

#### Diet Guidelines for Sleeve Gastrectomy and Gastric Bypass

Dietitian Phone Line: (617) 732-8884

Email us through Patient Gateway: www.patientgateway.org



Brigham and Women's Center for Metabolic and Bariatric Surgery 75 Francis Street Boston, Massachusetts 02115 www.brighamandwomens.org/WeightLossSurgery Tel: (617) 732-8500 We designed this book to help you and your family and friends understand the diet that you will follow after surgery. You need to commit to healthy lifestyle habits for the rest of your life to be successful with surgery. It is still possible for people to overeat and gain weight after bariatric surgery. We hope the guidelines in this book and the support from our team will help you to have a healthy and happy life after surgery.

In this book, you will find:  Skills for Success		
Physical Activity	In this book, you will find:	
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You will meet with a dietitian several times before and after surgery.

You can have extra appointments if desired.

#### **Typical Dietitian Appointment Schedule**

3efor	e Surgery:
	Nutrition Class
	Nutrition Assessment
	Nutrition Follow-Ups as needed
4fter	Surgery
	2-3 weeks
	l 6-8 weeks
	l 3 months
	l 6 months
	l 9 months
	l 1 year
	After 1 year, meet with dietitian twice per year (every 6 months) forever

#### **Skills for Success**

Bariatric surgery is only a tool. You must commit to a healthy lifestyle (diet, exercise, behaviors) to stay successful forever.

#### **Fluids**

Choose sugar-free fluids.

Sip fluids throughout the day.

Know the signs of dehydration: headaches, dizziness, dark urine Avoid alcohol after surgery. Speak with the CMBS team about your individual situation.

#### **Eating Behaviors**

Take bites the size of a dime.

Chew, chew, chew; puree the food with your teeth. Wait between bites to see how your stomach feels. Aim for 30-40 minute meals.

#### **Make Eating Mindful**

Avoid grazing, nibbling, and picking throughout the day.

Have regularly scheduled eating events.

When you're eating, just eat! Avoid distractions.

#### **Separate Fluids from Solids**

Wait to drink fluids until 30 minutes after you eat solid food. It's okay to drink before eating.

Why? Eating and drinking at the same time can overfill your stomach and make you feel sick.

#### Plan Ahead

Life is busy now and it will be busy after surgery too.

You will make healthier choices when you plan ahead.

Pack food and fluids for busy days.

Bring your own food to social events if you aren't sure what will be served.

#### **Stay Accountable**

Track yourself: food and beverage choices, exercise, and weight are good places to start.

Keep your appointments with the CMBS team.

Let your support team know how they can help you stay on track.

#### **Physical Activity**

Most people need to exercise at least 250 minutes (over 4 hours) each week to maintain weight loss. It takes time to build up to that amount of exercise but we are here to help you. Even if you don't reach that level of exercise, any amount of exercise will benefit your body.

Here are some ideas for increasing your physical activity before and after surgery.\*

#### ✓ Walk more!

- Walk the dog; go for a walk with a friend, a neighbor, or your children.
- o Get up to talk to co-workers instead of sending an email or making a phone call.
- Wear a pedometer to track your steps and challenge yourself to increase steps over time.
- Take a "walking break" at work instead of a coffee break.
- o If you take the bus or subway, get off a few stops early and walk.
- o Park your car farther away at shopping centers and walk through the parking lot.
- Take the stairs instead of the elevators.
- o During foul weather, get exercise by walking in the mall.
- ✓ Make exercise a family event. Go for a walk together after dinner or on the weekend.
- ✓ Keep exercise clothes in your car to make sure you will go to the gym.
- ✓ To decrease impact on your joints, try pool exercises, water aerobics, or a stationary bicycle.
- ✓ Turn up the music and dance.
- ✓ Do yard work, gardening, or household chores that require brisk movement.
- ✓ Check out exercise videos On Demand, online, or at the library.
- ✓ Try chair exercises.

#### What does 250 minutes of exercise look like in a week?

Day	Type of Exercise	Duration
Sunday	Hiked with family	60 minutes
Monday	Aerobics exercise video	30 minutes
Tuesday	10-minute walk; hand weights	10 minutes
Wednesday	Zumba class	45 minutes
Thursday	3 10-minute walks	30 minutes
Friday	Elliptical; weight machines	45 minutes
Saturday	Yardwork	30 minutes
Total		250 minutes

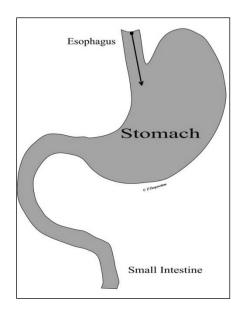
#### What are the benefits of exercise besides weight control?

Improves moodBoosts energy

- Keeps body strong
- Promotes better sleep
- Improves bone health
- Improves heart health

<sup>\*</sup> Remember to check with your primary care doctor or surgeon before starting any strenuous exercise.

#### The Surgeries

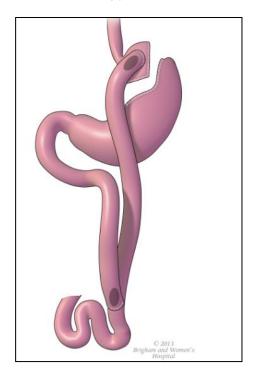


There are two main ways that gastric bypass and sleeve gastrectomy will help you to lose weight and become healthier.

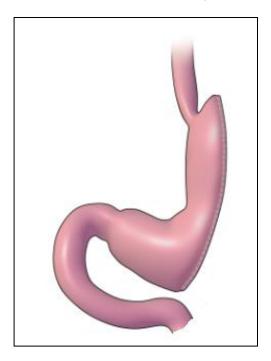
- Restriction Your smaller stomach will limit how much food you can eat in one sitting. The restriction will decrease over time so you will need to rely on healthy lifestyle habits.
- Metabolic Changes Stomach hormones and some other signals in your body change after surgery. This can make people feel less hungry and can help with health conditions like diabetes. Your body can adapt to this change in gut hormones over time and you will probably feel hunger again.

You are usually in the hospital for 2 nights after gastric bypass or sleeve gastrectomy.

#### **Gastric Bypass**



#### Sleeve Gastrectomy



#### **Dumping Syndrome**

About half of gastric bypass patients will have dumping syndrome. Dumping syndrome is the body's reaction to eating and drinking foods and beverages with added sugar, such as cakes, cookies, candies, juice, and soda. The foods or beverages pass too quickly through the stomach pouch. This causes symptoms such as nausea, cramping, cold sweats, dizziness, extreme tiredness, and an increase in heart rate. Usually the symptoms will stop in 1-2 hours. Lying down can help patients to recover. Eating high-fat foods, such as fried foods, causes similar symptoms. Sleeve gastrectomy patients usually do not have dumping syndrome. However, all patients are encouraged to avoid foods and beverages with added sugar and high-fat foods.

#### **Getting Ready for Surgery**

#### What to Buy Before Surgery

Measuring Cups & Spoons



Food Scale



Sugar-free Fluids



Protein Shakes\*



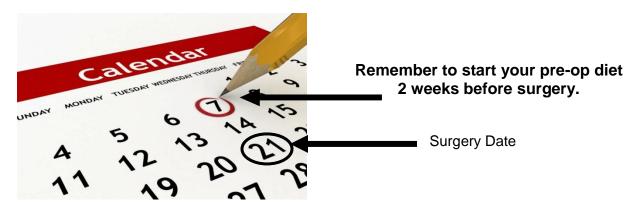
Vitamin & Mineral Supplements\*



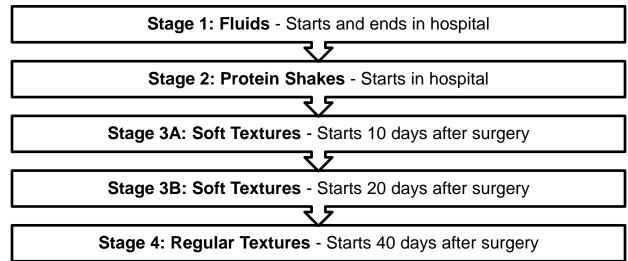
\* Choose protein shakes and vitamin & mineral supplements from the shopping guides.

#### **Pre-Op Diet**

You will receive a pre-op diet on a separate sheet of paper.



#### **Post-Op Diet Stages**



#### Post-Op Diet Stage 1: Fluids

Starts: In the hospital on either the day of surgery or the first day after surgery

Lasts for: Up to 1 day

What to do: Sip sugar-free, non-carbonated, non-caffeinated fluids throughout the day.

#### Examples of fluids:

- Water
- Crystal Light, MiO, or other sugar-free flavorings
- Decaf coffee and tea
- Broth
- Fruit-flavored water (Hint Water or homemade by floating fruit in water)
- Sugar-free sports drinks (PowerAde Zero, Propel)
  - o G2 only recommended with severe diarrhea and vomiting

You will be in the hospital for this entire diet stage and you will be given the right types of fluids. The nurses will guide you to sip enough fluids during the day.

#### **Stage 1 Key Points:**

- Fluids are the number one priority.
- You will only be able to sip small amounts of fluid at one time. Pace yourself throughout the day.
- Gulping and chugging fluids will cause stomach pain.
- Avoid caffeine until Stage 4. It irritates the stomach.
- Carbonation can cause gas, belching, bloating, and stomach discomfort. Some people never tolerate carbonation after surgery.
- You can use artificial sweeteners such as Equal (Aspartame), Sweet & Low (Saccharin), Splenda (Sucralose), PureVia and Truvia (Stevia), and Nectresse (monk fruit).

#### Post-Op Diet Stage 2: Protein Shakes

**Starts:** In the hospital on either the first or second day after surgery

Lasts for: 7-8 days

**What to do:** Sip fluids throughout the day. Drink a protein shake 3-4 times per day. If you haven't finished the protein shake after one hour, stop drinking it. Fluids are still the number one priority.

Fluid Goal: 48-64 ounces (fluid guidelines listed in stage 1). This does not include your protein shakes.

**Protein Goal:** 60-70 grams (number of shakes per day depends on brand of protein shake)

It is normal to not reach your fluid and protein goals right away. Just do your best each day.

#### **Protein Shake Nutrition Guidelines**

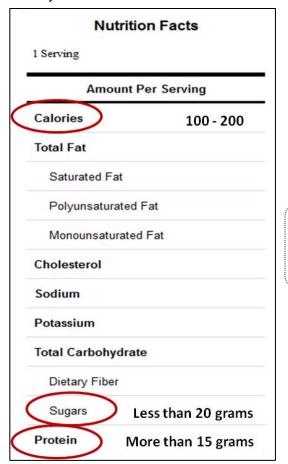
Each protein shake\* should have:

- at least 15 grams of protein
- 100-200 calories
- less than 20 grams of sugar

If you are using a protein powder, remember to add the protein, calories, and sugar from the liquid you are mixing with. For example, 8 ounces of skim milk has 8 grams protein, 90 calories, and 12 grams sugar.

You will receive a protein shake shopping guide to help you find shakes that meet our guidelines.

Here is where you'll find these numbers on a nutrition fact label:



Using a powder? Remember to add the protein, calories, and sugar from the liquid you are mixing with.

<sup>\*</sup> A typical protein shake is 8-11 ounces.

#### Post-Op Diet Stage 2: Protein Shakes (continued)

#### Lactose Intolerance:

Lactose is the natural sugar in milk. Sometimes after surgery, your body cannot digest this sugar. This causes problems like nausea, cramping, bloating, gas, and/or diarrhea. It is not normal to have these problems from drinking protein shakes. You might be experiencing lactose intolerance.

#### What if you are experiencing lactose intolerance?

- Stop drinking protein shakes for 24 hours. Keep drinking your fluids.
- When you start drinking protein shakes again, avoid any shakes that have milk, "whey protein concentrate", or "milk protein concentrate" in the ingredient list.
- Instead, choose a protein shake that is made from "whey protein **isolate**". The lactose has been filtered out of whey protein isolate.
- Call your dietitian if you need help finding lactose-free options.

#### **Having Trouble with Protein Shakes?**

#### If the taste is bothering you:

- Flavor your shakes with extracts. You can find extracts in the baking aisle at the grocery store. You only need a couple drops so go slowly and taste-test along the way.
- Flavor your shakes with sugar-free syrups. You can find sugar-free syrups at the grocery store but you will have more flavor options if you order online. Common brands are Da Vinci Gourmet and Torani.
- Flavor your shakes with spices such as cinnamon, ginger, nutmeg, and cloves.
- Flavor your shakes with unsweetened cocoa powder or powdered peanut butter; limit to 1 tablespoon total per day.

#### If the smell is bothering you:

- Drink your shake from a bottle with a small opening.
- Drink your shake using a straw.
- Drink your shake at a very cold temperature.

#### If you need to chew:

- Pour your protein shake into a popsicle or ice cube tray and freeze to make a protein popsicle.
- Semi-freeze your protein shake or blend it with ice to make a slushy.

#### Stage 2 Key Points:

- Be aware of signs of dehydration: sudden lightheadedness or dizziness, headaches, and urine color becoming darker throughout the day.
- If you're struggling to tolerate fluids, it's helpful to try different temperatures for your beverages. Some patients prefer ice cold while others prefer room temperature or warmer beverages.
- Keep track of the amount of protein shakes and fluids that you are drinking using a food log. If you cannot finish a protein shake in a one hour period, you can save it for the next meal time.
- Changes in bowel regimens, such as less frequent movements or loose stools, are normal. If you are having discomfort, contact the bariatric team.

#### Post-Op Diet Stage 3A: Soft Textures

Starts: 10 days after your surgery date

Lasts for: 10 days

What to Do: Keep sipping fluids. Have a protein shake or eat a protein food 5-6 times per day. Start taking

vitamin and mineral supplements. Please only eat the foods listed on this page.

Fluid Goal: 48-64 ounces (fluid guidelines listed in stage 1)

Protein Goal: 60-70 grams/day

#### **Protein Foods**

Fat-free Greek yogurt (without fruit chunks)

- Low-fat cottage cheese
- Part-skim ricotta cheese
- Tofu
- Vegetarian refried beans (black or pinto)
- Protein shakes and powders

#### **How to Count Grams of Protein**

This is a container of Greek yogurt. The label says that the serving size is 1 container. That means that each container has 15 grams of protein. If you eat the whole container, you have eaten 15 grams of protein. However, with your small stomach, you might not have room for the whole container. If you eat half of the container, you have eaten 7.5 grams of protein.

	<b>Nutrition Facts</b>	Amount/Serving	%DV*	Amount/Serving	%DV*
1	Serving Size	Total Fat Og	0%	Potassium 210mg	6%
\	1 Container (150g)	Saturated Fat Og	0%	Total Carbohydrate 15g	5%
	Calories 120	Trans Fat Og		Dietary Fiber 6g	24%
	Calories from Fat 0	Cholesterol <5mg	1%	Sugars 7g	
	*Percent Daily Values (DV) are	Sodium 65mg	3%	Protein 15g	30%
	based on a 2,000 calorie diet.	Vitamin A 2% • Vitamin	C 0%•0	Calcium 15% • Iron 0% • Vitamin	D 15%

#### **Non-Protein Foods**

- Fat-free or light yogurt
- Unsweetened applesauce
- Canned pears or peaches (in own juice or water; no syrup)
- Soft banana
- · Oatmeal, cream of wheat, or farina
- Sugar-free pudding

Try to meet the protein goal of 60-70 grams each day before choosing foods from this list. Your stomach will fill up quickly from the protein foods so you might not have room for the non-protein foods.

#### Post-Op Diet Stage 3A: Soft Textures (continued)

#### **Stage 3A Key Points:**

- Remember to drink plenty of fluids to stay hydrated and wait 30 minutes after eating to drink.
- You might not feel hungry but you still need to eat regularly.
- Space out your eating events evenly during the day.
- Some days you won't have room for everything. Do your best to reach your protein goal.
- Stop eating or drinking at the first sign of fullness. Sometimes this can feel like chest pressure or nausea.
- Keep track of how much you are eating and drinking using a food log.

#### **Example Day**

<b>Eating Event</b>	Food or Protein Shake	Grams Protein
1	Macho Mocha Cinnamon Shake*	28 grams
2	1/4 cup Key Lime Custard*	7 grams
3	1.5 ounces pan-fried tofu	6 grams
4	1/4 cup oatmeal cooked with 1/4 scoop protein powder	7 grams
5	1/4 cup cottage cheese with chive	7 grams
6	1/4 cup Chocolate Almond Bliss with ricotta cheese*	7 grams
	Total	62 grams

<sup>\*</sup>Ask your dietitian for these recipes or find them on our website: www.brighamandwomens.org/cmbs

#### Post-Op Diet Stage 3A: Soft Textures (continued)

#### **Vitamin and Mineral Supplements:**

You will need to take vitamin and mineral supplements for the rest of your life after surgery. We recommend that you start with chewable or liquid supplements. Over time, if you are comfortable swallowing a 'petite' tablet or cutting a pill in half, you can swallow your supplements.

#### **Multivitamin with Minerals:**

- Take a 'complete' multivitamin(s) daily; dose will vary based on brand of multivitamin.
- Complete multivitamins contain iron, zinc, folic acid, and copper.
- Avoid gummy or soft chew multivitamins these don't have all of the right nutrients.
- Separate multivitamin(s) from calcium by at least 2 hours.

#### **Calcium Citrate with Vitamin D:**

- Take 1200-1500 mg of calcium citrate daily split into 2-3 doses.
- Your body can only absorb 600 mg of calcium at one time.
- Separate calcium doses by at least 4 hours.
- Separate calcium from multivitamins by at least 2 hours.
- If you have a lot of calcium in your diet from foods and beverages, your dietitian will help you adjust your supplement dose.

#### Vitamin B<sub>12</sub>:

- Take 350-500 micrograms vitamin B<sub>12</sub> daily in the form of a tablet or liquid.
- You can take vitamin B<sub>12</sub> at any time or with any other supplements.
- You can also get vitamin B12 in a nasal spray or injection.
- Your multivitamin might have enough vitamin B<sub>12</sub> in it. This will be listed on your shopping guide.

#### **Other Supplements:**

Some patients may need extra vitamins and minerals, such as iron, vitamin D, or B vitamins. We will check your vitamin and mineral levels regularly through lab tests and discuss extra supplements as needed.

# Here are two suggestions for separating your supplements: Multivitamin(s) + vitamin B12 Wait at least 2 hours Wait at least 2 hours Wait at least 4 hours

500 mg calcium

#### Post-Op Diet Stage 3B: Soft Textures

Starts: 20 days after your surgery date

**Lasts for:** At least 21 days / 3 weeks

Your stomach has not fully healed yet so you need to stay on Stage 3B for at least 3 weeks.

What to Do: Keep sipping fluids. Have a protein shake or eat a protein food 5-6 times per day. Keep taking

vitamin and mineral supplements. Please only eat the foods listed on this page and in previous

stages.

Fluid Goal: 48-64 ounces daily (fluid guidelines listed in stage 1)

Protein Goal: 60-70 grams/day

#### Food Choices in Stage 3B

#### **Protein Foods**

• Fat-free Greek yogurt (without fruit chunks)

- Low-fat cottage cheese
- Part-skim ricotta cheese
- Tofu
- Chicken or turkey (dark meat is fine)
- Fish (flaky fish like tuna, cod, haddock, salmon, and tilapia)
- Egg, egg whites, or egg beaters
- Soy-based veggie burger
- Beans and lentils
- Protein shakes or powders

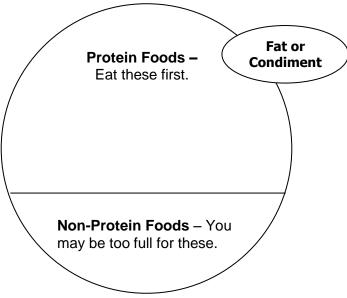
#### **Non-Protein Foods**

- Fat-free or light yogurt
- Unsweetened applesauce
- Canned pears or peaches (in own juice or water; no syrup)
- Soft banana
- Oatmeal, cream of wheat, or farina
- Tomato sauce
- Well-cooked vegetables (non-starchy or starchy) with no skins or peels
- Reduced-fat or light cheese

#### Fats

- Tub margarine or oil
- Light mayonnaise or salad dressing
- Hummus
- Avocado
- Smooth nut butter (not crunchy)

#### Example Plate – it might be this small!



#### **How to Count Grams of Protein**

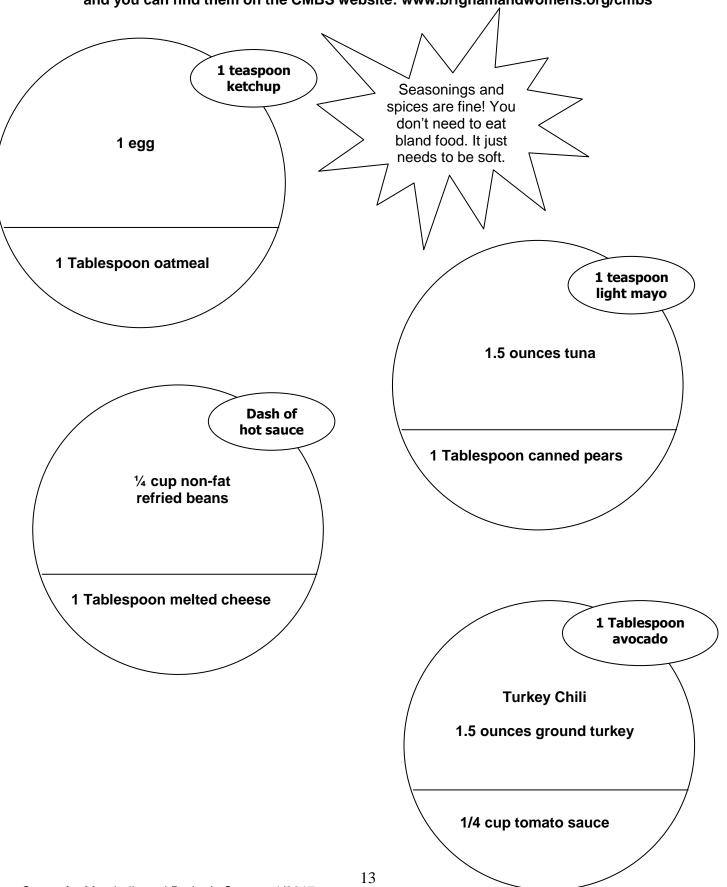
(if the food does not have a nutrition facts label)

#### 7 grams of protein is equal to:

1 ounce chicken/turkey/fish 1 egg ¼ cup egg substitute 2 oz firm tofu/3 oz soft tofu ½ cup beans

#### Post-Op Diet Stage 3B: Soft Textures (continued)

Here are some examples of eating events in stage 3B. You will receive recipe ideas from the dietitian and you can find them on the CMBS website: www.brighamandwomens.org/cmbs



#### Post-Op Diet Stage 3B: Soft Textures (continued)

#### Stage 3B Key Points:

- Food can get 'stuck' in your chest. If this happens, don't panic and don't drink water. Stay calm, move around, and it will pass. Afterwards, think about what might have gone wrong...
  - o Ate too fast? Take 30 minutes for each eating event and pause after each bite.
  - o **Didn't chew enough?** Chew until your food is pureed by your teeth.
  - o Food too tough? Make sure you are only eating stage 3A and 3B foods.
  - o Stomach too full? Fullness can feel like chest pressure or nausea.
  - o **Food too dry?** Dry foods are hard to tolerate. Keep meat tender and moist.
    - Use a slow cooker, marinate meats, cook in foil packets, avoid over-cooking.
    - Add broth when reheating meat in the microwave to keep it moist.
- Dehydration can still happen. You are likely getting back to your daily routine and will be busy with your scheduled eating times. Remember to drink your fluids in between eating times.
- You might not feel hungry but you still need to eat regularly. Space your eating events evenly during the day, about every 3 hours.
- Some days you won't have room for everything. Do your best to reach your protein goal.
- It's normal to not tolerate certain textures the first time you try them. If you have trouble with a food even when you are eating very carefully, avoid the food for 2-3 weeks before trying again.

#### Post-Op Diet Stage 4: Regular Textures

Starts: 40 days after your surgery date – Only if meeting protein goals regularly in Stage 3B

Last for: Forever, but your meal plan will change over time

What to Do: Keep sipping fluids. Use the meal plan below as guidance for a balanced diet. Keep taking

vitamin and mineral supplements.

**Fluid Goal:** 48-64 ounces (fluid guidelines listed in stage 1)

Protein Goal: 60-70 grams/day

#### Meal Plan

8	protein servings
2	vegetable servings □ □
2	fruit servings □ □
1	dairy serving □
2	fat servings □ □
3	starch servings $\square \square \square$

Refer to pages 20-25 for serving sizes in each food group.

#### How do I start in Stage 4?

- In Stage 4, you will start trying new types of foods. You may not tolerate every food you try so be patient with your stomach. Tolerance improves with time. See below for possible "problem foods".
- Use the meal plan for guidance. Each checkbox is a serving of food from that food group. In the early
  months after surgery, you won't have room for all of the foods in the meal plan. Focus on foods from
  the protein, vegetable, and fruit groups first.
- The meal plan is not "one size fits all". Your dietitian will help you change your meal plan as needed.

#### Possible "Problem Foods"

Your stomach can be sensitive for 3-6 months after surgery, and sometimes longer. The following foods have unique textures that may be difficult to tolerate if eaten too soon. Be cautious!

**Protein**: Tough red meat, hamburger, lobster, scallops, clams, shrimp **Fruits**: Stringy, thick skins, peels (like oranges, grapes, pineapple) **Vegetables**: Stringy, fibrous (like asparagus, peapods, celery)

Starches: Rice, pasta, doughy breads, popcorn

#### **Stage 4 Key Points**

Eat protein foods first, then vegetables or fruits, and eat starches last. Use fats as a flavoring or to keep foods moist.

This will be lifelong!
Use your "Stage 4 Meal Ideas" handout for recipe ideas.

#### Listen to your stomach

Stop eating at the first sign of fullness, which may feel like pressure in your upper chest.

#### Be aware of picking or grazing

Are you eating something just because it's available to you? Avoid unplanned eating moments and try to control your environment to minimize these opportunities. Have scheduled and structured eating times.

#### **Self-monitor**

Track protein and fluids. Tracking regularly will help you stay accountable and more consistent with meeting your goals.

#### Hunger may increase

This is normal. The hormone changes from surgery might not last forever.

Foods high in protein and fiber help control hunger so fill up on these foods. Avoid eating out of habit or from behavioral triggers like boredom, stress, and emotions.

#### Work towards a balanced diet

Learn which food groups the foods you eat belong to: Protein, Vegetable, Starch, etc.

Work towards keeping these foods within the meal plan outlined by your dietitian.

#### **Sample Meal Plans**

These are examples to show you how the amount you can eat will change over time. Each person can choose their own foods based on their preferences and their tolerance.

#### Just starting Stage 4 - about 6 weeks after surgery

8 protein servings 🗵🎞 🖾 🖾 🗆 🖂

2 vegetable servings ☒ ☐

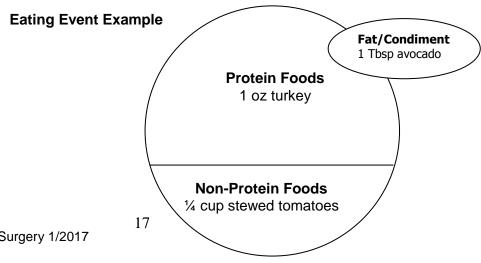
2 fruit servings ⊠ □

1 dairy serving ⊠

2 fat servings ⊠ □

3 starch servings □□□

Time	Food	Fluid (oz)	Protein (g)
8 AM	1 ½ scrambled eggs (1 ½ protein), ¼ banana (½ fruit)		10
9 AM		8 oz decaf tea	
10 AM	3 oz fat-free Greek yogurt (1 protein), ½ cup strawberries (½ fruit)		7
11 AM		8 oz water	
1 PM	Homemade chili: 1 oz turkey (1 protein), 1/4 cup stewed tomatoes (1/2 vegetable), 1 tablespoon avocado (1 fat)		7
2 PM		8 oz Crystal Light	
3 PM	1 scoop protein powder (2 ½ protein) in 8 oz skim milk (1 dairy)		26
4 PM		8 oz tea	
5 PM		8 oz water	
6 PM	1 oz fish (1 protein), ¼ cup cooked green beans (½ vegetable)		7
7 PM		8 oz water	
8 PM		8oz Crystal Light	
9 PM	1/4 cup ricotta cheese (1 protein)		7
10 PM		8 oz tea	
	Total	64 oz	64 grams



#### Feeling comfortable with Stage 4 – about 8 months post-op

2 vegetable servings ☒ ☒

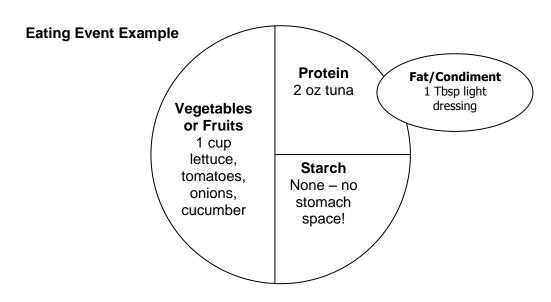
2 fruit servings ⊠ □

1 dairy serving ⊠

2 fat servings ⊠ □

3 starch servings ⊠ □ □

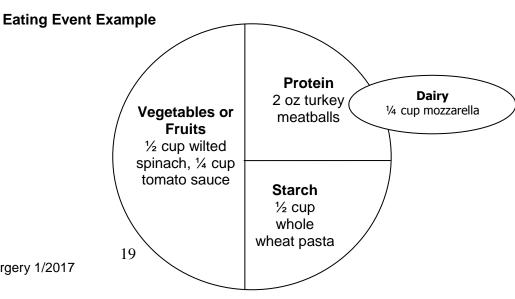
Time	Food	Liquid (oz)	Protein (g)
8 AM	1 scoop protein powder (2 ½ protein) in 8 oz skim milk (1 dairy)		26
9 AM		8 oz decaf tea	
11 AM		8 oz water	
12 PM	1.5 oz tuna (1.5 protein), 1 cup salad vegetables (lettuce, tomatoes, onion, cucumber) (1 vegetable), 1 Tbsp light dressing (1 fat)		14
2 PM		8 oz Crystal Light	
3 PM	6 oz Greek yogurt (2 protein)		14
4 PM		8 oz decaf tea	
5 PM		8 oz water	
6 PM	1 oz ground turkey (1 protein), ¼ cup beans (½ protein, ½ starch), ½ cup stewed tomatoes (1 vegetable)		10
7 PM		8 oz water	
8 PM		8oz Crystal Light	
9 PM	1/4 cup roasted chickpeas (½ protein, ½ starch), 2 clementines (1 fruit)		3
10 PM		8 oz decaf tea	
	Total	64 oz	67 grams



#### Long-term Stage 4 – About 2 years post-op

- 9 protein servings XXXXXXXX
- 2 vegetable servings ☒ ☒
- 2 fruit servings ⊠ ⊠
- 1 dairy serving ⊠
- 2 fat servings ⊠ ⊠
- 3 starch servings ☒ ☒ ☒

Time	Food	Liquid (oz)	Protein (g)
8 AM	6 oz Greek yogurt (2 protein), ½ banana (1 fruit), ½ cup bran flakes (1 starch)		14
9 AM		8 oz decaf tea	
10 AM			
11 AM		8 oz water	
12 PM	3 oz chicken (3 protein), lettuce, tomato, onion (1/2 vegetable), 1 sandwich thin (1 starch), 1 tablespoon avocado (1 fat)		21
2 PM		8 oz Crystal Light	
3 PM		8 oz tea	
4 PM	½ cup cottage cheese (2 protein), 1 cup blueberries (1 fruit), 2 tablespoons sliced almonds (1 fat)		14
5 PM		8 oz water	
6 PM		8 oz water	
7 PM	2 oz lean ground turkey meatballs (2 protein), 1/2 cup whole wheat pasta (1 starch), ¼ cup tomato sauce (1/2 vegetable), ½ cup wilted spinach (1 vegetable), ¼ cup light mozzarella (1 dairy)		14
8 PM		8oz Crystal Light	
9 PM		8 oz tea	
	Total	64 oz	63 grams



#### **Serving Sizes**

#### **Protein Foods**

1 serving of protein

1 ounce chicken
1 ounce turkey
1 ounce fish or shellfish
1 ounce beef
1 ounce pork
2 oz firm tofu/3 oz soft tofu
1/4 cup non-fat cottage cheese
1/4 cup non-fat ricotta cheese
3 oz Greek yogurt (1/2 individual container)
1/2 cup beans\*
1/4 cup egg substitute
1 egg

7 grams of protein

\*1/2 cup beans is equal to 1 protein serving + 1 starch serving

1 ounce or 1 serving = about 7 grams of protein
2 ounces or 2 servings = about 14 grams of protein
3 ounces or 3 servings = about 21 grams of protein
Each ounce of protein food contains 35-55 calories, depending on the fat content.

- Choose lower fat protein foods (like skinless chicken breast, 99% fat free ground turkey).
- Limit red meat (beef, lamb, pork).
- Processed meats can increase a person's risk of colorectal and stomach cancer. Processed meats
  include hot dogs, pepperoni, salami, sausages, corned beef, ham, bacon, pastrami, and any other
  meats that have been cured, smoked, salted or treated with any chemical preservatives. The dietitian
  can provide you with more information about processed meats.

Remember to eat at least 8 servings of protein everyday!

#### **Non-Starchy Vegetables**

Each vegetable serving contains 5 grams of carbohydrates (2-3 grams of fiber per serving), 2 grams of protein, 0 grams of fat, and 25 calories.

Fresh and frozen vegetables are ready to eat! Rinse canned vegetables to remove some salt.

1 serving of vegetables

½ cup cooked vegetables or1 cup raw vegetables

#### **Examples of non-starchy vegetables:**

Artichoke
Asparagus
Beets
Broccoli
Brussels Sprouts
Cabbage
Carrots
Cauliflower
Celery
Cucumber
Eggplant
Green Beans
Kale

Lettuce
Mushrooms
Onions
Peppers
Radishes
Salad Greens
Spinach
Sprouts
Snap Peas
Summer Squash
Tomato
Water Chestnuts
Zucchini

Starchy vegetables (corn, peas, potatoes, plantains, winter squash) are found on the <u>Starches List</u> (page 25).

Aim for at least 2 servings of non-starchy vegetables everyday!

#### **Fruits**

Each fruit serving contains 15 grams of carbohydrates (2 or more grams of fiber), 0 grams of protein, 0 grams of fat, and 60 calories.

Use fresh, frozen or canned fruits with no sugar added. Eat fruit in its whole form instead of blending or juicing. Whole fruit will fill you up more!

#### Fresh, Frozen, & Unsweetened Canned Fruit

Apple (2 in. across) Applesauce (unsweetened) Apricots (canned) Apricots (medium, fresh) Banana (8 in. long) Blackberries Blueberries Cantaloupe Cherries (canned) Cherries (fresh) Figs (fresh) Grapefruit (medium) Grapefruit (segments) Grapes Honeydew melon Kiwi Mandarin oranges	
Mango Nectarine (2 ½ in. across)	1 nectarine
Orange (2 ½ in. across) Papaya	
Peach (fresh)	1 peach or ¾ cup
Peaches (canned)	½ cup (2 halves)
Pear (fresh)	
Pears (canned)	2 nareimmone
PersimmonPineapple (canned)	1/3 cun
Pineapple (fresh)	3/4 CUD
Plum	
Pomegranate	½ of fruit
Raspberries	1 cup
Strawberries (whole)	1 ¼ cup
Tangerine (clementines)	2 tangerines
Watermelon	1 ¼ cup cubes

## Every fruit & amount listed on this page = 1 serving of fruit

#### **Dried Fruit (no added sugar)**

Serving sizes for dried fruits are small because they are calorie-dense foods.

Apples	4 rings
Apricots	7 halves
Dates	2 ½ medium
Figs	1 ½
Prunes	3 medium
Raisins	2 Tablespoons
Dried cranberries	2 Tablespoons

Aim for 2 servings of fruit everyday!

#### **Dairy**

Each serving of dairy contains 6-8 grams of protein. Carbohydrates, fat and calories vary.

1 serving of dairy

8 oz skim / fat-free milk
8 oz 1% / low-fat milk
8 oz Lactaid / lactose-free milk
8 oz soy milk
½ cup evaporated skim milk
1/3 cup dry nonfat milk
1 cup nonfat yogurt (non-Greek)

1 oz cheese\*

1/4 cup shredded cheese\*

1 string cheese\*

\* Choose reduced-fat, partskim, or light when possible

Aim for 1 serving of dairy everyday!

#### Fat

Each serving of fat contains 5 grams of fat and 45 calories. Conversion tip: 1 Tablespoon = 3 teaspoons

1 serving of fat

Limit to 2-3 servings of fat everyday!

2 teaspoons of nut butter 1 tablespoon avocado 1 teaspoon butter 1 tablespoon light tub margarine 1 teaspoon mayonnaise 1 tablespoon light mayonnaise 1 teaspoon oil (olive, canola) 10 small or 5 large olives 2 teaspoons creamy salad dressing 1 tablespoon light creamy dressing 1 tablespoon oil-based dressing 2 tablespoons light salad dressing 2 tablespoons of hummus 6 almonds 2 whole pecans 10 small peanuts 2 whole walnuts 1 teaspoon pumpkin seeds 1 tablespoon other nuts and seeds

#### **Starches**

Each serving contains 15 grams of carbohydrates, 3 grams of protein, 0-1 gram of fat, and 80 calories.

## Every food & amount listed on this page

1 serving of starch

#### **Cooked Beans/Peas/Legumes**

(also count as 1 protein)

Beans and legumes (kidney, pinto, black, lentils, chickpeas, black-eyed peas)\_\_\_\_\_\_1/2 cup
Baked beans\_\_\_\_\_\_1/4 cup

#### **Breads**

Bagel (from cafe)	½ (1 oz)
Bagel (pre-packaged, grocery store)	½ (1 oz)
Bread sticks	2 (2/3 oz)
English muffin	
Hamburger or hot dog bun	½ (1 oz)
Pita, 6 in. across	1/2
Plain roll, small	1 (1 oz)
Bread	1 slice (1 oz)
Tortilla, 6 in. across	1
Sandwich thins/deli flats	1

#### Cereals/Grains/Pasta

Cold cereals (unsweetened)	3/4 cup
Bran cereals	1/3 cup
Bran cereals (flaked)	½ cup
Granola	2 Tbsp
Shredded wheat	½ cup
Bulgur (cooked)	½ cup
Hot cereals (unsweetened)	½ cup
Grits (cooked)	½ cup
Pasta (cooked)	½ cup
Rice (cooked)	1/3 cup
Quinoa (cooked)	1/3 cup

Choose 100% whole grain / whole wheat options whenever possible!

#### **Starchy Vegetables**

Corn	½ cup
Corn on the cob, 6 in. long	1
Green peas	½ cup
Plantain	½ cup
Baked potato (medium	1/2
Mashed potato	½ cup
Winter squash (acorn, butternut)	½ cup
Yam/sweet potato	1/3 cup

#### Crackers and 'Snack Foods'

Animal crackers	8
Graham crackers (2.5 in. square)	3
Matzo	¾ 0Z
Melba toast	5
Oyster crackers	
Popcorn (popped, 94% fat free)	3 cups
Pretzels	¾ 0Z
Rye crisp (2 in. x 3 in.)	4
Saltine crackers	6
Wheat Thins	8
Triscuits	4

### Limit to 3 servings of starch everyday!

#### **Possible Problems and Solutions**

We don't expect all of these problems to happen to you but if they do, we want you to know how to solve them. It is helpful to keep a record of anything unusual that occurs and what you did before and after it happened.

#### Dizziness, Headaches, Lightheadedness, Dark Urine (Signs of Dehydration)

- ✓ Drink fluids with electrolytes (like Propel Zero, G2, Powerade Zero)
- ✓ Add salt to your foods
- ✓ Drink salty bouillon or soup broth
- ✓ Call the Physician's Assistant phone line if you are unable to catch up on your fluids

#### Constipation

Short-term Solutions

- ✓ Increase your fluids aim for 64 ounces daily
- ✓ Try a laxative, such as Milk of Magnesia or Miralax, and take a stool softener up to 3 times daily Long-term Solutions
  - ✓ Increase your fluids aim for 64 ounces daily
  - ✓ Increase your fiber intake
    - o Eat more fruits, vegetables, and whole grains if your diet stage permits.
    - If you are unable to add more fiber through your diet, try a fiber supplement, such as Benefiber or Metamucil.
    - Slow and steady is the key to adding fiber to your diet. Start with a small amount, such as one serving of fiber supplement or one extra serving of food with fiber. Stick with that amount for 1-2 weeks before increasing as needed.
  - ✓ Stay physically active
  - ✓ Continue taking a stool softener as needed

#### Diarrhea

- ✓ Limit or avoid foods with lactose. Lactose intolerance can occur after surgery. Please see page 8 for more details.
- ✓ Eat slowly and chew thoroughly
- ✓ Do not drink fluids with meals
- ✓ Avoid high sugar, high fat, and spicy foods
- ✓ Limit the amount of sugar-free products (like sugar-free candies). These products may contain sugar alcohols (artificial sweeteners that end with −ol such as malitol, sorbitol, xylitol, etc.) that can cause diarrhea.
- ✓ Limit caffeinated beverages
- ✓ Try a probiotic supplement ask your dietitian for suggestions

#### Possible Problems and Solutions (continued)

#### Nausea and/or Vomiting

- ✓ Tune into your eating behaviors. Take small bites, chew thoroughly and pause after each bite.
- ✓ Stop eating or drinking at the first sign of fullness, which may feel like pressure in your upper chest.
- ✓ Stay hydrated. Drink at least 48-64 ounces of fluids.
- ✓ Keep foods tender and moist.
- ✓ Determine whether you might have lactose intolerance (page 8).
- ✓ Avoid eating and drinking at the same time.
- ✓ If these suggestions do not work, or you vomit bright red or dark brown liquid, please call the PA line or your surgeon's office.

#### **Bloating/Gas/Cramping**

- ✓ Limit or avoid foods with lactose. Lactose intolerance can occur after surgery. Please see page 8 for more details.
- ✓ Limit or avoid sugar alcohols (artificial sweeteners that end with –ol such as malitol, sorbitol, xylitol, etc.)
- ✓ Avoid carbonated beverages.
- ✓ If drinking through a straw causes these problems, avoid using one.

#### Heartburn

- ✓ Every person has different food and beverage triggers of heartburn. Make a list of the ones that trigger heartburn for you and avoid them.
- ✓ Take your prescribed heartburn medication.
- ✓ Tune into your eating behaviors. Take small bites, chew thoroughly and pause after each bite.
- ✓ Avoid lying down for 3-4 hours after eating.

#### **Hair Loss**

- ✓ Hair loss is normal in the first six months after surgery and will usually resolve on its own. If hair loss continues past six months, it may be related to nutrition.
- ✓ Meet your protein goal of 60-70 grams daily.
- ✓ Take your multivitamins daily you should be getting 200% of iron, zinc, and biotin.
- ✓ You can also try Nioxin shampoo.