



Bariatric Nutrition Handbook

Introduction

Bariatric surgery is not a cure for obesity. It is simply a tool to help you begin your weight loss journey and improve your health. Even after surgery, it is possible to consume more calories than you need and prevent weight loss. Eating or drinking foods high in calories and sugar and constant snacking or “grazing” throughout the day will result in failure to lose weight or contribute to weight gain.

You should start making changes to your habits before surgery to better prepare for your new lifestyle after surgery. You must commit to these healthy lifestyle changes (diet, exercise, behaviors) for the rest of your life in order to achieve your weight loss goals and maintain your healthy weight. Bariatric surgery helps you to lose weight by limiting the quantity of food you can eat at a time. Following the guidelines in this booklet will help ensure that you are consuming a balanced, nutrient-rich diet.

Guidelines for Success

Eat regularly throughout the day.

- Avoid eating very large portions of food only 1-2 times per day.
- Eat 3 small meals and 2-3 small snacks at regularly scheduled intervals throughout the day.
- Avoid skipping meals.
- Avoid “grazing” or nibbling throughout the day.

Eat slowly and stop eating when you feel comfortably full.

- Take dime sized bites.
- Chew each bite 20-30 times before swallowing—think pureed consistency.
- Put down your utensil between each bite and wait to see how your stomach feels before taking another bite.
- Don’t eat too quickly. Meals should last about 20-30 minutes.
- Stop eating as soon as you feel comfortably satisfied, not overfull. Fullness may feel like a pressure in your upper stomach.
- Avoid overeating. This can contribute to pain, nausea and vomiting.

Practice mindful eating.

- Sit at the table to eat.
- Unplug during meal times. Avoid distractions such as watching TV or using the computer.
- Take the time to savor the flavors of what you are eating. It will help you to feel more satisfied by what you are eating and to learn to identify when you feel full.
- Use smaller plates, bowls and utensils. Try putting your utensils down between bites.

Make smart fluid choices and avoid eating and drinking at the same time.

- Choose sugar-free (<10 calories/serving), caffeine-free, non-carbonated beverages.
- Take small sips throughout the day between meals. No guzzling or gulping. Initially after surgery you may only be able to drink 4 ounces in an hour.
- Try using bottles with smaller openings to slow your rate of drinking.
- Wait until 30 minutes after eating solid food to drink fluids. Eating and drinking simultaneously can overfull your stomach and increase nausea/vomiting.
- Do not drink from straws.
- Aim to consume 6-8 cups (48-64 ounces) of fluid daily.
- Increase your fluid intake if you have signs of dehydration (decreased or dark urine, dry skin, headache, dizziness, lethargy).
- Avoid alcohol after surgery.

Consume adequate amounts of protein.

- Aim to consume 60-80 grams of protein daily.
- Choose lean proteins. Include protein at all meals and eat protein foods first.
- Moist proteins tend to be better tolerated (ex. Fish, cottage cheese, yogurt, protein supplements)

Read food labels and choose nutrient dense foods.

- In addition to consuming adequate lean protein, incorporate fruits, vegetables, and whole grains.
- Avoid sweets and other foods with large amounts of added sugars. Not only can diets high in sugar contribute to weight gain, but they can lead to dumping syndrome after Gastric Bypass.
- Limit intake of high fat foods. Make sure the fats you choose are heart healthy (unsaturated) fats (ex. Olive oil, canola oil, nuts/nut butters, and avocados).
- Check the amount of sugar, fat, protein, and calories by reading the food label.

Take vitamin and mineral supplements daily for the rest of your life.

- It is difficult to meet your nutrient needs through food after these surgeries, therefore you will have to take a complete multivitamin, calcium citrate + vitamin D, and vitamin B12 for the rest of your life after surgery. Additional supplements may be needed on an individual basis.
- These supplements typically need to be chewable or liquid for the first several weeks after surgery, as swallowing large pills may be difficult.
- Refer to vitamin/mineral supplement handout for specific guidelines.

Incorporate physical activity into your daily routine.

- Exercise can help to improve overall health and mood as well as help maximize weight loss.
- Aim for 30-60 minutes of moderate aerobic activity at least 5 days a week and strength training at least 2-3 days a week.
- Always make sure you to get clearance from your PCM before beginning any exercise regimen.
- Make an appointment with the Exercise Physiologist to get started on an exercise program.

Be accountable.

- Self-monitor. Keep a food and exercise log. Track your weights.
- Come to your appointments.
- Attend support group.

Why do I need to follow these recommendations?

- To help prevent nutrient deficiencies.
- To help achieve weight loss goals and maintain weight loss.
- Prevent side effects including nausea, vomiting, and hair loss.

Typical Dietitian Appointment Schedule After Surgery

Follow-up with the RD is very important for success with weight loss AND prevention of malnutrition.

- 1 week
- 4-6 weeks
- 3 months
- 6 months
- 9 months
- 1 year
- After 1 year, meet with dietitian twice per (every 6 months) x 2 years
- At least yearly after the first 2 years

In addition to the above appointment schedule, you are encouraged to see the RD for additional visits as needed. Regular support group attendance is highly encouraged after surgery, as well.

Preoperative Liquid Diet

Patients with severe obesity often have significant liver enlargement, which can make laparoscopic surgery difficult or impossible. The preoperative diet is designed to decrease the liver size and the amount of fatty tissue around the stomach to make laparoscopic surgery easier and safer.

Two to four weeks before your surgery date, you will need to follow this full liquid diet. The diet is a low-carbohydrate, low-fat, high protein diet with a goal of 800-1000 calories/day. **Strict adherence to the preoperative diet is mandatory.**

- You will drink protein supplements instead of eating regular meals. **NO SOLID FOODS ALLOWED!**
 - You will be drinking 4-5 servings of protein supplements throughout the day. Be sure to choose protein supplements that meet the guidelines on the next page. You should be consuming at least 60 to 80 grams of protein/day.
 - You can drink either ready to drink shakes or protein powder mixed with water, skim milk, or light unsweetened soy milk.
- Drink plenty (at least 64 ounces) of sugar-free, caffeine-free, non-carbonated clear liquids (water or other liquids containing less than 5 calories per serving such as sugar-free drink mix, zero calorie sports drinks, sugar-free popsicles, and low sodium broth) in addition to your protein supplements.
- **DRINKS TO AVOID:** Drinks with sugar (juices, regular sports drinks), drinks with carbonation (sodas, diet sodas, sparkling waters), drinks with caffeine (tea and coffee), and whole or 2 % milk.
- Resist a last supper—it will enlarge your liver and stomach and make surgery harder.
- **ATTENTION DIABETICS:** carefully monitor your blood sugars and contact your PCM with questions/concerns. With a low carbohydrate intake, your medications may need to be adjusted.

Sample Meal Plan

0800	1 serving protein supplement
0930	1 sugar-free gelatin, 16 ounces water
1030	1 serving protein supplement
1200	16 ounces water
1300	1 serving protein supplement
1500	1 cup low sodium broth, 8 ounces water
1600	1 serving protein supplement
1730	16 ounces water
1900	1 serving protein supplement
2000	1 sugar-free popsicle, 8 ounces decaf tea

Protein Supplements

Protein supplements come in many forms: powders, ready to drink liquids, and bars. Meal replacement shakes are not recommended because they contain larger amounts of carbohydrates, including sugar, and fat than are preferred. Protein bars are also not recommended as many are high in fat and/or sugar and are lower in protein. The preferred options are protein powders or ready to drink liquids and shakes.

Protein Supplement Nutrition Guidelines

Read the nutrition facts label to make sure anything you choose meets these criteria:

Per 8 ounce serving (or 1 scoop of protein powder):

- 200 calories or less
- 15-30 grams protein
- 5 grams of sugar or less
- 10 grams of fat or less

Examples of Ready to Drink Protein Shakes

- EAS AdvantEdge Carb Control
- EAS Myoplex Lite
- Ensure High Protein
- Premier Protein
- Slim Fast High Protein
- Bariatric Advantage (Lactose-free)

Examples of Ready to Drink Protein Shakes

- Bariatric Fusion (Lactose-free)
- Designer Whey
- Muscle Milk Light (Lactose-free)
- Isopure Zero Carb (Lactose-free)
- GNC Total Lean Shake (Lactose-free)
- Pure Protein

Examples of Protein Powders

- Syntrax Nectar (Lactose-free)
- Unjury Protein (Lactose-free)
(www.unjury.com)
- Muscle Milk (Lactose-free)
- Isopure Whey Protein Isolate/Zero Carb
(Lactose-free)
- Jay Robb Whey Protein Isolate or Egg White
Protein (Lactose-free)

Examples of Protein Powders

- Bariatric Fusion (Lactose-free)
- Bariatric Advantage (Lactose-free)
(www.bariatricadvantage.com)
- Pure Protein
- Designer Whey
- Chike

There are many products with similar names, so **ALWAYS** check the label to make sure it meets the guidelines. **These examples of specific products does not necessarily constitute endorsement by the staff or Walter Reed National Military Medical Center.**

What if I am lactose intolerant?

- Lactose is the sugar found in milk. People who have trouble digesting lactose experience symptoms such as bloating, gas, cramping, diarrhea, and/or nausea when they eat or drink products that contain lactose.
- If you are intolerant to lactose, you should avoid milk and other dairy products that cause symptoms.
- Protein supplements that contain “whey protein concentrate” or “milk protein concentrate” are not typically lactose-free. Carefully read the label to make sure you choose a protein supplement that is lactose-free. Typically this will be printed on the label. If you do not see these words on the label, look for a protein supplement made from “whey protein isolate,” which is typically lactose-free.
- Mix your protein powder with water, unflavored light soy milk, or low-fat or fat-free Lactaid milk.
- If you have tried a “lactose-free” protein supplement and you are still having symptoms of lactose intolerance, try switching to soy, egg, or other non-dairy protein powder.

Post-Operative Diet Stages Overview

Refer to each individual diet stage for further information.

STAGE 1:	CLEAR LIQUID DIET
Start	Post-op Day 1, after swallow study
Duration	Hospital stay
Diet Instructions	Sip sugar-free, caffeine-free, non-carbonated liquids throughout the day.
Fluid Goal	1 ounce/15 minutes or 4 ounces/hour. Aim for at least 32 ounces per day.

STAGE 2:	FULL LIQUID DIET
Start	After discharge, post-op day 3
Duration	14 days/2 weeks
Diet Instructions	Slowly sip fluids and protein shakes throughout the day.
Fluid Goal	Aim for 48 to 64 ounces daily.
Protein Goal	Aim for 60 to 80 grams per day (usually between 2 to 3 8-ounce protein shakes).
Vitamins	Complete chewable /liquid multivitamin Chewable/liquid calcium citrate + vitamin D 500-600 mg two to three times daily Sublingual Vitamin B12 (350-500 mcg/day)

*You may not reach these fluid and protein goals right away, but do your best by sipping throughout the day.

STAGE 3:	PUREED/BLENDED FOODS
Start	Approximately 2 weeks after surgery (post-op day 15)
Duration	1 week
Diet Instructions	Start introducing pureed/blended foods.
Fluid Goal	Keep sipping fluids and protein shakes. Aim for 48 to 64 ounces clear liquids daily.
Protein Goal	Aim for 60 to 80 grams per day between protein foods and protein supplements.
Vitamins	Complete chewable/liquid multivitamin Chewable/liquid calcium citrate + vitamin D 500-600 mg two to three times daily Sublingual Vitamin B12 (350-500 mcg/day)

STAGE 4:**SOFT DIET**

Start	Approximately 3 weeks after surgery (post-op day 22)
Duration	1 week
Diet Instructions	Start introducing soft foods.
Fluid Goal	Keep sipping fluid and protein shakes. Aim for 48 to 64 ounces clear liquids daily.
Protein Goal	Aim for 60 to 80 grams per day between protein foods and protein supplements.
Vitamins	Complete chewable /liquid multivitamin Chewable/liquid calcium citrate + vitamin D 500-600 mg two to three times daily Sublingual Vitamin B12 (350-500 mcg/day)

STAGE 5:**REGULAR CONSISTENCY, LOW-FAT, HIGH PROTEIN DIET**

Start	Approximately 4 weeks after surgery (post-op day 29)
Duration	Ongoing
Diet Instructions	Choose well-balanced, planned meals focusing on protein and produce.
Fluid Goal	Sip sugar-free, caffeine-free, non-carbonated fluids throughout the day between meals. At least 48 to 64 ounces clear liquids daily.
Protein Goal	Aim for 60 to 80 grams per day (may still need daily protein supplement until can consistently meet protein needs through solid food intake).
Vitamins	Complete chewable /liquid multivitamin Chewable/liquid calcium citrate + vitamin D 500-600 mg two to three times daily Sublingual Vitamin B12 (350-500 mcg/day)

STAGE 1: CLEAR LIQUID DIET

Why do you need to follow a liquid diet? The liquid diet gives your stomach time to heal. Liquids are easy to digest and put no pressure on the newly formed pouch.

Start: After surgery, you will advance from NPO (nothing by mouth) to clear liquids once you pass your swallow evaluation to test your tolerance of foods.

Expected Duration: Hospital stay

Diet Instructions: Sip sugar-free, caffeine-free, non-carbonated liquids throughout the day. Take only one small sip at a time. Initially start with 1 ounce (one medicine cup) of liquid per hour. Gradually advance to 3-4 ounces (3-4 medicine cups) per hour. **GO SLOWLY.**

Fluid Goal: Aim to drink at least **32 ounces** each day, initially. You should work up to 48 to 64 ounces per day to prevent dehydration. Drink slowly. Limit to 1 ounce every 15 to 20 minutes (4 ounces per hour), as tolerated.

Protein Goal: None

Recommended Clear Liquids:

- Water
- Sugar-free gelatin
- Broth/bouillon
- Sugar-free popsicles (without fruit pieces)
- Zero-calorie sports drinks
- Sugar-free drink mix or diet juice
- Sugar-free decaf iced tea
- Decaffeinated black coffee or tea
- Clear liquid protein supplement

***Do NOT add sugar, honey, etc. to your fluids. You may use artificial sweeteners to sweeten your fluids.**

***You will be provided a variety of clear liquids during your hospital stay.**

Tips for Success

- Stop sipping as soon as you feel full or have any nausea/vomiting. If you feel increasing pressure or fullness under your breast bone, SLOW DOWN!
- Always take small sips. Initially, use a 1 ounce medicine cup to avoid drinking too much too quickly. If you drink too fast or gulp, you may vomit.
- Avoid caffeine, as it is a diuretic and also irritates the stomach.
- Avoid carbonation. It causes gas, bloating, and stomach discomfort.
- Avoid straws. When you drink through a straw you suck up air which can cause gas and stomach discomfort.
- Avoid beverages with natural or added sugars (including 100 percent juice).
- Record your fluid intake to help you meet your goals.

STAGE 1: CLEAR LIQUID DIET (continued)

Sample Meal Plan

0800-0900	4 ounces water
0900-0930	2 ounces sugar-free gelatin
0930-1000	2 ounces sugar-free drink mix/water
1000-1100	4 ounces decaf coffee
1100-1200	4 ounces water
1200-1230	2 ounces sugar-free gelatin
1230-1300	2 ounces chicken broth
1300-1400	4 ounces sugar-free drink mix/water
1400-1500	4 ounces water
1500-1600	4 ounces zero-calorie sports drink
1600-1700	4 ounces sugar-free decaf tea
1700-1730	1 sugar-free popsicle
1730-1800	2 ounces water
1800-1830	2 ounces chicken broth
1830-1900	2 ounces sugar-free gelatin
1900-2000	4 ounces water
2000-2100	4 ounces sugar-free drink mix/water

Daily total fluid intake = 52 ounces

*Remember to slowly sip your fluids at the rate of 1 ounce every 15 minutes, as tolerated. **Early on, this may be too much for you, if so aim for 1 ounce every 30 minutes.** Avoid guzzling/gulping your liquids. Stop drinking as soon as you feel full.

*The purpose of this sample meal plan is to help you understand the timing of your intake in order to maintain your hydration on this diet stage. You may make substitutions for taste preferences, as long as it is compliant within the guidelines of this diet stage.

STAGE 2: FULL LIQUID DIET

Why do you need to follow a liquid diet? The liquid diet gives your stomach time to heal. Liquids are easy to digest and put no pressure on the newly formed pouch.

Start: After discharge, around post-op day 3.

Expected Duration: 2 weeks

Diet Instructions: Slowly sip fluids and protein shakes throughout the day. Typically, if it can pass through a small strainer it should be okay to drink.

Fluid Goal: Aim for **48 to 64 ounces** (6 to 8 cups) of sugar-free, calorie-free, caffeine-free, noncarbonated liquids per day, as tolerated. Protein shakes may be counted towards this fluid goal.

Protein Goal: Aim for **60 to 80 grams** per day (usually between 2 to 3 8-ounce protein shakes, depending on their protein content). Refer to protein supplement handout for guidelines and examples. If you don't use supplemental protein, it will be very difficult to meet your protein needs at this time. Try adding unflavored protein powder to broth/soup or crystal light, if you are having trouble tolerating protein shakes.

Vitamin/Mineral Supplements: Begin taking supplements.

Complete chewable/liquid multivitamin with minerals (1-2 per day)

Chewable or liquid Calcium Citrate (1200-1500 mg taken in divided doses)

Sublingual Vitamin B12 (350-500 mcg/day)

Vitamin D (3000 IU/d total, includes amount from calcium and multivitamin supplements)

Recommended Full Liquids:

- All approved clear liquids (see Clear Liquid diet stage handout for reference)
- Protein supplements (powder or ready to drink shakes)—see protein supplement handout for guidelines and examples
- 1% or skim/fat-free milk or lactose-free milk
- Low-fat, unsweetened soy milk or other non-dairy milk (ex. almond milk)
- Double milk: 8 ounces fat-free or 1% milk mixed with 1/3 cup non-fat dry milk powder
- Low-fat buttermilk
- Fat-free, light thinned yogurt (you may choose Greek or regular)
- Thinned sugar-free pudding
- Strained low-fat soups, try adding unflavored protein powder
- Low sodium vegetable juices (ex. tomato juice)

***If a food/liquid is not listed above, it is not an appropriate choice for this diet stage.**

STAGE 2: FULL LIQUID DIET (continued)

Tips for Success

- Maintain a daily food journal to keep track of your intake.
- You may not meet your protein and/or fluid goals initially after surgery. Carry fluids and protein supplements with you and take small sips throughout the entire day.
- Stop sipping as soon as you feel full or have any nausea/vomiting. If you feel increasing pressure or fullness under your breast bone, **SLOW DOWN!**
- Initially, use a 1 ounce medicine cup to avoid drinking too quickly. If you drink too fast or gulp, you may vomit.
- If you are having difficulty tolerating your fluids, experiment with different temperatures. Sometimes room temperature liquids are better tolerated than hot or cold liquids.
- Avoid alcohol, caffeine, carbonation, and beverages with natural or added sugars (including 100 percent juice). Avoid straws.

Sample Meal Plan

0700	4 ounces fluid such as water
0800	4 Tbsp fat-free, plain Greek yogurt, thinned
0900	4 ounces fluid such as water
1000	8 ounces protein supplement
1200	4 Tbsp fat-free, plain Greek yogurt, thinned
1300	4 ounces fluid such as sugar-free drink mix
1400	8 ounces protein supplement
1600	4 ounces sugar-free decaf tea
1700	4 Tbsp strained low-fat cream-based soup
1800	4 ounces fluid such as water
1900	8 ounces protein supplement
2100	4 ounces water

(Provides: approximately 400 calories, 48 ounces fluid, 70 grams protein, assuming protein supplement provides 20 g protein per scoop mixed with 8 ounces water or per 8 ounce ready-made)

*The purpose of this sample meal plan is to help you understand the timing of your intake in order to maintain your hydration on this diet stage. You may make substitutions for taste preferences, as long as it is compliant within the guidelines of this diet stage.

STAGE 3: PUREED/BLENDED FOODS

On this diet stage, foods should be pureed or blended and thinned (as needed) to the consistency of applesauce or baby food. Your stomach is still healing at this time, so it is important to comply with the diet progression.

Start: Approximately 2 weeks after surgery (post-op day 15)

Expected Duration: 1 week

Diet Instructions: Continue to sip fluids throughout the day between meals. Start introducing pureed/blended foods.

Fluid Goal: Aim for **48 to 64 ounces** (6 to 8 cups) of sugar-free, calorie-free, caffeine-free, noncarbonated liquids per day, as tolerated. Protein shakes may still help meet this fluid goal but focus on increasing intake of clear liquids. Drink fluids between meals only. Stop drinking 30 minutes before and wait at least 30 minutes after finishing a meal to resume drinking fluids.

Protein Goal: Aim for **60 to 80 grams** per day between protein foods and protein supplements. Begin to replace some of your protein supplements with pureed/blended protein sources as tolerated. You may still need 1 or 2 8-ounce protein supplements/day to meet your protein needs.

Vitamin/Mineral Supplements: Continue taking supplements.

Complete chewable/liquid multivitamin with minerals (1-2 per day)

Chewable or liquid Calcium Citrate (1200-1500 mg taken in divided doses)

Sublingual Vitamin B12 (350-500 mcg/day)

Vitamin D (3000 IU/d total, includes amount from calcium and multivitamin supplements)

Instructions for Pureeing Foods

- 1) Cut food into small pieces about the size of your thumbnail.
- 2) Place food in blender.
- 3) Add enough liquid (fat free broth, fat free gravy, fat free yogurt, non-fat milk) to cover the blades.
- 4) Blend until smooth like applesauce.
- 5) Strain out any lumps, seeds, or chunks of food.
- 6) Use mild herbs and spices (avoid spicy ones) to flavor your food.
Try using ice cube trays to control portion sizes and make it easier to estimate your protein intake. Each cube holds about 1 ounce (2 Tbsp).

STAGE 3: PUREED/BLENDED FOODS (continued)

Tips for Success

- Maintain a food journal to track your intake.
- Stop eating as soon as you become full. Overeating can make you sick. Start with 2 to 4 Tablespoons of food per meal. As your portions increase, limit to no more than ½ cup food per meal.
- Portions should be small. You might not be able to eat all the recommended foods at this time. Focus on consuming adequate protein and fluids.
- You may not feel hungry, so you may have to remind yourself to eat regularly throughout the day. Try setting an alarm to remind yourself to eat.
- Include lean protein at all meals and eat protein first. Your stomach will fill up quickly and you may only have room for protein. After protein, if you still have room, eat non-starchy vegetables, followed by fruits, and then whole grains/starches.
- Introduce only **one** new food at a time. This way you will know which foods you tolerate.
- Be cautious with foods that are dry, sticky, tough, gummy, or stringy in texture (i.e. red meat, soft bread, dry chicken, rice, asparagus, celery, pineapple, coconut, etc). These types of foods are more likely to get stuck.
- Choose foods that are tender and moist. Use moist cooking methods such as slow cooking or braising.
- Avoid spicy foods.
- Room temperature foods may be better tolerated. Foods that are very hot or very cold may cause discomfort.
- Avoid high fat foods (fried foods, sweets, butter, regular mayonnaise, high fat meats).
- Avoid excessive carbohydrate intake. Stay away from breads, pasta, rice, macaroni and cheese, etc.
- Avoid alcohol, caffeine, carbonation, and beverages with natural or added sugars (including 100 percent juice). Avoid straws.
- Avoid eating and drinking simultaneously. Stop drinking 30 minutes before and wait at least 30 minutes after meals to resume drinking fluids. Make sure to take carry fluids with you at all times and take small sips throughout the day between meals to prevent dehydration.

STAGE 3: PUREED/BLENDED FOODS (continued)

Food Group	Choose	Avoid
<p>Protein (Always eat first)</p> <p>Aim to consume 9 servings daily, as tolerated, 1 serving = 7 grams protein</p>	<p>Low sodium baby food meat</p> <p>All should be blended : Skinless poultry, fish/shellfish, canned chicken, canned tuna/salmon packed in water Eggs, egg whites, egg substitute scrambled Light tofu, mashed Vegetarian or fat-free refried beans, beans, and lentils (try blending with mild salsa to thin)</p> <p>Light yogurt or Greek yogurt (fat-free, low-sugar) Fat-free or 1% cottage cheese or ricotta cheese</p> <p>Skim/fat-free or 1% milk or lactose-free milk Low-fat plain soy milk</p> <p>Protein supplements (High protein, low sugar)</p>	<p>Baby food “meals” where meat is mixed with starch</p> <p>High fat meats or proteins cooked in fats such as oil or butter</p> <p>Whole milk yogurt, cottage cheese, ricotta cheese</p> <p>Whole or 2% milk, flavored milk Sweetened, flavored soy milk</p>
<p>Produce</p>	<p>Non-Starchy Vegetables Blended, soft, well-cooked vegetables or low-sodium baby food vegetables</p> <p>Fruits Mashed bananas or no sugar added (natural) applesauce Blended canned peaches or pears in 100% juice or water Blended, soft, tender varieties without seeds or skins Baby food fruits without added sugars</p>	<p>Raw vegetables Tough or fibrous vegetables Skins, seeds, hulls Vegetables cooked in butter or oil</p> <p>Tough fruits Skins and seeds Any fruit with added sugar</p>
<p>Starches (Limit, eat last at meals)</p>	<p>Blended hot cereals (oatmeal, grits, cream of wheat) Mashed potatoes or sweet potatoes Blended winter squash</p>	<p>Pasta/noodles, rice, bread and bread products, crackers, cold cereals Starches prepared with added butter or oil</p>
<p>Other Foods</p>	<p>Sugar-free pudding Sugar-free gelatin Sugar-free popsicles Low sodium broth/bouillon Low-fat cream soups, blended</p>	

STAGE 3: PUREED/BLENDED FOODS (continued)

Sample Meal Plan

0700	4 ounces water
0800	2 to 4 tablespoons scrambled eggs or egg substitute (protein) 2 to 4 tablespoons blended oatmeal (starch)
0900	8 ounces sugar-free, caffeine-free, non-carbonated fluid
1000	8 ounces protein supplement (protein)
1100	4 ounces water
1200	2 to 4 tablespoons Greek yogurt (protein) 2 to 4 tablespoons unsweetened applesauce (fruit)
1300	4 ounces sugar-free, caffeine-free, non-carbonated fluid
1400	2 to 4 tablespoons cottage cheese (protein)
1500	8 ounces water
1600	8 ounces protein supplement (protein)
1700	4 ounces fluid such as water
1800	2 to 4 tablespoons (1 to 2 ounces) blended, baked fish (protein) 2 to 4 tablespoons pureed carrots (non-starchy vegetable)
1900	8 ounces sugar-free, caffeine-free, non-carbonated fluid

***These portions may be too large for you. Only eat until the first sign of fullness. The amount of protein you consume through solid food will determine how much supplemental protein you need to consume.**

STAGE 4: SOFT DIET

Start: Approximately 3 weeks after surgery (post-op day 22)

Expected Duration: 1 week

Diet Instructions: Continue to sip fluids throughout the day between meals. Start introducing soft foods.

Fluid Goal: Aim for **48 to 64 ounces** (6 to 8 cups) of sugar-free, calorie-free, caffeine-free, noncarbonated liquids per day, as tolerated. Protein shakes may still help meet this fluid goal but focus on increasing intake of clear liquids. Drink fluids between meals only. Stop drinking 30 minutes before and wait at least 30 minutes after finishing a meal to resume drinking fluids.

Protein Goal: Aim for **60 to 80 grams** per day between protein foods and protein supplements. Begin to replace some of your protein supplements with soft protein sources as tolerated. You may still need 1 or 2 8-ounce protein supplements/day to meet your protein needs.

Vitamin/Mineral Supplements: Continue taking supplements.

Complete chewable/liquid multivitamin with minerals (1-2 per day)

Chewable or liquid Calcium Citrate (1200-1500 mg taken in divided doses)

Sublingual Vitamin B12 (350-500 mcg/day)

Vitamin D (3000 IU/d total, includes amount from calcium and multivitamin supplements)

Tips for Success

- Maintain a food journal to track your intake.
- Stop eating as soon as you become full. Overeating can make you sick. Start with 4 Tablespoons of food per meal. As your portions increase, limit to no more than ½ cup (8 Tbsp) food per meal.
- Portions should be small. You might not be able to eat all the recommended foods at this time. Focus on consuming adequate protein and fluids.
- You may not feel hungry, so you may have to remind yourself to eat regularly throughout the day. Try setting an alarm to remind yourself to eat.
- Include lean protein at all meals and eat protein first. Your stomach will fill up quickly and you may only have room for protein. After protein, if you still have room, eat non-starchy vegetables, followed by fruits, and then whole grains/starches.
- Take small, dime-sized bites of food. Chew food 20-30 times before swallowing (until pureed or baby food consistency) before swallowing.
- Eat slowly. Meals should last 20-30 minutes as it takes time to identify fullness. Pause between bites to assess fullness.
- Introduce only **one** new food at a time. This way you will know which foods you tolerate.

STAGE 4: SOFT DIET (continued)

Tips for Success (continued)

- Be cautious with foods that are dry, sticky, tough, gummy, or stringy in texture (i.e. red meat, soft bread, dry chicken, rice, asparagus, celery, pineapple, coconut, etc). These types of foods are more likely to get stuck.
- Choose foods that are tender and moist. Use moist cooking methods such as slow cooking or braising.
- Prepare your foods using healthy cooking methods (i.e. baking, broiling, grilling, steaming, poaching).
- Room temperature foods may be better tolerated. Foods that are very hot or very cold may cause discomfort.
- Avoid high fat foods (fried foods, sweets, butter, regular mayonnaise, high fat meats).
- Avoid excessive carbohydrate intake. Stay away from breads, pasta, rice, macaroni and cheese, etc.
- Avoid spicy foods.
- Avoid alcohol, caffeine, carbonation, and beverages with natural or added sugars (including 100 percent juice).
Avoid straws.
- Avoid eating and drinking simultaneously. Stop drinking 30 minutes before and wait at least 30 minutes after meals to resume drinking fluids. Make sure to take carry fluids with you at all times and take small sips throughout the day between meals to prevent dehydration.
- Incorporate physical activity.

STAGE 4: SOFT DIET (continued)

Food Group	Choose	Avoid
<p>Protein (Always eat first)</p> <p>Aim to consume 9 servings daily, as tolerated, 1 serving = 7 grams protein</p>	<p>Mashed or finely chopped: Skinless poultry, fish/shellfish, canned chicken, canned tuna/salmon packed in water Lean ground chicken/turkey breast Low sodium, lean deli meats Eggs, egg whites, egg substitute scrambled Light tofu and other meat substitutes such as soy-based veggie burger Vegetarian or fat-free refried beans, beans, and lentils</p> <p>Light yogurt or Greek yogurt (fat-free, low-sugar) Fat-free or 1% cottage cheese or ricotta cheese Low-fat or fat-free cheese or soy cheese</p> <p>Skim/fat-free or 1% milk or lactose-free milk Low-fat plain soy milk Protein supplements (high protein, low sugar)</p>	<p>High fat meats or proteins cooked in fats such as oil or butter</p> <p>Tough, dry meats</p> <p>Whole milk yogurt, cottage cheese, ricotta cheese High fat/whole milk cheese</p> <p>Whole or 2% milk, flavored milk Sweetened, flavored soy milk</p>
Produce	<p>Non-Starchy Vegetables Soft, well-cooked vegetables or no salt added canned vegetables Low-sodium vegetable juice (limit to 6 ounces/day)</p> <p>Fruits Mashed bananas or no sugar added (natural) applesauce Canned peaches or pears in 100% juice or water Soft tender varieties without seeds or skins</p>	<p>Raw vegetables Tough or fibrous vegetables Skins, seeds, hulls Vegetables cooked in butter or oil</p> <p>Tough fruits Skins and seeds Any fruit with added sugar</p>
Starches (Limit, eat last at meals)	<p>Hot cereals (oatmeal, grits, cream of wheat) Mashed or baked potatoes or sweet potatoes (no skin) Winter squash</p>	<p>Pasta/noodles, rice, bread and bread products, crackers, cold cereals, baked goods, French fries, chips Starches prepared with added butter, oil, or sugar</p>
Fats (Limit to 3-6 teaspoons per day!)	<p>Creamy, natural peanut butter or other nut butters Avocado 1/3 less-fat or fat-free cream cheese, low-fat mayonnaise Cooking oil spray, olive oil/canola oil (limit)</p>	<p>Chunky nut butters, nuts Regular salad dressing, mayonnaise, cream cheese, sour cream, gravy, butter, bacon</p>
Other Foods	<p>Sugar-free pudding, sugar-free gelatin Sugar-free popsicles Low sodium broth/bouillon, Egg drop soup Low-fat cream soups, blended Herbs/spices, mustard, vinegar, artificial sweeteners</p>	<p>Ice cream</p> <p>Soups made with heavy cream</p> <p>Syrups, jams, honey, sugar</p>

STAGE 4: SOFT DIET (continued)

Sample 3-Day Meal Plan

DAY 1

- Breakfast** 1 scrambled egg with 2 tablespoons milk, ¼ cup no sugar added applesauce
- Snack** Protein supplement
- Lunch** 2-3 ounces tuna with 1 teaspoon light mayonnaise, ¼- ½ cup cooked, chopped broccoli
- Snack** Protein supplement
- Dinner** 2-3 ounces chopped baked chicken breast, ¼ cup mashed potatoes

DAY 2

- Breakfast** ¼ cup fat-free or low-fat cottage cheese, 2 tablespoons peaches, canned in juice and drained
- Snack** Protein supplement
- Lunch** 2 ounces low-sodium turkey lunch meat, 1 slice low-fat cheese, ¼ small banana
- Snack** Protein supplement
- Dinner** 2-3 ounces poached salmon, ¼- ½ cup cooked carrots

DAY 3

- Breakfast** 6 ounces yogurt (fat-free, no added sugar), ¼ cup mango chunks
- Snack** Protein supplement
- Lunch** 1 egg scrambled with cooked mushrooms, green peppers, zucchini, and low-fat cheddar cheese
- Snack** Protein supplement
- Dinner** 2-3 ounces poached salmon, ¼ cup mashed butternut squash

STAGE 5: REGULAR CONSISTENCY, LOW-FAT, HIGH PROTEIN DIET

Start: Approximately 4 weeks after surgery (post-op day 29)

Expected Duration: Ongoing for the rest of your life

Diet Instructions: Choose well-balanced, planned meals focusing on protein and produce.

Fluid Goal: Aim for **48 to 64 ounces** (6 to 8 cups) of sugar-free, calorie-free, caffeine-free, noncarbonated liquids per day, as tolerated. Drink fluids between meals only. Stop drinking 30 minutes before and wait at least 30 minutes after finishing a meal to resume drinking fluids.

Protein Goal: Aim for **60 to 80 grams** per day (may still need daily protein supplement until can consistently meet protein needs through solid food intake).

Vitamin/Mineral Supplements: Continue taking supplements. Consult supplement page for additional info.

Complete chewable/liquid multivitamin with minerals (1-2 per day)

Chewable or liquid Calcium Citrate (1200-1500 mg taken in divided doses)

Sublingual Vitamin B12 (350-500 mcg/day)

Vitamin D (3000 IU/d total, includes amount from calcium and multivitamin supplements)

Tips for Success

- Maintain a food journal to track your intake.
- Stop eating as soon as you become full. Overeating can make you sick. Start with 4 Tablespoons of food per meal. As your portions increase, limit to no more than ½ cup (8 Tbsp) food per meal.
- You may not feel hungry, so you may have to remind yourself to eat regularly throughout the day. Try setting an alarm to remind yourself to eat.
- Include lean protein at all meals and eat protein first. Your stomach will fill up quickly and you may only have room for protein. After protein, if you still have room, eat non-starchy vegetables, followed by fruits, and then whole grains/starches.
- Take small bites, chew thoroughly, eat slowly, and stop eating as soon as you feel full.
- Introduce only **one** new food at a time. This way you will know which foods you tolerate.
- Be cautious with foods that are dry, sticky, tough, gummy, or stringy in texture (i.e. red meat, soft bread, dry chicken, rice, asparagus, celery, pineapple, etc). These types of foods are more likely to get stuck.
- Choose foods that are tender and moist. Use moist cooking methods such as slow cooking or braising.
- Prepare your foods using healthy cooking methods (i.e. baking, broiling, grilling, steaming, poaching).
- Avoid “grazing” or snacking all day long as this can contribute to weight gain. Eat only at planned meal/snack times.
- Avoid high fat foods and excessive carbohydrate intake. Avoid spicy foods.
- Avoid alcohol, caffeine, carbonation, and beverages with natural or added sugars (including 100 percent juice). Avoid straws.
- Avoid eating and drinking simultaneously. Stop drinking 30 minutes before and wait at least 30 minutes after meals to resume drinking fluids. Make sure to take carry fluids with you at all times and take small sips throughout the day between meals to prevent dehydration.
- Incorporate physical activity.

STAGE 5: REGULAR CONSISTENCY, LOW-FAT, HIGH PROTEIN DIET (continued)

Food Group	Choose	Avoid
<p>Protein (Always eat first)</p> <p>Aim to consume 9 servings daily, as tolerated, 1 serving = 7 grams protein</p>	<p>Skinless poultry, fish/shellfish, canned chicken, canned tuna/salmon packed in water, lean beef (loin or round cuts), lean pork (loin cuts)</p> <p>Lean ground chicken/turkey breast</p> <p>Low sodium, lean deli meats</p> <p>Eggs, egg whites, egg substitute scrambled</p> <p>Light tofu and other meat substitutes such as soy-based veggie burger</p> <p>Vegetarian or fat-free refried beans, beans, and lentils</p> <p>Light yogurt or Greek yogurt (fat-free, low-sugar)</p> <p>Fat-free or 1% cottage cheese or ricotta cheese</p> <p>Low-fat or fat-free cheese or soy cheese</p> <p>Skim/fat-free or 1% milk or lactose-free milk</p> <p>Low-fat plain soy milk</p> <p>Protein supplements (high protein, low sugar)</p>	<p>High fat meats (such as hot dogs, bacon, organ meats, ribs) or proteins cooked in fats such as oil or butter</p> <p>Tough, dry meats</p> <p>Whole milk yogurt, cottage cheese, ricotta cheese</p> <p>High fat/whole milk cheese</p> <p>Whole or 2% milk, flavored milk</p> <p>Sweetened, flavored soy milk</p>
<p>Produce</p>	<p>Non-Starchy Vegetables</p> <p>Soft, cooked vegetables or no salt added canned vegetables (can begin gradually introducing raw)</p> <p>Low-sodium vegetable juice (limit to 6 ounces/day)</p> <p>Fruits</p> <p>Bananas or no sugar added (natural) applesauce</p> <p>Canned peaches or pears in 100% juice or water</p> <p>Soft tender varieties without seeds or skins</p>	<p>Tough or fibrous vegetables</p> <p>Skins, seeds, hulls</p> <p>Vegetables cooked in butter or oil</p> <p>Tough fruits</p> <p>Skins and seeds</p> <p>Any fruit with added sugar</p>
<p>Starches (Limit, eat last at meals)</p>	<p>Hot cereals (oatmeal, grits, cream of wheat)</p> <p>Mashed or baked potatoes or sweet potatoes (no skin)</p> <p>Winter squash</p> <p>Whole grains such as brown rice, whole wheat pasta, whole grain crackers, whole wheat bread</p>	<p>Baked goods, French fries, chips</p> <p>Starches prepared with added butter, oil, or sugar</p> <p>Refined carbohydrates made from white flour (ex. White bread, white pasta, pancakes, etc)</p>
<p>Fats (Limit to 3-6 teaspoons per day!)</p>	<p>Creamy, natural peanut butter or other nut butters</p> <p>Avocado</p> <p>1/3 less-fat or fat-free cream cheese, low-fat mayonnaise</p> <p>Cooking oil spray, olive oil/canola oil (limit)</p>	<p>Chunky nut butters, nuts</p> <p>Regular salad dressing, mayonnaise, cream cheese, sour cream, gravy, butter, bacon</p>
<p>Other Foods</p>	<p>Sugar-free pudding, sugar-free gelatin</p> <p>Sugar-free popsicles</p> <p>Low sodium broth/bouillon, Egg drop soup</p> <p>Low-fat cream soups, blended</p> <p>Herbs/spices, mustard, vinegar, artificial sweeteners</p>	<p>Ice cream</p> <p>Soups made with heavy cream</p> <p>Syrups, jams, honey, sugar</p>

Sample 3-Day Meal Plan**DAY 1**

- Breakfast** 1 scrambled egg (1 protein)
¼ banana (½ fruit)
- Snack** 1 low-fat cheese stick (1 dairy)
- Lunch** 2 ounces tuna (2 protein) with 1 tablespoon light mayonnaise (1 fat)
½ slice whole wheat bread (½ whole grain/starch)
½ cup cooked, chopped broccoli (1 vegetable)
- Snack** 6 ounces nonfat Greek yogurt (1 dairy)
- Dinner** 3 ounces chopped baked chicken breast (3 protein)
¼ cup whole wheat pasta (½ whole grain starch)
¼ cup peaches canned in water (½ fruit)

DAY 2

- Breakfast** ¼ cup fat-free or low-fat cottage cheese (1 dairy) topped with ½ cup raspberries (½ fruit)
- Snack** Protein supplement (2 protein)
- Lunch** 2 ounces low-sodium turkey lunch meat (2 protein)
2 whole grain crackers (½ whole grain/starch)
¼ cup green beans (½ vegetable)
- Snack** 1 slice low-fat cheese (1 dairy) with ½ apple (½ fruit)
- Dinner** 2 ounces poached salmon (2 protein)
½ cup cooked tossed salad (½ vegetable) with 1 teaspoon olive oil (1 fat)
¼ cup baked potato (½ starch)

DAY 3

- Breakfast** Protein supplement (2 protein)
- Snack** ½ apple (½ fruit) with 2 teaspoons peanut butter (1 fat)
- Lunch** 2 ounces grilled chicken breast (2 protein)
½ 6-inch corn tortilla (½ whole grain/starch)
1 ounce low-fat cheese (1 dairy)
- Snack** ¼ cup fat-free ricotta cheese (1 dairy) topped with 6 cherries (½ fruit)
- Dinner** 2 ounces baked sole (2 protein)
½ cup steamed carrots (1 vegetable)
¼ cup mashed sweet potato (½ starch)

Meal Planning Assistance

Suggested Daily Intake for Different Food Groups

FOOD GROUP	800 calories 60 to 65 g protein	1000 calories 65 to 80 g protein	1200 calories 80 g protein	1500 calories 80 g protein
Meat/protein	6 servings	6 to 7 servings	7 servings	7 servings
Dairy	2 servings	2 to 3 servings	3 servings	3 servings
Vegetables	1 serving	2 servings	2 servings	3 servings
Fruits	1 serving	2 servings	2 servings	3 servings
Whole grains/starches	1 serving	2 servings	3 servings	5 servings
Healthy fats	1 serving	2 servings	2 servings	3 servings

*You may substitute a protein supplement with at least 15 g protein per serving for 2 protein servings.

Daily Goals (use these boxes to help you track your intake):

Servings of meat/protein

Servings of dairy

Servings of vegetables

Servings of fruit

Servings of whole grains/starches

Servings of fat

PROTEIN

- Include protein at all meals and eat protein first.
- Choose very lean and lean proteins and avoid high fat/high calorie protein sources. This will help you consume the protein you need, while still meeting your calorie goals for weight loss/weight maintenance.
- Meats, poultry, and fish do not contain carbohydrates. Most plant-based protein sources such as beans and soy products contain some carbohydrates.

CHOOSE:

VERY LEAN PROTEINS (provide 7 grams protein, 0 to 1 grams fat, and 35 calories per serving) One serving equals:	LEAN PROTEINS (provide 7 grams protein, 3 to 5 grams fat, and 55 to 75 calories per serving) One serving equals:
1 ounce skinless, white meat poultry (chicken breast, turkey breast)	1 ounce skinless, dark meat poultry (chicken or turkey thighs, drumsticks)
1 ounce fish/shellfish (cod, flounder, haddock, halibut, trout, fresh tuna, tuna canned in water, crab, lobster, scallops, shrimp, clams)	1 ounce fish/shellfish (salmon, tuna canned in oil, catfish, oysters, sardines, herring, swordfish)
1 ounce game meat (venison, buffalo, ostrich, skinless pheasant)	1 ounce lean cuts of beef* (round, sirloin, flank steak, tenderloin, roast, at least 90% lean ground beef), lean cuts of pork* (ham, Canadian bacon, tenderloin, center loin chop), veal* (roast or lean chop), lamb* (roast or lean chop)
¼ cup non-fat/low-fat cottage cheese or ricotta cheese	¼ cup 4.5 percent milk cottage cheese or part-skim ricotta cheese
1 ounce fat-free cheese	1 ounce low-fat cheese (3 grams or less of fat/ounce)
3 ounces nonfat (0 %) Greek yogurt	3 ounces low-fat Greek yogurt
½ cup beans/lentils such as black, kidney, or fat-free refried beans, black-eyed peas (also count as 1 starch)	Plant-based (tofu, tempeh, hummus, soy nuts)
2 egg whites or ¼ cup egg substitute	1 medium whole egg

***Limit these to no more than 1 to 2 times per week.**

LIMIT/AVOID:

- High fat/processed meats such as ground beef (less than 90 percent lean), hot dogs, sausage, bacon, scrapple, bologna, salami, pastrami, pepperoni, spareribs, ribeye, prime rib, organ meats, etc.
- Full fat dairy products such as whole milk, 2 percent milk, full-fat cheese, ice cream, cream cheese, etc.

DAIRY

- Dairy also provides protein, as well as calcium. Each serving of dairy provides 6 to 8 grams of protein.
- Make sure to look at the label to see the calorie, fat, and carbohydrate content of what you are choosing.
- **One serving equals:**

One Serving	One Serving
1 cup fat-free (skim) or low-fat (1 percent) milk	1 cup soy milk
1 cup fat-free/low-fat lactose-free milk	1/3 cup nonfat dry milk
1/2 cup fat-free evaporated milk	1/4 cup fat-free or low-fat cottage cheese
1 cup fat-free, no added sugar yogurt	1 string cheese
1 ounce fat-free/low-fat cheese or soy cheese	1/4 cup fat-free or low-fat ricotta cheese

NON-STARCHY VEGETABLES

- One serving provides 25 calories, 2 grams protein, 0 grams fat, 5 grams carbohydrate, and 2 to 3 grams fiber. One serving equals 1/2 cup cooked vegetables/vegetable juice or 1 cup raw vegetables.
- Examples include:

Non-starchy Vegetables	Non-starchy Vegetables	Non-starchy Vegetables
Alfalfa sprouts	Artichoke	Asparagus
Beets	Broccoli	Brussels sprouts
Cabbage	Carrots	Cauliflower
Cucumber	Eggplant	Greens (collard, mustard, turnip)
Green beans	Kale	Leeks
Lettuce	Mushrooms	Okra
Onions	Peppers	Radishes
Summer squash/zucchini	Spinach	Tomato

FRUITS

- Choose fresh, frozen, or canned fruits without added sugar. Opt for whole fruits rather than juice or dried fruit.
- One serving provides 60 calories, 0 grams protein, 0 grams fat, 15 grams carbohydrate, and 2 to 3 grams fiber.
- **One serving equals:**

1 small apple	½ cup unsweetened applesauce	½ banana
12 cherries	1 kiwi	½ small mango
1 ¼ cup watermelon	1 ¼ cup strawberries	1 cup raspberries
2 small plums	½ pomegranate	1 small orange

WHOLE GRAINS/STARCHES

- One serving provides 80 calories, 3 grams protein, 0 to 1 gram fat, and 15 grams carbohydrate.
- **One serving equals:**

1/3 cup brown rice, cooked	1 ounce whole grain bread (~1 slice)
¼ whole wheat bagel	½ cup whole wheat pasta, cooked
½ cup green peas	½ cup beans and peas (ex. kidney, white, lentils)
2 to 4 whole wheat crackers	½ cup baked potato

HEALTHY FATS (UNSATURATED FATS)

- One serving provides 45 calories and 5 grams of fat.
- **One serving equals:**

1 teaspoon trans-fat free margarine	1 teaspoon olive oil, canola oil
2 tablespoons light/reduced fat salad dressing	1 tablespoon light/low-fat mayonnaise
10 small peanuts	1 tablespoon other nuts/seeds (ex. cashews)
1/8 avocado	

Special Concerns after Surgery

Common Food Intolerances

You may find that there are certain foods you are not able to tolerate after surgery, especially during the first few months. Avoid these foods for at least the first 6-12 weeks after surgery:

- Dry or tough meats, especially red meat, ground beef, and pork
- Lettuce, salad, and other raw, fibrous vegetables
- Gummy or doughy foods such as bread, rice, pasta
- Stringy vegetables such as celery or asparagus stalks
- Stringy fruits such as membranes of citrus fruits (ex. oranges or grapefruits), coconut and pineapple
- Cores, seeds, or skins of fruits or vegetables, dried fruits
- Spicy foods such as curry, salsa, or red pepper flakes
- Acidic foods
- Fried foods, high fat foods/sauces (cheese/butter/white/alfredo sauces, gravies)
- High sugar foods and beverages including juices and baked goods (avoid for the long-term after surgery)
- Carbonated beverages such as soda or sparkling water (avoid for the long-term)
- Caffeine

Many people are able to tolerate some or all of the foods listed above. When experimenting with new foods. It is recommended that you only add one new food at a time and observe your reaction. Adding too many new foods at once may lead to confusion as to which food caused problems.

Nausea and Vomiting

Nausea and vomiting may occur as a result of hormonal changes, in the early period after weight-loss surgery. Some patients also experience increased sensitivity to certain tastes or smells, which may contribute to nausea or vomiting. Nausea and vomiting are often related to overeating, eating/drinking too quickly, or not chewing well enough, so you will need to be mindful when eating or drinking for the rest of your life.

During the first few weeks after surgery:

- Stop eating or drinking as soon as you feel full.
- Make sure you are not eating or drinking too quickly. Avoid guzzling or gulping. Take small sips of fluid throughout the day—initially drink 1 ounce every 15 minutes.
- Avoid strong smelling foods or fluids. If the odor of your protein supplement increases nausea, try sipping your shake from a container with a lid.
- If hot or cold liquids worsen your symptoms, try room temperature fluids.
- Try using sugar-free popsicles, ginger tea, or adding lemon to water.
- Comply with the diet progression guidelines as instructed.

After the first few weeks:

- If nausea occurs after trying a new food, wait several days before trying it again. You may need to eat more liquid or pureed food temporarily.
- Avoid foods that are commonly not tolerated (see above).
- Eating or drinking too quickly (meals should last 20 to 30 minutes), too much (watch your portion sizes), or not chewing your foods thoroughly (chew 20 to 30 times before swallowing) may also cause nausea or vomiting.
- If you are having difficulty keeping food down, switch back to a clear liquid diet. After you are able to keep clear liquids down, advance your diet as you did after surgery. Sucking on ice chips may help relieve nausea and vomiting.
- Comply with the dietary guidelines.

If you are unable to keep food down for more than two days or if you have signs of dehydration such as dry skin that wrinkles easily or lack of urine, call your doctor or go to the emergency room immediately.

Constipation

Constipation may occur temporarily during the first month after surgery, but generally resolves as your body adapts to the changes in the amount of food you consume.

- Make sure you consume enough fluids (at least 48 to 64 ounces per day).
- Engage in regular physical activity. If you are sedentary, try increasing walking.
- If you are having difficulty having a bowel movement, gradually increase the amount of fiber in your diet. Depending on your diet stage, there are different foods you may be able to incorporate to increase your fiber intake. Good sources of fiber include bran cereals, whole wheat bread, fruits, and vegetables. Be cautious with these high-fiber foods for the at least first 6-12 weeks after surgery.

Dietary Sources	Fiber Content
Kidney Beans, ½ cup	4.5 grams
White Beans, ½ cup	4.2 grams
Apple, 1 medium	3.9 grams
Broccoli, ½ cup	2.6 grams
Pear, 1 medium	2.5 grams
Tangerine, 1 medium	1.6 grams
Potato, 1 small	3.8 grams
Peas (cooked), ½ cup	5.2 grams
Light Bread, 2 slices	5 grams
100% Bran cereal, ½ cup	10 grams

- Try adding a soluble fiber supplement such as Benefiber to your foods.
- Incorporate probiotics into your diet. Try eating sugar-free, fat-free yogurt with live cultures.
- If you go three days without a bowel movement, be sure to consult your health care provider.

Diarrhea

Lactose intolerance is a common cause of diarrhea after surgery. Even if you weren't lactose intolerant before surgery, some people develop lactose intolerance after surgery. Another common cause of diarrhea is dumping syndrome which is most often seen in patients who have had gastric bypass surgery, although it can also occur in patients who have had the sleeve gastrectomy.

- If you think you might be lactose intolerant, try eliminating foods with lactose such as milk and pudding. Make sure to choose a protein supplement that is lactose-free. You can also try drinking lactose-free milk or use a lactase supplement when consuming dairy products.
- Avoid foods/fluids that may trigger dumping syndrome such as greasy or high-fat foods (ex. fried foods), foods or fluids with simple sugars (ex. sweets, juice), and alcohol. Avoid drinking fluids with meals, as well as 30 minutes before or after meals.
- Limit intake of sugar alcohols. These are found in many sugar-free products, and when eaten in excess they can cause bloating and diarrhea. Examples of sugar alcohols include sorbitol, xylitol, mannitol, and maltitol.

Dumping Syndrome

Simple sugars, high-fat foods, drinking with meals, and alcohol are the most common triggers of dumping syndrome. Other symptoms of dumping syndrome include nausea, cramping, dizziness, sweating, faintness, and fast heart rate. Early dumping syndrome can occur anywhere from 15 to 30 minutes after eating and late dumping syndrome can occur anywhere from 1 to 3 hours after eating. To prevent dumping syndrome:

- Avoid added sugar (including hidden sugars)—choose products with <5 grams sugar per serving.
- Avoid drinking fluids with meals, as well as 30 minutes before or after meals.
- Avoid alcohol.
- Avoid greasy and high-fat foods.
- Eat protein and complex carbohydrates with meals and snacks.
- Eat 5 to 6 small meals per day.

Gas

If you experience problems with gas after surgery, try the following to help manage your symptoms:

- Eat slowly and chew at least 20 to 30 times before swallowing.
- Follow portion guidelines and avoid overeating.
- Avoid carbonated beverages, straws, and chewing gum.
- If you are lactose intolerant, avoid lactose.
- Gradually increase fiber intake and make sure to consume enough fluids.
- Limit sugar alcohols and fat intake.
- Be cautious with beans and cruciferous vegetables such as broccoli, cauliflower, and cabbage.

Dehydration

Patients who have had weight loss surgery are at great risk of becoming dehydrated. Drinking 48-64 ounces (6-8 cups) of fluid every day can prevent dehydration. Drinking this much fluid is more challenging after surgery because you cannot drink as much at one time. To prevent nausea/vomiting and avoid stretching your stomach, slowly sip your beverages throughout the day. Initially it should take you 10-15 minutes to drink 1 ounce of fluid. Additionally, avoid drinking fluids 30 minutes before and after meals. Signs of dehydration include dry mouth or dry skin, dizziness/headache, dark urine, or little urine output. **If you have any of these signs, increase your fluid intake.**

Medication Changes

During the first months after surgery, most people lose weight at a rapid pace. As you lose weight, your need for certain medications will decrease, and eventually you may not need them anymore. Occasionally, people suffer adverse effects, such as low blood pressure or low blood sugar, from taking medications that were prescribed to them when they were at a higher weight. Additionally, if you have diabetes, you should be regularly checking your blood glucose (sugar) levels. It is very important that you stay in close contact with your PCM so he or she can adjust your medications as your weight decreases.

Hair Loss

Three to four months after surgery, you may experience hair loss or thinning. Usually it is all-over thinning and is noticeable only to you. This hair loss is a side effect of the rapid weight loss and the stress of surgery. There is little evidence that this type of hair loss is preventable, and in time your hair will typically regrow.

Hair loss that continues 6 to 12 months after surgery may be a result of nutrient deficiencies, such as inadequate intake of protein or vitamins/minerals, such as iron and zinc. These surgeries restrict your intake, which makes it more difficult to consume adequate protein and other vitamins/minerals. To reduce chances of ongoing hair loss, consume a balanced diet with at least 60 to 80 grams of protein per day and take a daily multivitamin.

Excess Skin

After losing a large amount of weight, your skin may not “shrink” and you may find you have excess skin. The amount will depend on how much weight you lose, where you lose it, genetics, age, and gender. Weight training may help minimize the appearance of loose skin, but some patients elect to have plastic surgery to remove it. Procedures to remove excess skin are not usually performed until at least 18 months after surgery when weight loss has slowed. Having surgery too early in the weight loss process may require you to have additional surgery. Talk with your doctor to decide if plastic surgery is appropriate for you and when would be the best time for you to have surgery.

Pregnancy

It is possible for women to have successful pregnancies after having bariatric surgery, but it is recommended that women wait at least 12-18 months after the surgery before attempting to become pregnant. Pregnant women have greater nutritional needs that may be difficult to meet while their body is adjusting to the surgery and while losing large amounts of weight. This could result in complications and deficiencies for you and your baby and may result in birth defects. Consult your physician prior to attempting to become pregnant to discuss specific health care issues that could potentially have a negative impact on your pregnancy. Also follow-up with your registered dietitian to make sure your intake is adequate to meet your increased nutrient needs.

****Rapid weight loss increases fertility, so you should use the proper precautions to prevent pregnancy.****

Weight gain or lack of weight loss

Surgery is just a tool to help you achieve your weight loss goals. In order to be successful with weight loss and maintenance of that weight loss after your surgery, you must follow the lifestyle changes for the rest of your life. Regular follow-up with both your surgeon and dietitian is critical for lifelong success. Some causes for inadequate weight loss or weight regain after surgery include:

- Snacking/“grazing” throughout the day.
- Overeating/consuming large portions—follow portion guidelines
- Eating high calorie foods—avoid “junk foods,” sweets, and fried foods.
- Consuming calorie containing fluids—only drink fluids with less than 10 calories/serving.
- Not engaging in physical activity—aim for at least 150 minutes of cardiovascular exercise each week

Helpful Hints for Eating Out

- Limit how frequently you eat out at restaurants. When you eat out, you should still be focusing on making healthy choices that fit within your dietary guidelines.
- Before you go to the restaurant, plan ahead and decide what you will eat. Many restaurants have their nutrition information available online, so you can view it prior to going to the restaurant.
- To help with portion control, order:
 - Half or lunch-sized portions
 - A la carte items
 - Senior citizens portions
 - Children's menu—*take* caution as many of these items tend to be high in fat
 - Low-fat appetizers—(i.e. shrimp cocktail, chicken skewers, etc.), avoid choices that are breaded and fried or contain cheese
- Follow the plate method. Consume only recommended foods in suggested portion sizes.
- Avoid foods with cream-based sauces, cheese sauces, butter sauces, gravies, glazes, sweet-n-sour sauce, and teriyaki sauce. Ask for sauces and dressings on the side and then use sparingly.
- Choose foods you know you can tolerate. Experiment with adding new foods to your diet at home, prior to trying them in a restaurant.
- Share a meal with your spouse or friend.
- Ask for a box and pack up half your entrée before you start eating. Take home the leftovers to enjoy later.
- Remember not to drink any beverages with your meal.
- Remember to eat slowly, savor your food and take time to enjoy the dining experience.

My Gastric Surgery Team

Contact Person	Phone Number
Surgeon:	
Nurse:	
Registered Dietitian:	
Exercise Physiologist:	
Psychologist:	