariatric diet	Day 2 after surgery (when home from hospital).
Stage 3–Pureed bariatric diet	Day 10 after surgery.
Stage 4–Soft bariatric diet	1 month after surgery.
Stage 5–Regular bariatric diet	6 weeks after surgery.



STAGE 1

Clear Liquid Bariatric Diet

Start: Day 1 after surgery.

End: Day 2 after surgery.

Diet instructions: Sip sugar-free, carbonation-free and caffeine-free liquids.

Goals:

- Fluid: 2 ounces every 15 minutes, sipping slowly all day.
- Protein: No goal.

Tips:

- You will likely have gas pain from your procedure. It is often felt in the shoulder area. Walking is the best way to help with this.
- You may have some nausea. We will give you anti-nausea medicines for this.



STAGE 2

Full Liquid Bariatric Diet

Start: Day 2 after surgery.

End: 10 days from surgery.

Diet instructions: Slowly sip fluids and protein shakes throughout the day. Protein intake and hydration are top priorities!

Goals:

- Protein: 60 to 80 grams per day.
- Fluids: 64 ounces or more a day.
- Take your vitamins (see vitamin section).

What to drink:

- Protein shakes
- Water
- Broth
- Hint water
- Powerade Zero, Gatorade Zero, or Vitaminwater Zero

- Crystal Light
- MiO liquid water enhancer
- Wyler's Light Lemonade
- Minute Maid Zero Sugar Lemonade
- Sugar-free gelatin
- Sugar-free popsicles
- V8 Splash Diet

Tips:

- Take small sips all day long.
- Avoid full-sugar beverages, popsicles and gelatin.
- Track protein and fluid intake.
- Mix unflavored protein powder with low-protein beverages or broth.

Protein shakes:

How to choose a ready-to-drink protein shake:

- At least 20 to 30 grams of protein per serving.
- Less than 3 grams of sugar per serving.
- Less than 200 calories per serving.

How to choose a protein powder:

(Mix with low-fat milk, unsweetened almond milk, soy milk or water.)

- At least 20 grams of protein per serving.
- Less than 3 grams of sugar per serving.
- Less than 200 calories per serving.

Tips for getting in enough protein:

- Mix unflavored protein powder in:
 - Soup broth
 - Strained, low-fat cream soup
- Try clear protein supplements:
 - Syntrax Nectar protein supplement, fruit-flavored (mixed with water)
 - UNJURY Medical Quality Protein chicken soup flavor or unflavored
 - Isopure Zero Carb protein supplement (ready-to-drink)
 - Protein2O
 - Premier Protein Clear
 - Gatorade Zero with Protein
- Use a variety of products so you don't get bored.

Product (shakes)	Serving size	Calories	Protein (grams)	Sugar (grams)
EAS AdvantEDGE Carb Control	1 carton = 11 fluid oz.	100	17	0
Fairlife Nutrition Plan	1 carton = 11 fluid oz.	150	30	2
Isopure Zero Carb	1 bottle = 20 fluid oz.	160	40	0
Isopure Zero Carb Plus	1 bottle = 8 fluid oz.	60	15	0
Muscle Milk Zero	1 bottle = 12 fluid oz.	100	20	0
Muscle Milk Genuine	1 bottle = 14 fluid oz.	160	25	0
Premier Protein	1 carton = 11 fluid oz.	160	30	1
Premier Protein Clear	1 bottle = 16.9 fluid oz.	90	20	1
Pure Protein	1 can = 11 fluid oz.	170	35	1
SlimFast Advanced Nutrition	1 bottle = 11 fluid oz.	180	20	1
BOOST Max	1 bottle = 11 fluid oz.	160	30	1
Ensure Max	1 bottle = 11 fluid oz.	150	30	1

Protein powders:

Product (powders)	Serving size	Calories	Protein (grams)	Sugar (grams)
GNC Total Lean 25	2 scoops (52 g)	200	25	3
Isopure Zero Carb Protein	1 scoop (29 g)	110	25	0
Muscle Milk 100% Whey	1 scoops (34 g)	130	25	2
Optimum Nutrition Platinum Hydrowhey	1 scoop (41 g)	140	30	Less than 1
Optimum Nutrition 100% Gold Standard Whey	1 scoop (31 g)	120	24	1
Premier Protein	2 scoop (39 g)	150	30	1
Pure Protein	1 scoop (42 g)	160	25	2
Quest Protein Powders	1 scoop (28 g)	100 to 120	23 to 26	0
Syntrax Nectar fruit flavors	1 scoop (28 g)	100	23	0
Vega Essentials	1 scoop (35 g)	140	20	1
Vega Sport	1 scoop (41 g)	150	30	1
UNJURY	1 scoop (27 g)	100	21	0 to 3

Sample menu:

Time	Meal or beverage
8 a.m.	11.5 oz. Fairlife Nutrition Plan Protein Shake (30 grams of protein)
9 a.m.	4 oz. water
10 a.m.	8 oz. water
11 a.m.	8 oz. water
Noon	Carnation Breakfast Essentials Light Start mixed with 8 oz. of 1% milk (13 grams of protein)
1 p.m.	4 oz. water
2 p.m.	8 oz. water
3 p.m.	8 oz. water
4 p.m.	8 oz. water
5 p.m.	11 oz. of Premier Protein shake (30 grams of protein)
6 p.m.	4 oz. water
7 p.m.	8 oz. water
8 p.m.	8 oz. water

Total protein: 73 grams

Total fluid: 68 ounces



STAGE 3

Pureed Bariatric Diet

Start: 10 days from surgery.

End: 28 days from surgery (4 weeks).

Diet instructions: Eat 3 meals a day, each one of ¼-cup size. Use a blender to make the texture like baby food. Chew to baby food consistency before swallowing.

Goals:

- 60 to 80 grams of protein per day.
- 64 ounces of fluid.
- Take your vitamins (see vitamin section).

What to eat:

- Low-fat cottage cheese
- Greek-style yogurt (no chunks of fruit or seeds, no more than 3 grams added sugar per serving)
- Scrambled eggs
- Stage 2 baby food (meat only)
- Refried beans
- Pureed: OK to add low-fat broth or gravy to moisten:

- Beef, chicken or turkey
- Whitefish (cod, haddock, tilapia)
- Canned chicken breast, mashed and moist
- Canned tuna fish in water, mashed
- Lentil soup
- Black bean soup
- Soft tofu

Tips:

- Measure out meals using ¼-cup measuring cup.
- Take pea-sized bites of food.
- Wait 2 minutes between bites.
- Avoid caffeine, carbonation and alcohol.
- Separate beverages and protein drinks from pureed foods:
 - Stop drinking 15 minutes before eating.
 - Wait 60 minutes after eating to drink again.
- Track your fluid and protein intake.
- Eat for 20 to 30 minutes, then stop to prevent grazing.

Sample menu:

Time	Food and beverage
8 a.m.	11 oz. Premier Protein shake (30 grams protein)
9:30 to 11:45 a.m.	16 oz. water (8 oz. per hour)
Noon to 12:30 p.m.	¼ cup Greek yogurt with 1 scoop protein powder mixed (26 grams protein)
1:30 to 4:45 p.m.	24 oz. water (8 oz. per hour)
5 p.m.	¼ cup (2 oz.) pureed chicken (14 grams protein)
6:30 to 9:30 p.m.	24 oz. water (8 oz. per hour)

Total protein: 70 grams of protein

Total fluid: 64 ounces





STAGE 4

Soft Bariatric Diet

Start: 28 days from surgery (4 weeks).

End: 42 days from surgery (6 weeks).

Diet instructions: Eat 3 meals a day, each one ¼-cup size. Foods should be soft enough to be cut with the side of a fork, and do not require a knife.

Goals:

- 60 to 80 grams of protein per day.
- 64 ounces of fluid.
- Take your vitamins (see vitamin section).

What to eat:

Protein foods:

- | | |
|--------------------------|---|
| • Greek yogurt | • Lean deli meat (turkey, chicken, ham, roast beef) |
| • Eggs/egg white | • Beans, lentils |
| • Low-fat cottage cheese | • Tofu |
| • Low-fat ricotta cheese | • Ground meat, turkey, chicken |
| • Fish, canned tuna | |
| • Low-fat cheese | |

Cooked vegetables:

- | | |
|---------------|---------------------------------|
| • Green beans | • Carrots |
| • Wax beans | • Zucchini |
| • Asparagus | • Summer squash |
| • Mushrooms | • Cauliflower (pureed or riced) |
| • Tomatoes | |
| • Beets | |

Tips:

- Measure out meals using ¼-cup measuring cup.
- Take pea-sized bites of food.
- Wait 2 minutes between bites.
- Avoid caffeine, carbonation and alcohol.
- Separate beverages and protein drinks from pureed foods:
 - Stop drinking 15 minutes before eating.
 - Wait 60 minutes after eating to drink again.
- Track your protein and fluid intake.

Moistening your food:

After surgery, patients often have complaints of foods being too dry or feeling that food is getting “stuck.” Below is a list of ways to moisten foods to try to prevent such problems:

- Broth (low-sodium)
- “Butter” sprays (Noncaloric)
- Low-sugar barbecue sauce
- Fresh citrus juice: lemon, orange, lime, grapefruit
- Cottage cheese (low-fat)
- Low-fat cream soups
- Gravy (low-fat)
- Greek yogurt (plain, nonfat)
- Low-sugar ketchup
- Mayonnaise (low-fat or light)
- Mustard
- Salad dressing (low-fat or light)
- Salsa
- Sour cream (low-fat or light)
- Soy sauce (low-sodium)
- Spaghetti sauce (low-sugar)
- Stewed tomatoes
- Tomato paste
- V8 juice

Meal ideas:

2 oz. canned tuna, water-packed 1 tablespoon plain Greek yogurt	2 cheese wedges (light Laughing Cow) 3 slices deli turkey breast
2 oz. tilapia fillet, seasoned with lemon pepper 1-2 teaspoons cooked green beans	¼ cup cottage cheese with cinnamon and nutmeg to taste
¼ cup fat-free refried beans 1-2 teaspoons low-fat grated cheddar cheese Hot sauce to taste	¼ cup Greek-style yogurt (Oikos Triple Zero) 1 tablespoon protein powder
2 oz. cooked ground turkey with taco seasoning 1-2 teaspoons of cooked tomatoes	2 oz. wild salmon fillet with sea salt, lemon 1-2 small steamed broccoli florets

Sample menu:

Time	Food and beverage
8 to 8:30 a.m.	¼ cup Greek-style yogurt with ½ scoop protein powder added (22 grams of protein)
9:30 to 10:45 a.m.	12 oz. water (about 8 oz. per hour)
10:45 to 11:45 a.m.	8 oz. Protein2O water (8 grams protein)
Noon to 12:30 p.m.	2 oz. tilapia fillet with lemon pepper 1 tablespoon green beans (14 grams of protein)
1:30 to 2:30 p.m.	8 oz. Premier Protein Clear (10 grams of protein)
2:30 to 4:45 p.m.	16 oz. water (about 8 oz. per hour)
5 to 5:30 p.m.	2 oz. thinly shaved roast beef 1 tablespoon soft, cooked carrots (14 grams of protein)
6:30 to 10 p.m.	24 oz. water (about 8 oz. per hour)

Total protein: 68 grams of protein

Total fluid: 68 ounces

Sample menu:

Time	Food and beverage
8 to 8:30 a.m.	1 hard-boiled egg (7 grams protein)
9:30 to 11:45 a.m.	18 oz. water
Noon to 12:30 p.m.	¼ cup ricotta cheese mixed with ½ scoop protein powder, 1 tablespoon of low-sugar marinara sauce (15 grams protein)
1:30 to 2:30 p.m.	8 oz. water
2:30 to 3:30 p.m.	1 scoop Optimum Nutrition 100% Whey Powder mixed with 8 oz. unsweetened almond milk (24 grams protein)
3:30 to 5:45 p.m.	18 oz. water
6 to 6:30 p.m.	2 oz. cooked ground turkey with 1 tablespoon salsa and 1 tablespoon low-fat cheese, melted (16 grams protein)
7:30 to 10:30 p.m.	24 oz. water

Total protein: 62 grams

Total fluid: 68 ounces



STAGE 5

Regular Bariatric Diet

Start: 42 days from surgery (6 weeks).

End: Goal weight.

Diet instructions: Eat 3 meals a day.

Goals:

- 60 to 80 grams protein per day.
- 64 ounces of fluid.
- Take your vitamins (see vitamin section).

Tips:

- Measure out portions for meals using measuring cups. Portions should be $\frac{1}{4}$ cup total. Portion size will increase around 6 months post-op.
- Take pea-sized bites of foods.
- Wait 2 minutes between bites.
- Avoid caffeine, carbonation and alcohol.
- Separate beverages and protein drinks from foods:
 - Stop drinking 15 minutes before eating.
 - Wait 60 minutes after eating to drink again.

- Track everything you eat and drink.

What to eat:

Protein foods:

- Chicken
- Turkey
- Lean beef: eye of round, top round, tip round, sirloin, top loin, tenderloin
- Lean pork: tenderloin, loin chop, sirloin
- Fish: salmon, tuna, cod, haddock, tilapia, etc.
- Lean deli meat: turkey, chicken, roast beef, ham
- Shellfish: shrimp, scallops, lobster
- Eggs, egg white or Egg Beaters
- Low-fat or fat-free Greek yogurt
- Low-fat or fat-free cottage cheese
- Beans, lentils
- Tofu
- Protein shakes, protein water or protein powder

Non-starchy vegetables:

- Asparagus
- Broccoli
- Cabbage
- Cauliflower
- Peppers
- Turnips
- Tomatoes
- Onions
- Garlic
- Celery
- Spinach
- Green beans
- Kale, collard greens
- Mushrooms
- Carrots
- Cucumber
- Zucchini or summer squash
- Spaghetti squash
- Beets
- Brussels sprouts

High-fiber carbohydrates (around 6 months post-op, if space allows): These items should have at least 3 g of fiber per serving:

- Fruit
- Brown or wild rice
- Whole-wheat pasta
- Quinoa
- Whole-grain bread
- Oatmeal
- Whole-wheat tortilla
- Corn
- Peas

Low-fiber carbohydrates (once weight is stable, in small quantities):

- Baked goods
- White bread
- White pasta
- Flour tortillas
- Potatoes/sweet potatoes
- Chips
- Crackers
- Pretzels



Sample menu—6 weeks post-op:

Time	Food and beverage
8 to 8:30 a.m.	2 oz. Greek-style yogurt with 1 tablespoon of protein powder (12 grams of protein)
9:30 to 11:45 a.m.	17 oz. Protein2O water (15 grams of protein)
Noon to 12:30 p.m.	¼ cup fat-free cottage cheese with 1 teaspoon ranch seasoning and 1 to 2 baby carrots (6 grams protein)
1:30 to 2:30 p.m.	8 oz. water
2:30 to 3:30 p.m.	1 scoop Optimum Nutrition 100% Whey Powder mixed with 8 oz. unsweetened almond milk (25 grams protein)
3:30 to 5:45 p.m.	18 oz. water
6 to 6:30 p.m.	1-2 oz. ground turkey meatball with 1 teaspoon Parmesan and 1 tablespoon zucchini (14 grams of protein)
7:30 to 10:30 p.m.	24 oz. water

Total protein: 72 grams

Total fluid: 67 ounces

Sample menu—3 months post-op:

Time	Food and beverage
8 to 9:30 a.m.	11 oz. Premier Protein Shake (30 grams of protein)
9:30 to 11:45 a.m.	18 oz. water
Noon to 12:30 p.m.	¼ can of tuna in water with 1 tablespoon fat-free mayo 3 cucumber slices (7 grams of protein)
1:30 to 2:30 p.m.	8 oz. water
2:30 to 4:30 p.m.	17 oz. Gatorade Zero with Protein (10 grams of protein)
4:30 to 5:45 p.m.	8 oz. water
6 to 6:30 p.m.	2-3 oz. pot roast with a few bites of cooked carrots (14 grams of protein)
7:30 to 10:30 p.m.	24 oz. water

Total protein: 61 grams

Total fluid: 75 ounces

Sample menu—6 months post-op:

Time	Food and beverage
8 to 8:30 a.m.	2 oz. turkey sausage patty with ¼ cup cooked peppers and onion (11 grams of protein)
9:30 to 11:45 a.m.	18 oz. water
Noon to 12:30 p.m.	2 oz. chicken breast ¼ cup salad greens with grape tomatoes 1 teaspoon light balsamic dressing (14 grams of protein)
1:30 to 2:30 p.m.	8 oz. water
2:30 to 4:30 p.m.	17 oz. Protein2O water (15 grams of protein)
4:30 to 5:45 p.m.	10 oz. water
6 to 6:30 p.m.	3 oz. cooked shrimp with 1 tablespoon cocktail sauce (21 grams of protein)
7:30 to 10:30 p.m.	24 oz. water

Total protein: 61 grams

Total fluid: 77 ounces

Sample menu—1 year post-op:

Time	Food and beverage
8 to 8:30 a.m.	¾ cup cottage cheese with ¼ cup pineapple (18 grams of protein)
9:30 to 11:45 a.m.	18 oz. water
Noon to 12:30 p.m.	3 oz. deli turkey with 1 slice low-fat cheese 1 slice avocado (28 grams of protein)
1:30 to 5:45 p.m.	34 oz. water
6 to 6:30 p.m.	3 oz. cooked ground turkey burger ¼ cup roasted potato ¼ cup green beans (21 grams of protein)
7:30 to 10:30 p.m.	16 oz. water

Total protein: 67 grams

Total fluid: 68 ounces

LEARNING ABOUT YOUR NEW STOMACH

Weight-loss surgery is a learning process. There is no right or wrong experience along the way. All stomachs react differently.

How to know when you are full.

Listen to your stomach and eat mindfully. After surgery, you may not feel hungry, but your stomach will make it very clear when it is full. You may start to feel uncomfortable, and at times the feeling may happen very quickly and without warning. This is when eating slowly becomes important. Take your time while eating so you can feel the restriction that surgery provides. If you eat too quickly or drink too soon after eating, you may become sick.

Is it possible to stretch your stomach or pouch?

Naturally over the course of a year, the pouch will stretch. This is expected and is helpful because it lets you eat more nutritious foods. Just remember, the biggest factors in gaining weight back include:

- Overeating
- Snacking
- Grazing
- Drinking calorie-containing beverages

If you think you are having trouble, be sure to contact your team for help.

Tips for dealing with food cravings.

Food cravings come from your brain, not your belly. These are short-term things that are often affected by:

- Mood
- Emotion
- Environment
- Stress
- Poor sleep
- Boredom
- Old habits
- Others

Dealing with food cravings is hard but will become easier with practice. Here are some ideas to help:

- **Remove the trigger.** If it's a commercial, change the channel, turn off the TV, etc.
- **Get busy.** Engage in some activity whether it's knitting, calling a friend, journaling or cleaning. This will distract you from what triggered your craving.
- **Exercise regularly.** Exercise changes your response to food in your brain, so it is easier to practice portion control. Exercise also improves stress management and sleep. This will help prevent cravings for starches and sweets in the future.

VITAMIN AND MINERAL SUPPLEMENTS

Vitamin and mineral supplementation is key after bariatric surgery and will be for the **rest of your life**. If you do not keep up with your supplements and regular lab testing, you will be at risk for severe and sometimes permanent damage. These include, but are not limited to:

- Blindness, cataracts
- Weakening bone loss
- Memory and concentration issues
- Confusion
- Hair loss
- Skin breakdown, rash
- Heart damage
- Blood not having enough red blood cells (anemia)
- Sores in mouth, tongue
- Impaired immune function
- Seizures
- Problems with muscle contraction
- Heart arrhythmia
- Death

Labs:

Labs will need to be drawn every 6 months for the first year and then yearly thereafter. If you have a vitamin or mineral deficiency, you may need to come in for testing more often. If you chose not to have labs drawn here, we ask that you get yearly lab testing at your primary care doctor's office. The following labs need to be checked at least once a year for life:

- CMP
- CBC
- Iron
- Ferritin
- Liver function enzymes
- Vitamin B12
- Folic acid
- Vitamin D
- PTH
- Thiamin
- TSH
- Hemoglobin A1C

It is recommended to have a bone density scan (DEXA) before surgery and every 2 years thereafter for bypass patients. Please talk to your primary care doctor about testing as most insurance providers have strict guidelines on testing for bone density.



Taking your vitamin and mineral supplements—the first month.

Start: Day home from the hospital.

End: Day 28 (4 weeks) from surgery.

Instructions: Take a chewable multivitamin twice a day that will provide at least 30 mg of iron per day.

Tips:

- Chewable vitamins are required for the first 4 weeks after surgery.
- Take multivitamin with food or protein shake, not on an empty stomach.
- **Avoid gummy multivitamins.**
- **Avoid vitamin patches.**
- **Avoid vitamin pods.**

Recommendations:

- Equate Children's Multivitamin Complete (2 per day)
- Flintstones Complete Multivitamin (2 per day)
- Centrum Kids Chewable (2 per day)
- Target brand Kids' Multivitamin Complete (2 per day)
- Opurity Bypass and Sleeve Optimized (unjury.com) (1 per day)
- Celebrate Multi-Complete 36 (celebratevitamins.com) (2 per day)
- Bariatric Advantage Ultra Multi with iron

Taking your vitamin and mineral supplements—after the first month.

Start: Day 28 (4 weeks) from surgery.

End: Never.

What vitamins and minerals to take:

Supplement	Dose
Adult multivitamin with iron (Not 50+ or men's/women's formula.)	Take 2 tablets daily.
B-50 complex (For first year only.)	Take 1 tablet daily.
Calcium citrate	Take 1,200 to 1,500 mg a day, split into 2 to 3 doses, 2 to 3 hours apart. Separate from multivitamin.
Vitamin B12 (Taken under the tongue.)	2,500 to 3,500 mcg weekly.
Vitamin D	3,000 IU per day. Add up the vitamin D in the multivitamin and calcium. If there is less than 3,000 IU, we suggest taking other supplements as well.

How should I take my vitamins?

Morning	Multivitamin with iron + B-50 complex + sublingual vitamin B12
Afternoon	600 mg calcium citrate + vitamin D
Evening	Multivitamin with iron
Night	600 mg calcium citrate

SHOPPING LISTS

Shop for your supplies before surgery.

Beverage and liquid options available at all diet stages:

- Decaf herbal tea
- Sugar-free popsicles
- Sugar-free gelatin
- Crystal Light
- Diet juice (5 calories or less)
- Gatorade Zero, Powerade Zero or Vitaminwater Zero
- Isopure Zero
- Protein waters
- Broth

Full liquid diet:

- Unflavored protein powder
- Protein supplements such as protein shakes, protein waters or protein powders
- Chewable multivitamin

Pureed diet:

- Eggs
- Greek yogurt
- Stage 2 baby food (meat)
- Small curd cottage cheese
- Refried beans
- Tofu
- Low-fat or fat-free ricotta
- Canned chicken, pureed
- Canned tuna, pureed
- Fat-free mayo or Miracle Whip
- Black bean soup or lentil soup, pureed

Soft diet:

- All foods from prior stages
- Lean deli meat
- Ground meat, chicken, turkey
- Beans or lentils
- Stew
- Chili
- Vegetables
- Seafood

Vitamins (refer to vitamin supplement section for dosages):

- Multivitamin with iron
- Calcium citrate with vitamin D
- Vitamin B12 (taken under the tongue)
- Vitamin D
- B-50 complex





DINING OUT

Eating out can still be a part of your life after surgery. It is important to keep following the habits you have developed. This should be used as a chance to enjoy food and company. It should not be the chance to overindulge in high-fat, high-calorie foods. Here are some guidelines to help you stick to eating healthfully away from home:

- Choose restaurants you know.
- Check online for the restaurant's menu. This can help you plan what you will eat before getting there.
- Choose high-protein foods from the appetizer menu for your main course.
- Split a meal with a friend.
- Do not try new foods when eating out.
- Keep eating proteins first and vegetables next.
- Avoid fried foods, cream and sugary sauces.
- Avoid buffets. They can lead to overeating.
- Take leftovers home.
- When your meal is brought out, leave a small portion on your plate. Put the rest in a to-go container.
- Ask the waiter to take away the bread or the chip basket.
- Always be an informed consumer. Ask the server what ingredients are in a sauce, etc.
- Ask the server to remove your water glass so that you are not tempted to drink while you eat.

Restaurant type:	What to pick:
Fast-food chains	Chili; salads with chicken; hamburger or chicken breast minus bread or bun.
Chinese	Steamed options with chicken, beef, pork or fish; pass on the rice; sauces on the side.
Mexican	Fajitas; chili; hold the guacamole, sour cream, rice and tortillas.
Seafood	Choose baked and steamed options over fried.
Italian	Seafood, chicken, beef, meatballs (avoid pasta and bread) Be aware that marinara sauces may be high in sugar.

Vacation or holiday:

- Do your research. Find out what restaurants will be around where you are going.
- Plan ahead. Bring comfortable shoes so you can exercise as often as possible.
- If you want to “treat yourself” be sure you are in control. Don’t let 1 meal ruin your entire day or week.
- Enjoy your trip. Go on tours, speak with people, be adventurous, have fun! Do the activities you couldn’t do before surgery.
- Enjoy your new body! Go shopping and “treat” yourself with new shoes, clothes, watch, etc.
- Enjoy the people you are with. Catch up, talk, listen.
- Stay busy with things other than food.
- Bring portable coolers or lunch bags to pack your own food. Vacations and holidays tend to be spur-of-the-moment. You can be spontaneous—but also a little prepared!

Parties and gatherings:

- Be sure you are around people who support your weight loss. Be aware that there are some people who may deceive you or try to force you to eat or drink something you don’t feel comfortable with.
- If you are going to a potluck or barbecue, bring a dish that works for you!
- Wear dressier, form-fitting clothes wherever you go. You will not only have a slimmer body to show off, but you will be less likely to eat more if you are in tighter clothing.
- Plan ahead. Look up where you are going to see what your options are. Call ahead to the destination to ask about any other dishes or drinks they may have that work for the “new” you.
- Suggest going somewhere outside instead of going to a restaurant for food, drinks or desserts. Meet outside somewhere and go for a walk. Catching up with friends, family and coworkers is much more pleasant when you can interact with the outdoors.
 - This may be even more helpful if it is a first date or someone you may not know very well. The surroundings can be used as a distraction from eating or your smaller portions.



EXERCISE

The benefits of exercise are many, including:

- Improved function of your heart and lungs.
- Increased energy.
- Maintain lean muscle and bones.
- Boost mood.
- Reduced risk of Alzheimer's disease.
- Better sleep.
- Improved body image.
- Better metabolism.
- Weight loss and maintenance.
- Lower risk of heart disease.
- Reduced risk of some forms of cancer.

Goal: 150 to 250 minutes of moderate-intensity exercise each week.

Exercise goals are in addition to normal activities during the day and should be more intense than normal moving around. Your heart rate should be higher than normal.

How to exercise:

Warm-up: You should warm up for 5 to 10 minutes at a low effort. This means you should be able to comfortably have a conversation or sing a song.

Exercise: 30 to 60 minutes of daily exercise from the following categories:

- **Aerobic training:** Includes running, elliptical training, swimming, cycling, dancing, aerobics, sports, walking, rowing, upper arm bike, sitting aerobics, etc.
- **Resistance training:** Includes weight training using body weight, machine weights, tubes or bands, yoga, Pilates, free weights or pulleys.
- **Neuromuscular training:** Includes exercises that work on your balance and agility, such as yoga, Pilates and calisthenics.

Cool down: 5 to 10 minutes at low to moderate effort after exercise. This slowly brings the body back to rest and lowers body temperature, heart rate and blood pressure.

Stretching: Stretch for 5 to 10 minutes after exercise to allow your muscles to return to their proper length and prevent injuries.

Tips for success with exercise:

Get approval from a doctor, especially if you:

- Suffer from a chronic disease like diabetes.
- Have high blood pressure, high cholesterol or heart disease.
- Have other concerns about exercise.

If you have current physical limits:

- Ask for a referral for physical therapy.
- Water aerobics: Check out local pools in your area.
- Chair aerobics or exercises (Sit and Be Fit, chairdancing.com).
- Recumbent biking.

Stop exercising right away and get medical help if you:

- Have pain, tightness, or pressure in your chest, neck, shoulder or arm.
- Feel dizzy, nauseous.
- Break out in a cold sweat.
- Have muscle cramps.
- Are very short of breath.
- Feel an increase in pain in your joints, feet, ankles or legs.

Write out a detailed contract with yourself and log your activity:

You are much more likely to follow through with a well-thought-out exercise plan and a **SMART** goal!

- What kind of exercise: _____
- When will you exercise: _____
- How often will you exercise: _____
- For how long will you exercise: _____
- When do you want to start exercising: _____

Get a “workout buddy” for support and to help stay on track!

When you are accountable to others, you are more likely to follow through with what you promised. Also surround yourself with others who also engage in healthy behaviors, like exercise.

Explore new activities:

- Join a group class at your gym.
- Join a Meetup group.
- Get a free workout video from YouTube.

Hydrate:

- Carry water with you and take small sips often.
- Use calorie-free beverages with electrolytes on hot days, or workouts where you are sweating.

Invest in good equipment:

- Wear clothing made with moisture-wicking materials to reduce sweat.
- Use anti-chaffing products to avoid skin irritation.
- Use appropriate shoes for the activity to prevent injury.

For schedule challenges:

Break up your workout into 3, 10-minute intervals instead of doing 30 minutes at a time.



COMMON SIDE EFFECTS AND SOLUTIONS

Lactose intolerance:

Sometimes after surgery, patients struggle with digesting dairy foods due to a type of sugar called lactose. Foods high in lactose include milk, cottage cheese and yogurt (not Greek-style). Lactose intolerance is a common cause of gas, bloating, cramping and diarrhea. To avoid these issues, try to:

- Switch to Lactaid brand milk and cottage cheese.
- Take Lactaid tablets before eating dairy foods.
- Switch to dairy-free protein shakes (ask your dietitian).
- Take a probiotic regularly.

Dumping syndrome:

Dumping syndrome occurs when food passes too quickly from the stomach into the small intestine. This results in nausea, vomiting, weakness, sweating, increased heart rate, lightheadedness and diarrhea. Some tips to avoid dumping syndrome:

- Avoid foods that are high in carbohydrate and sugar.
- Eat more protein and avoid drinking with meals.
- Avoid foods that are too hot or too cold.
- Lie down and rest.

Nausea and vomiting:

Nausea and vomiting can occur during the first few months after weight-loss surgery; some helpful tips to remember:

- Avoid eating too quickly.
- Chew food well.
- Avoid eating too much at one sitting. Meals should be ¼-cup total for the first 6 months.
- Make sure foods are moist.
- Return to a previous stage in the process that you can tolerate.
- Avoid drinking with or too soon after meals.
- Avoid lying down too soon after a meal.
- Avoid foods that are poorly tolerated.
- Drink plenty of non-carbonated, non-caffeinated beverages.
- Avoid foods that may cause dumping syndrome.
- Limit or avoid foods with lactose.
- Log what foods you eat, how much, and how quickly you eat when nausea or vomiting occur.
- Contact the surgical weight loss staff if nausea or vomiting persists for several days after trying the above at 720.848.2070.

Frothing or “foamies:”

Frothing occurs when mucous is produced to help break down food as the new pouch heals. For some patients, the mucous backs up into the esophagus and causes frothy, clear vomiting. To treat, drink warm water with decaf tea or lemon, 30 minutes before a meal.

Food intolerances:

Intolerances, or not handling something well after surgery, vary from patient to patient. Foods that are not tolerated well right after surgery may be fine later on. Remember:

- If you are not tolerating the food, avoid it for now.
- Reintroduce the food in small amounts about a month later.
- Record foods you have tried.
- Document symptoms.
- Be patient with your new pouch.
- Contact your doctor or dietitian.

Diarrhea:

Diarrhea occurs often in the early weeks after weight-loss surgery. This is normal and often only lasts about 1 to 2 weeks. Diarrhea is not a normal, long-term side effect for weight-loss surgery. Tips to avoid diarrhea:

- Eat slowly and chew food well.
- Do not drink fluids with food.
- Avoid high-sugar, high-fat and spicy foods.
- Avoid sugar-free products with sugar alcohols.
- Avoid caffeinated beverages.
- Avoid foods with lactose.

Constipation:

Trouble passing a bowel movement (constipation) may occur from not enough fluids, less dietary fiber and inactivity following surgery and can be avoided by:

- Drinking plenty of non-carbonated, non-caffeinated beverages (64 ounces per day).
- Increase physical activity when possible.
- Once you have advanced to the regular diet, increase your fiber intake through fruits, vegetables and whole grains.
- Try stool softeners or discuss a bowel regimen with your team.

Hair loss:

During periods of rapid weight loss and protein deficiency, hair follicles may become inactivated. This can cause hair to fall out. Hair loss often starts around 3 months after surgery and improves around 9 months after surgery. During this time:

- Be sure to meet protein goals set by your dietitian.
- Take your vitamin supplements as recommended by your dietitian daily.

Muscle wasting:

After surgery, your body is not getting enough calories to maintain weight. Protein from muscle tissue becomes one of the body's main sources of energy. This can lead to a decline in muscle tissue and a decrease in resting metabolic rate (the number of calories you burn at rest). It is important to:

- Exercise if possible. Do moderate to vigorous physical activity daily.
- Add weight-bearing exercise and upper body strength training 2 to 3 times per week.
- Be sure to get enough protein from your diet to meet the protein goal set by your dietitian.

Protein deficiency:

Protein is the most essential nutrient after surgery to stay well-nourished after surgery. The body does not store extra protein so you must get it through your diet. When planning meals, keep in mind:

- Eat protein-rich foods to meet your protein goal.
- Eat protein foods first at each meal.
- Avoid drinking 15 minutes before eating to allow room for protein foods.
- Track your protein intake and aim for 60-80 grams of protein daily.

Vitamin and mineral deficiency:

After weight-loss surgery patients are not often able to eat enough to supply complete nutrition through their diet, so remember to:

- Take vitamin supplements daily for your entire life per dietitian's recommendations.
Refer to the guide provided in this packet.

Stomach bloating:

- Avoid overeating.
- Avoid sugar alcohols.
- Keep food records to review with dietitian.
- Avoid carbonated beverages.
- Eat slowly.
- Exercise if possible.

Dizziness, headache and lightheadedness:

- Drink at least 64 ounces per day of non-carbonated, non-caffeinated beverages with electrolytes (Propel, Powerade Zero).
- Do not skip meals.



Slow weight loss:

- Keep a food record to review with your dietitian.
- Exercise daily.
- Avoid snacking and calorie-containing beverages.

Extreme hunger:

- Keep a food record to review with your dietitian.
- Eat protein foods first to help meet the protein goal set by your dietitian.

Excessive weight loss:

- Keep a food record to review with your dietitian.
- Discuss weight loss with your doctor.
- Make an appointment to be seen in clinic.

Bad breath:

- Take caution with gum, as it can plug the stomach if swallowed.
- Use mints with caution. Most have sugar alcohols which may not be tolerated well.
- Drink fruit-flavored beverages (Crystal Light, Fruit2O).
- Meet fluid requirements of at least 64 ounces per day.



MEDICINES TO AVOID

List of medicines/other products that should NOT be taken:

- **Alcohol:** Alcohol absorbs in your body faster after surgery. This means it is stronger. It also is high in calories and will not help you lose weight.
- **Antibiotics** (Augmentin, amoxicillin): The pill form of these antibiotics may cause inflammation of the esophagus (esophagitis). Use the liquid form if these medicines are needed. Azithromycin (Z-Pak, Zithromax) is an antibiotic which may not work as well after bariatric surgery due to changes in absorption.
- **Antiretroviral or HIV medicine:** Doses may need to be adjusted due to changes in absorption. Please consult your provider if you are on these medicines.
- **Aspirin:** If it is needed for heart issues, a chewable baby aspirin is OK. Discuss with your provider before taking.
- **Bisphosphonates:** Binosto or Fosamax (alendronate), Boniva (ibandronate), Reclast (zoledronate), Actonel (risedronate), Didronel (etidronate).
- **Caffeine:** Avoid more than 20 mg per day.
- **Corticosteroids (prednisone):** Can cause ulcers and poor healing. Double-check with your provider that this is needed for treatment as it can cause problems after bariatric surgery.
- **Extended-release medicines:** Look to see if your pill bottle says extended- or sustained-release (SR, ER or XR) on it. These medicines need to be changed to immediate-release (IR) formulations or they will not work as well or could cause poisoning.
- **Nonsteroidal anti-inflammatory medications (NSAIDs):** (Advil, ibuprofen, Aleve, Naprosyn, naproxen, Vioxx, Celebrex, celecoxib, Mobic, meloxicam, etodolac, Indocin, indomethacin, nabumetone, Daypro, oxaprozin, Feldene, piroxicam, salsalate, sulindac, tolmetin). These medicines can cause ulcers, which are hard to diagnose and treat after bariatric surgery. This can be a serious side effect of these medicines.

*If you are taking any cough or cold medicine, please check with the pharmacist to make sure it does not have an NSAID in it.
- **Opiates:** They are stronger due to increased absorption and can cause harm.
- **Potassium:** Avoid the pill form and use a solution instead.
- **Sugar:** Avoid liquid medicines with more than 4 grams of sugar.
- **Ziprasidone:** This medicine requires a high number of calories when taking it for it to work.

Reminders:

- All pills must be crushed, and capsules opened for the first 30 days. This is because it is hard for pills to pass through your new digestive system. Please consult the “Do Not Crush” list to see if you have medicines you cannot crush and need to be changed to a different one.
ismp.org/recommendations/do-not-crush
- Always check with the pharmacist at your drug store before starting a new medicine, even if it is over the counter. This is to make sure it will not cause you harm after having bariatric surgery.
- When taking vitamins, make sure they are chewable or liquid form for 30 days.
- Medicines may be absorbed differently after bariatric surgery. Antidepressants may work differently due to this. Please check with your provider to see if you need a higher dose of medicine to have the same effect.
- As you lose weight, insulin and other diabetes medicines will need to be adjusted. High blood pressure and cholesterol medicine may also need to be adjusted. Please be sure to follow up with your primary care physician, endocrinologist or cardiologist about adjusting medicines as you lose weight after surgery.
- Consult with your gynecologist or primary care physician if using birth control. Other methods to prevent pregnancy may be needed due to changes in absorption of birth control medications.
- Ask your providers if you are on any medicines that follow dosing based on weight.
- If possible, avoid medicines that cause weight gain.
- For 4 weeks after surgery, it is suggested that patients get their post-surgery medicines in liquid or crushable form to avoid choking.
- Vitamin supplementation may be adjusted based on lab results at follow-up visits.



ONLINE RESOURCES

There are many online resources. Below, we listed a few of them for you. Any time you access a website, be sure to know who is providing the information. Some of the information may be from experts in the field and some may be from patients. If the suggestions vary from what we have told you, please ask before making big changes to your diet or lifestyle.

- **American Society for Metabolic and Bariatric Surgery**
asmbs.org
- **BMI calculator**
nhlbi.nih.gov/health/educational/lose_wt/BMI/bmicalc.htm
- **Baritastic**
baritastic.com
- **Calorie King**
calorieking.com
- **Eating Disorder Hope**
eatingdisorderhope.com
- **Food Addicts in Recovery Anonymous**
foodaddicts.org
- **Healthy Dining Finder**
healthydiningfinder.com
- **MyPlate** (general healthy eating resources)
choosemyplate.gov
- **Obesity Help**
obesityhelp.com
- **Obesity Action Coalition**
obesityaction.org
- **Overeaters Anonymous**
oa.org
- **UCHealth Surgical Weight Loss Center**
uchealth.org/services/weight-and-metabolism/surgical-weight-loss

Learn more at [uchealth.org](https://www.uchealth.org).

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uchealth