

MaineHealth

Bariatric Surgery Nutrition Guide

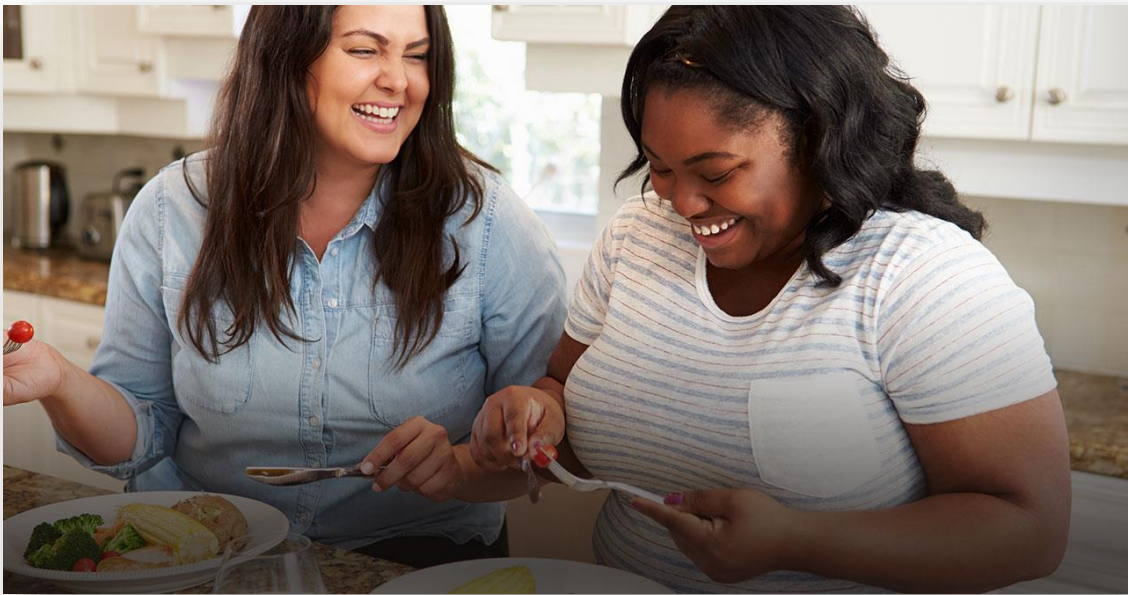
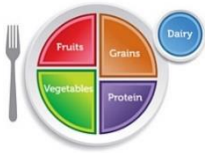


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Key Nutrition Behaviors: Before Surgery



Choose balanced meals and snacks
Eat 3 meals a day



Limit high-sugar and high-fat foods
Stop drinking carbonated and sugary drinks



Focus on protein-rich food at mealtime
Eat your protein FIRST



Eating mindfully, do not graze
Take small bites and chew well

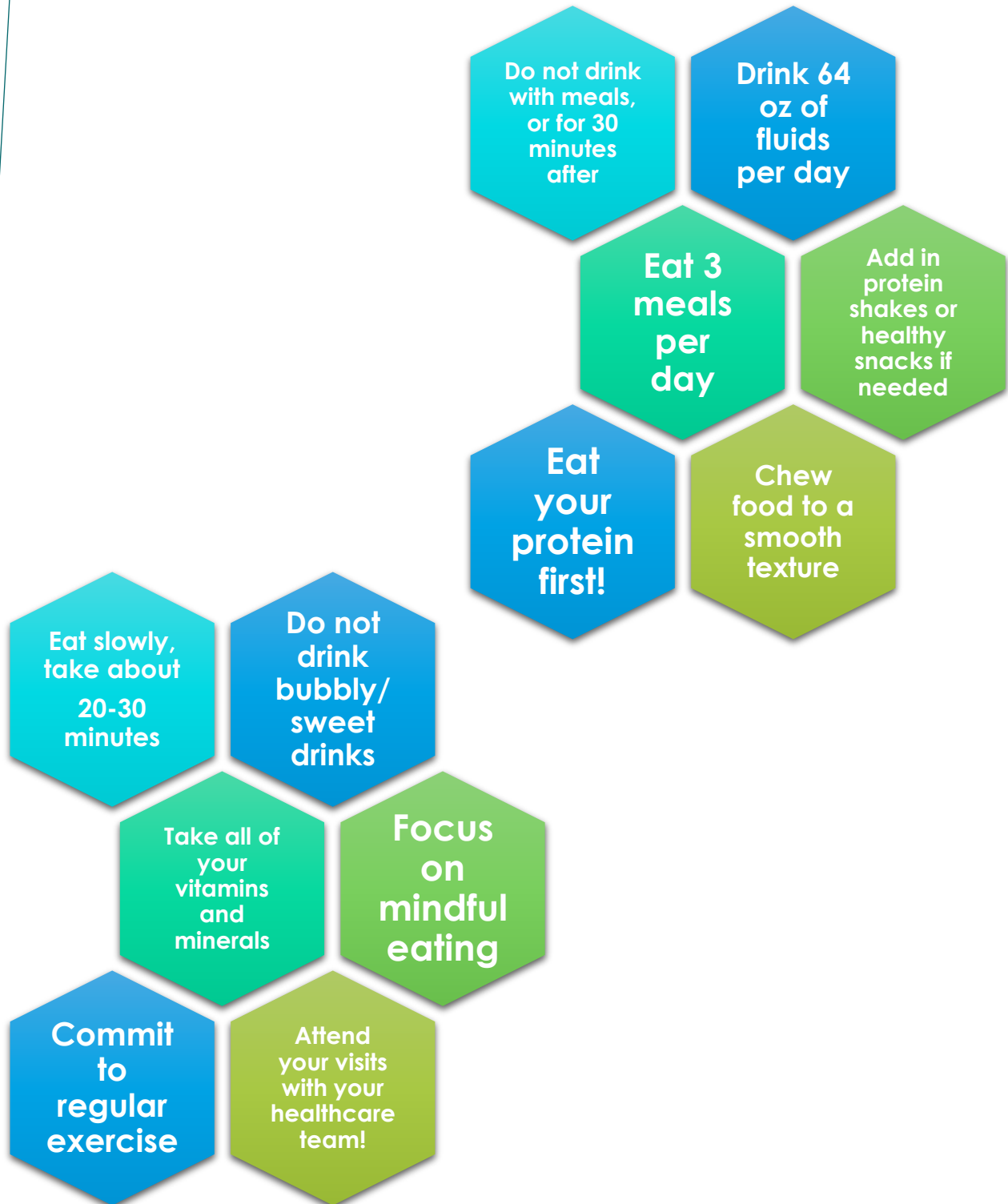


Drink 64 ounces of water each day
Eat and drink at separate times



Start taking a multivitamin with minerals
Get your labs checked

Key Nutrition Behaviors: After Surgery



Nutrition Basics

The food that makes up our diet contains both **macronutrients** (large- the body needs large amounts of these nutrients) and **micronutrients** (small- the body needs small amounts).

Macronutrients: Fats, Carbohydrates, and Protein

- These provide the body with calories
 - Calories = the body's form of energy

○ Protein	○ 4 calories per gram
○ Carbohydrates	○ 4 calories per gram
○ Fat	○ 9 calories per gram

Fats:

- Help produce hormones, calorie dense, and absorb fat-soluble vitamins
- Healthy Sources include:
 - Nuts, seeds, nut butters
 - Avocado
 - Fish
 - Olives and olive oil

Proteins:

- Building block of our body: helps with the building and repairing of skin, muscles, hair, etc.
- Very important after bariatric surgery
- Breaks down slowly, keeps your fuller for longer

Carbohydrates:

- Preferred source of energy for the body
- Source include
 - Starches: bread, rice, pasta, corn, peas, potato, legumes
 - Fruits
 - Dairy
 - Sweets/sugar

Micronutrients: Vitamins and minerals

Protein

Protein helps:

- Your body heal
- Give you energy
- Strengthen your immune system
- Keep you satisfied and less hungry during the day

Always
eat
protein
FIRST!

SOURCES OF QUALITY PROTEIN

MEAT

Beef
Lamb
Pork
Wild Game

POULTRY

Chicken
Duck
Eggs
Ostrich
Turkey

FISH

Bass
Hake
Kingklip
Mackerel
Salmon
Sardines
Snoek
Trout
Tuna
Yellowfish

SEAFOOD & SHELLFISH

Calamari
Clam
Crab
Crayfish
Lobster
Mussel
Oyster
Prawn
Shrimp

DAIRY

Milk
Cottage Cheese
Plain Yoghurt
Protein Powders

PLANT-BASED

Beans and Peas
Chickpeas
Lentils
Protein Powders
Tofu and Tempeh
Edamame

Lean or low-fat options = more protein per calorie.

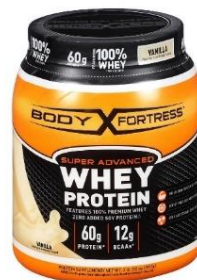


Protein Shakes

Protein drinks and powders help you meet your protein goals when you are not able to meet them through the foods you eat. Some are powders that you mix with liquid (such as water, skim milk, 1% milk, or unsweetened almond milk) or foods (such as yogurt), and others are sold as premixed drinks. However, not all protein shakes are equal. **Look for protein shakes that are less than 200 calories and have at least 20 grams of protein, 5 grams of total fat or less, and 5 grams of sugar or less per serving.**

Here are some examples of protein supplements that will help you reach your goals:

- Slimfast Advanced Nutrition 20g Protein Shakes
- Premier Protein Drinks
- Ensure Max Protein Shakes
- Vega Protein Drinks*
- OWYN Shakes and Powder*
- Orgain Protein Drinks*
- Unjury Protein Powder
- Equate Shakes and Powder
- Protein2O Clear Drinks
- Isopure Zero Carb Drinks
- Fairlife Nutrition Plan Shakes
- Atkins Plus 30g Protein Shakes
- Body Fortress Whey Protein Powder



*Vegan

High Protein Yogurts

Yogurt can be a great source of high quality protein and calcium that will likely be easy to tolerate in the first couple of weeks after surgery.

- Choose Greek yogurt or Icelandic/Skyr for double the protein.
 - Protein should be at least 10 grams per serving.
- Sugar should be less than 12 grams per serving.
- If there is added fruit, be sure to chew it thoroughly before swallowing.
- If you don't like the texture of Greek yogurt, try a different brand. They all taste a bit different.

Brand	Protein (grams)	Sugar (grams)	Type of Sweetener
Oikos Triple Zero	15	5	Stevia
Oikos Pro	20	3	Stevia
Dannon Light n Fit Greek	12	7	Sucralose
Siggi's Skyr	16	9	Agave Nectar
Icelandic Provisions Skyr	17	10	Sugar
Two Good	12	2	Stevia
Fage Total (Plain)	18	5	None
Chobani Less Sugar	12	9	Sugar



Notes

Lined area for writing notes.

Food Labels

Nutrition Facts	
8 servings per container	
Serving size	2/3 cup (55g)
Amount per serving	
Calories	230
	% Daily Value*
Total Fat 8g	10%
Saturated Fat 1g	5%
<i>Trans Fat</i> 0g	
Cholesterol 0mg	0%
Sodium 160mg	7%
Total Carbohydrate 37g	13%
Dietary Fiber 4g	14%
Total Sugars 12g	
Includes 10g Added Sugars	20%
Protein 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	

Total fat is the total amount of fat per serving. There are different types of fat listed on the label. **Saturated fat** typically comes from animal sources and is solid at room temperature. Saturated fat can raise your cholesterol. **Trans fats** act like a saturated fat and can increase your risk for heart disease. **Monounsaturated and polyunsaturated fats** typically come from plant sources and are more heart healthy. They will add calories but will not increase your cholesterol.

Serving size: the information you see on the label is based on this portion size of food. The label will also tell you how many servings of food are in the container.

Calories: refer to the total amount of energy in the stated serving size.

Sodium: also known as salt, can contribute to high blood pressure in some people with high intake. Try to keep daily sodium intake to less than 2400mg. Generally, if a product has more than 400mg of sodium per serving, it is considered a high sodium food.

Carbohydrates are used by the body for energy. There are two different types of carbohydrates listed on the food label: **Fiber** is important for digestive health and can reduce the risk of heart disease. The goals for fiber intake is 25-35g per day. Choose products with more than 2-3g per serving. Whole grains are an excellent source of fiber. **Sugar** is found in most foods. Try to keep this number as low as possible. Calories from sugar are empty calories.

Protein is found in many foods and is important for healing muscles and body tissues. Choose lean proteins that have less fat like fish and chicken.

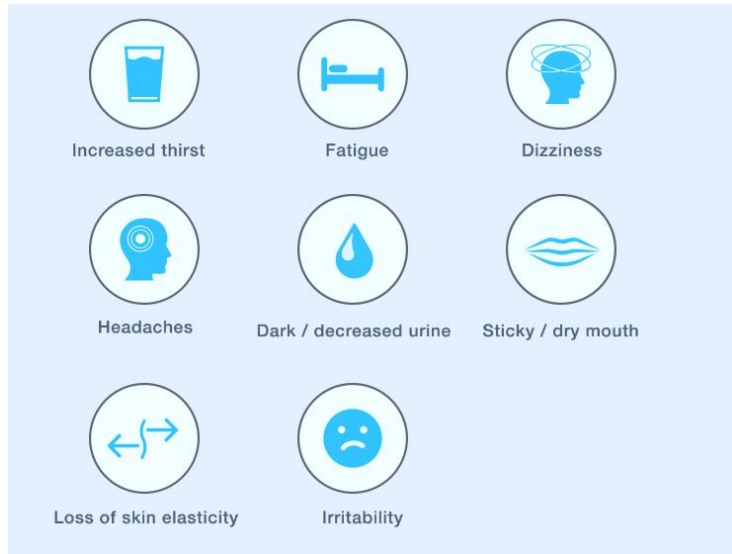
The **% daily values** are based on recommendations for a 2,000 calories daily diet. Values 5% and under are considered "low" and 20% and high are considered "high".

Fluids

Dehydration happens when your body loses too much water. It can happen easily after weight loss surgery and can cause you to get very sick.

Signs of Dehydration

- Nausea and vomiting
- Dizziness, lightheadedness
- Tiredness
- Irritability or anxiousness
- Constipation
- Dark urine
- Cracked lips
- Feeling thirsty
- Fast breathing
- Muscle weakness or low energy



How much should I drink?

Drink 8 cups (64 ounces) of fluid a day

When should I drink?

Initially, drink at least 1 ounce every 15 minutes. You will be able to drink more over time. **Do not drink during meals or for 30 minutes after meals.**

Tips for drinking enough fluid:

- Bring liquids with you so that you can drink slowly throughout the day
- Set an alarm on your watch, cell phone, kitchen timer, or computer
- Drink slowly and take small sips
- Keep written records of how much you drink the first few weeks
- Call us if you are having a hard time drinking enough
- Mix it up, drink sugar-free/calorie-free flavored water if needed (such as Crystal Light, Vitamin Water Zero, Sobe Life Water, or Mio drops)

Fluids Continued...

What should I drink?

- WATER!!!
- Iced tea (sugar-free, decaffeinated)
- Tea, decaffeinated or herbal
- Skim milk, 1% milk
- Protein shakes
- Fat-free or low fat broth or bouillon
- Popsicles (sugar-free, zero calorie)
- Hot chocolate (sugar-free)
- Naturally flavored water with mint, lemon, lime, or fruit
- Sugar-free, non-carbonated beverages



We recommend you add regular or flavored Benefiber or another clear soluble fiber supplement to your fluids (as directed) to prevent constipation.

What should I NOT drink?

- Drinks with calories (Protein shakes and/or skim or 1% milk are OK)
- Drinks with added sugar
- Drinks with carbonation
- Juice
- Caffeine and decaffeinated coffee (Ask your dietitian when it is OK to drink):
 - Irritates your stomach
 - Dehydrates you
- Alcohol:
 - Has extra calories
 - Not processed well after surgery
 - Irritates your stomach, can make you sick, dehydrate you
 - Can lead to risky behaviors
- Straws cause you to take in more air with each sip. You might want to avoid using them if you are feeling gassier.

Vitamins and Minerals

You will need to take the vitamins and minerals every day for the rest of your life. Please ask your dietitian when it's appropriate to switch your vitamins from chewable to a pill. We will regularly checking your lab work to make sure you are not low in any nutrients.



- Do not take with coffee or tea or on an empty stomach.

Multivitamins:

- Take a chewable complete multivitamin daily with at least 18mg of iron, 400 mcg folic acid, zinc and copper.
- Examples include: Children's Chewable Multivitamin, Celebrate Bariatric Vitamins, Bariatric Advantage Multivitamins
- Do not choose multivitamins that are gummies or spray-form. They do not have all of the recommended minerals that your body needs to be healthy.

Calcium:

- You need 1200-1500mg of calcium every day – take 2-3 pills daily.
- Take 1 at a time (500-600mg each). Be sure to take them at least 2 hours apart and separate from the multivitamin with iron.
- Calcium **Citrate** is preferred for better absorption.
- Examples include: Nature Made Chewable Calcium, Solaray Calcium Citrate Chewable, Celebrate Calcium Citrate Chewable, Bariatric Advantage Chewable Calcium, Caltrate or Viactiv Chewables (calcium carbonate)

B-50 Complex

- For the first 3 months after surgery, you will take a B-50 complex daily.
- Choose one that has at least 15mg thiamin (Vitamin B1).
- Examples include: KAL Coenzyme B-Complex, Bariatric Fusion Vitamin B-Complex, Celebrate B-50 Complex, Bariatric Advantage B-Complex

Vitamin B-12

- 3 months after surgery, stop taking B-Complex and start taking 500 mcg of vitamin B12 every day.
- It is okay to take vitamin B12 with either the multivitamin or with the calcium supplement.
- There is an option to get this through a monthly shot at your doctor's office or as a nasal spray. Ask us for more information.

Vitamins and Minerals Continued...

Daily Vitamin Schedule

Breakfast	2 Chewable/ Liquid Complete Multivitamins B-Complex or 500mcg Vitamin B-12
Lunch	Calcium Supplement with Vitamin D
Dinner	Calcium Supplement with Vitamin D
Bedtime	Calcium Supplement with Vitamin D

It is not mandatory that you take your vitamins in this exact schedule. Some individuals will choose to take their multivitamins at night to avoid nausea. The key point is that you do not want to take calcium and multivitamin together. This would also be true of iron supplements; they should not be taken at the same time as calcium.

****Vitamin B12 and Vitamin D (if needed) are okay to take with either your multivitamin or with your calcium****

Vitamin Shopping Tips:

- Check to make sure your multivitamin regimen contains the following:
 - ▲ At least 18mg of **iron**
 - At least 400 mcg **follic acid/folate**
 - Zinc and copper
- **Where to purchase:**
 - **Over-the-counter options:** CVS Children's Chewable, Optisource Post-Bariatric Surgery Chewable Multivitamin, Equate Children's Chewable Complete, Target Kids' Multivitamin Complete
 - **Amazon options:** Procure Health Once Daily Bariatric Multivitamin, BariSlim Complete Multivitamin Chewable
 - **Southern Maine Health Care Pharmacy – ask about pharmacist about bariatric vitamins**
 - **Bariatric Adavantage.com & Celebratevitamins.com**
 - **Nutrition Direct (through private insurance) – Ask your Dietitian for more info.**

Common Vitamin & Mineral Deficiencies

Vitamin B12

B12 deficiencies are very common after any type of surgery that removes a large part of the stomach. Symptoms of deficiency include: loss of mental alertness, nausea, muscle weakness, sore tongue, and numbness in hands/feet.

Vitamin B1 or thiamine

B1 deficiencies can occur after multiple episodes of vomiting or if appropriate vitamins are not taken. Symptoms of deficiency include memory issues, muscle cramps, and or weakness, and numbness or tingling in arms/legs.

Folate

Folate deficiency often occurs due to poor dietary intake and/or if appropriate vitamins are not taken. Symptoms of deficiency are very similar to Vitamin B12 deficiency including: fatigue, weakness, sore tongue, and forgetfulness. However a folate deficiency is also thought to play a role in neural defects (birth defect), heart disease, and some cancers.

Vitamin D

Vitamin D deficiency is very common among bariatric patients both before and after surgery. There are multiple factors that can cause low levels which include: reduced sun exposure, malabsorption, and low dietary intake. Long-term Vitamin D can lead to bone issues, and it may play a role in some cancers. It is also thought that low Vitamin D can cause seasonal affective disorder and/or depression.

Iron

Iron deficiencies can develop after bariatric surgery due to reduction in stomach acids, especially if the appropriate vitamins are not taken. Iron deficiency can occur many years after surgery, therefore supplementation for a lifetime is important. In some cases, deficiency will occur even with supplementation. Symptoms of deficiency include: weakness/fatigue, hair loss, swollen tongue, and difficulties concentrating.

Zinc

Zinc deficiencies can occur after bariatric surgery, however is not as common as some of the other deficiencies. Symptoms of deficiency include: poor wound healing, grooved nails, sore around the mouth, and more frequent infections.

Selenium

Selenium deficiency is rare after bariatric surgery; however some of the children's multivitamins do not contain selenium. Symptoms of deficiency include: premature graying of hair, weakness, and whitened nail beds.

Start Your Journey: The Preoperative Diet

Your safety is our number one priority. We have found that following a preoperative diet can make your operation safer and shorter. You will start the preoperative diet **2 weeks prior to your surgery**.

***PLEASE NOTE:** *If you normally experience low blood sugars or have diabetes, please speak with your Registered Dietitian before starting this diet. Also, we do not recommend staying on the preoperative diet for more than 2 weeks unless you have approval from your Registered Dietitian.*

Pre-op Meal Plan:

We recommend that you eat a meal or drink a shake every 3-4 hours to help manage your hunger. This is the maximum amount of food, not the minimum. Free foods (on page 18) can be added in as desired.

Breakfast: Protein Shake



Snack: Choose from list on page 17



Lunch: Protein shake



Snack: Choose from list on page 17



Dinner: Homemade Meal or Frozen Meal



Start Your Journey: The Preoperative Diet

Snack List:

- ½ cup cream of wheat, cooked
- ½ cup oatmeal, cooked (1 packet)
- ¼ cup egg whites
- ½ cup sugar free pudding
- ½ cup unsweetened applesauce
- ½ cup low fat cottage cheese
- ½ cup lower fat/reduced sodium cream soup
- 6 ounces low-fat, lower sugar yogurt (Greek yogurt preferred)
- 8oz sugar free hot cocoa (made with milk)
- 8oz skim or 1% milk
- 8oz lactose free skim or 1% milk
- 8oz Low sodium V8 juice
- *Protein shake (no more than 3 per day)

Condiments:

- Salsa
- Mustard
- Light Mayo (1 Tablespoon)
- Cinnamon, nutmeg
- Splenda/Stevia/Equal/Nutrasweet
- Splenda brown sugar
- Dips made with low-fat yogurt and dry mix (ex. Lipton onion soup) - ¼ cup
- Bolthouse Farms Greek yogurt dressing (no more than 2 Tablespoons)
- Walden Farms dressings/chocolate sauce
- Laughing cow cheese wedges (1-2 for melting on veggies)
- Jolly Time butter seasonings (for sprinkling on veggies)
- Hummus (no more than 2 Tablespoons)

Condiments should be used as needed to add flavor to your food. Stick to 1 serving of 1 condiment per meal to maintain calorie and portion control!

Start Your Journey: The Preoperative Diet

Dinner Option 1: Homemade Meal

- 3-5 ounces of lean, high quality protein
- Unlimited non-starchy vegetables (no peas, corn, potatoes, or squash)
- Use portion control with added fats:
 - No more than 2T of low fat/ low calorie dressing
 - No more than 1T of oil for cooking
 - No more than 2T of grated cheese for meat or vegetables

Dinner Option 2: Frozen Meal

- No more than 300 calories and at least 15g protein
- Less than 600mg sodium
- Pair with additional free food OR additional non-starchy vegetables

Free Foods:

Sugar-free Jello

Sugar-free popsicles

Low sodium broth

Sugar-free hot cocoa (made with water)

Pickles

Sugar-free hot cider

Non-starchy vegetables

Fluid:

Your fluid goal is 64 ounces of non-caffeinated, non-carbonated fluid

DAY BEFORE SURGERY

No solid foods. You may have up to 5 protein shakes plus non-calorie liquids.

DAY OF SURGERY

Do not eat or drink anything unless specified by your doctor

FOR YOUR SAFETY, IT IS IMPORTANT THAT YOU FOLLOW THE GUIDELINES PROVIDED TO YOU BY ANESTHESIOLOGY – THESE GUIDELINES MAY VARY FROM THOSE OUTLINED ABOVE.

After Surgery Nutrition: The Postoperative Diet

Diet Stage	Duration	Texture of Foods
Stage 1	First 48 hours	Liquids
Stage 2	Weeks 1 – 2	Smooth Foods
Stage 3	Weeks 3 – 7	Mashed Foods
Stage 4	Weeks 8 – 12	Solid Foods
Stage 5	Weeks 12 +	Solid Foods + Fruit, Vegetables, & Whole Grains

It is very important that you DO NOT advance diet stages before recommended!

Purpose of Diet Stages

Helps your body heal and slowly introduces new foods, textures, and portion sizes

Fluid Goal

64 ounces of fluid a day

Protein Goals:

- AT LEAST 60-70g a day (aim for 15-20g per meal)
- Remember to always eat protein first
- You can get protein from protein shakes, protein powder, or food
- You may not reach this goal at first, but it will get easier every day

Daily Vitamins: (see pages 13 and 14)

- Both surgeries: chewable complete multivitamin, 2-3 chewable calciums, B-complex (first 3 months), Vitamin B-12 (after 3 months)

Stage 1: Liquids

Hospital & First 48 Hours Home

Instructions

During your hospital stay and for the first couple of days at home, your goal is to work on adequate fluid intake. Aim for at least 48-64 ounces of fluid each day. Initially, focus on having about 1 ounce of fluid every 15 minutes and then increase as able.

If you are unable to take in at least 32 ounces for two days in a row, **please give our office a call** so one of our nurses can do an assessment and see if you are at risk for dehydration. Our office number is **207-661-6064**.

What to drink:

- Beverages that are sugar-free, non-carbonated, non-caffeinated

Examples of appropriate fluids:

- Water
- Protein shakes
- Crystal Light, Mio or other sugar-free flavorings
- Decaf coffee or tea*
- Skim or 1% milk
- Low-sugar milk alternative such as soy or almond milk
- Clear low-fat, low-sodium chicken, beef or vegetable broth
- Sugar free sports drinks such as Gatorade Zero, Powerade Zero or Vitamin Water Zero

Fluid Tips:

- Gulping or chugging fluids may cause stomach pain, be sure to sip throughout the day and pace yourself.
- *Be mindful of what you are adding to decaf coffee or tea. Also, these drinks are acidic and may cause heartburn or reflux, so if you are experiencing these symptoms it may be best to avoid decaf coffee or tea for a little while longer.
- Avoid caffeine until 3 months post-op.
- If you are experiencing gas pain or discomfort, try walking around.

Stage 2: Smooth Foods

Weeks 1 and 2

How Much to Eat & Drink:

- Typical portion size is about ¼ cup
- Aim for at least 60-70 grams of protein per day
- Aim for 48-64 ounces of fluid per day

What to Eat & Drink:

- You may eat smooth foods that are listed below. Your stomach is still healing and other foods may be irritating.
- If you choose, blend your foods in a blender *after you cook them* if they are not already smooth. Make sure foods do not have any lumps, chunks, or strings.
- You may include any of the fluids listed in Stage 1 along with the smooth foods listed below.

Protein Foods:

Food Item	Average Protein (¼ cup)
Greek yogurt (non-fat, low sugar)	4
Cottage cheese (low-fat or fat free)	8
Refried beans, fat-free	4
Hummus, plain	4
Shredded cheese, low fat, melted	7
Blended soups, stews, mild chili	Varies
Protein powder/RTD Shakes	Varies

Other Choices:

- Fat free or light yogurt
- Sugar-free pudding
- Unsweetened or SF applesauce
- Plain cream of wheat, oatmeal, cream of rice
- Peanut butter powder
- Mashed avocado

Stage 2 Eating Tips:

- Prioritize protein at each meal and eat your protein foods first
- Stop eating before you are full and do not force yourself to finish the meal
- Meals should last 20-30 min but no more than 30 min to prevent grazing
- You should be able to meet your protein needs with the above foods, using protein shakes as needed

Stage 3: Mashed Foods

Weeks 3 – 6

How Much to Eat & Drink:

- Typical portion size is about ½ cup per meal
- Aim for at least 60-70 grams of protein per day
- Aim for 48-64 ounces of fluid per day

What to Eat & Drink:

- You may start to incorporate foods that can be mashed and do not require excessive chewing.
- You may include any of the fluids listed in Stage 1, smooth foods from Stage 2, and the mashed foods that are listed below.

Protein Foods:

Food Item	Average protein
Tuna, canned, in water (2oz)	14
Chicken, canned, in water (2oz)	14
Soft scrambled or poached egg (1)	7
Deli turkey or ham (2oz)	14
Flaked fish (baked or grilled) (2-3oz)	14-21
Ground chicken or turkey, moist (2oz)	14
Tofu (1/4 cup)	5
Cheese, low-fat (1oz or ¼ cup shredded)	7

Other Choices:

- Soft, well-cooked non-starchy vegetables (avoid potatoes, corn, peas)
- No sugar added canned fruit (canned in juice, no syrup)

Stage 3 Eating Tips:

- Slowly start to incorporate the above foods. You may not tolerate certain textures the first time you try them. If you have trouble with a certain food, wait at least a week before trying it again.
- You may add low-fat/light mayo or plain non-fat Greek yogurt to canned chicken, tuna, or eggs to make chicken/tuna/egg salad.
- You may incorporate protein shakes as needed to reach your protein goals.

Stage 4: Solid Foods

Weeks 7 – 12

How Much to Eat & Drink:

- Typical portion size is about 1 cup per meal
- Aim for at least 60-70 grams of protein per day
- Aim for 48-64 ounces of fluid per day

What to Eat & Drink:

- You may start to slowly incorporate regular/solid texture foods.
- You may include any of the fluids listed in Stage 1, smooth foods from Stage 2, mashed foods from Stage 3, and solid foods listed below.

Protein Foods:

Food Item	Average protein
Chicken breast (2-3oz)	14
Turkey breast (2-3oz)	14
Beef, lean, moist (2-3oz)	14
Ground beef, lean (2-3oz)	14
Canadian bacon (1oz)	14
Fish, any kind (2-3oz)	14
Lobster (2-3oz)	14
Scallops (2-3oz)	13
Shrimp (2-3oz)	12
Lump crab meat (2-3oz)	10
Imitation crab (2-3oz)	7
Veggie burger (1)	7-12
Cooked/canned beans* (1/2 cup)	7-8

Other Choices:

- Soft cooked fruit or vegetables
- No sugar added canned fruit (canned in juice, no syrup)
- Mashed white or sweet potato (limit to 1/3 cup per meal)

Stage 4 Eating Tips:

- Keep meat moist by using low-sodium broth or fat-free gravy.
- Limit added fat and sugar to 5-6 grams or less per serving.
- You may still incorporate protein shakes as needed to reach your protein goals.
- *Avoid baked beans

Stage 5: Solid Foods, Fruit, Vegetables and Whole Grains

Weeks 12+

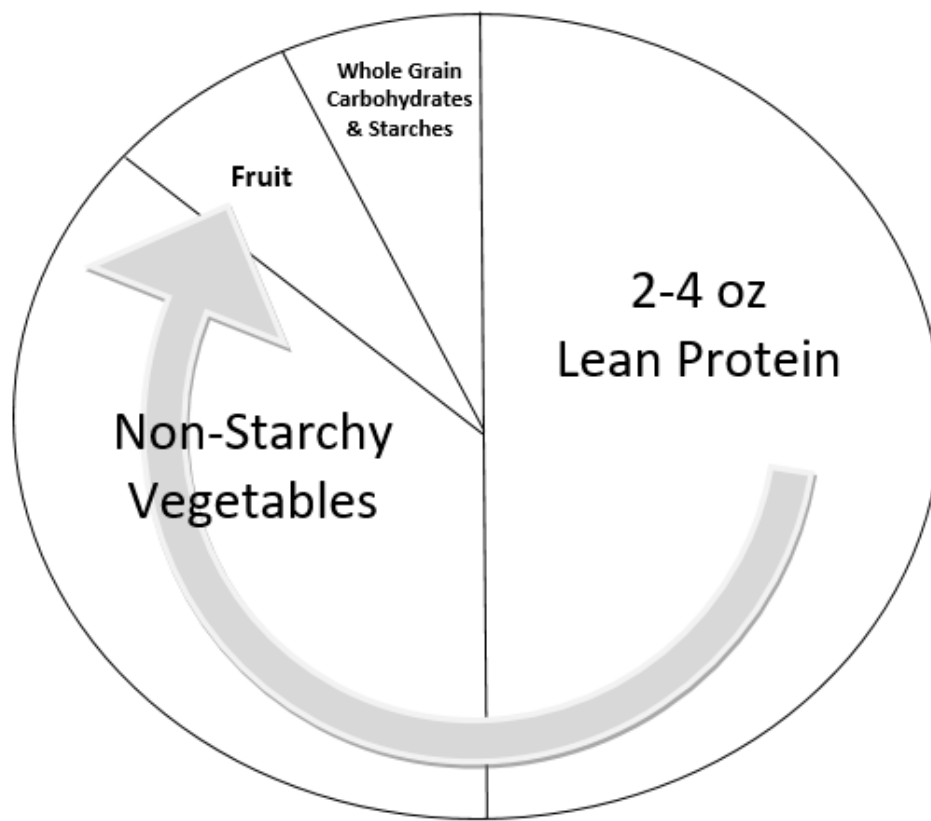
How Much to Eat & Drink:

- Typical portion size is about 1 cup per meal
- Aim for at least 60-70 grams of protein per day
- Aim for 64+ ounces of fluid per day

What to Eat & Drink:

- You may start to slowly incorporate raw fruit and vegetables along with whole grains. Use the plate method below as a guide.
- You may include any of the fluids listed in Stage 1 and the foods listed throughout the previous stages, with the addition of raw fruits and vegetables, and whole grains.

Bariatric Plate Method



Dumping Syndrome

What is dumping syndrome?

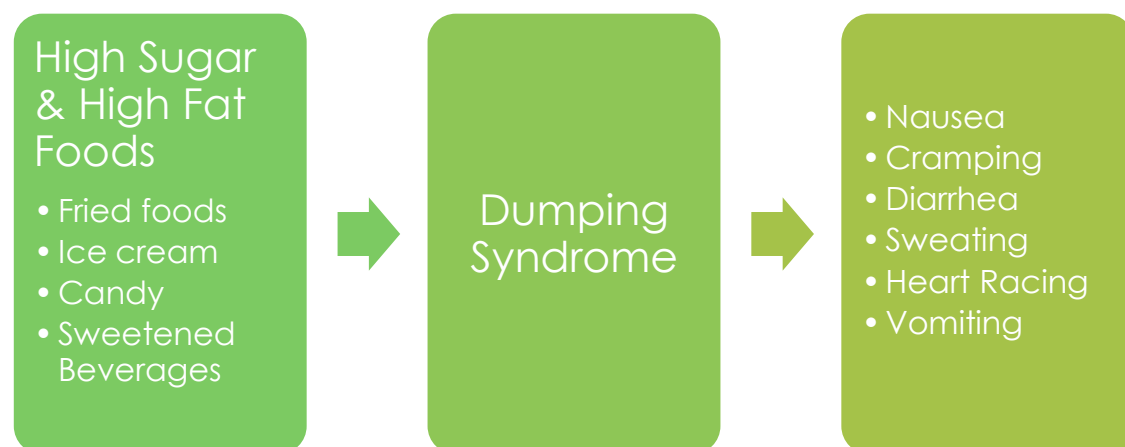
- A condition that occurs in most gastric bypass patients after they eat added sugar or high fat foods.
- Caused by sugar passing quickly into the small intestine.
- Dumping syndrome is not dangerous, but is quite unpleasant.
- You MAY eat fruits, vegetables, and milk which have natural sugar.

What are the symptoms?

- Flu like symptoms, cramping, "queasiness," gas, bloating, diarrhea, weakness, sweating and heart palpitations.
- Symptoms typically last about an hour, but vary by person.

How do I avoid dumping syndrome?

Don't eat food with added sugar - avoid anything containing sugar as one of the first three ingredients. Look for foods with 6 grams of sugar or less per serving. In some people, dumping syndrome may occur after they eat foods high in fat. Common culprits include fried foods, ice cream, sugary drinks, candy, cake, etc.



Sweeteners

Sweeteners you can use:

- Sucralose (Splenda)
- Stevia
- Truvia

Sweeteners to avoid if they are one of the first three ingredients listed:

- Brown sugar
- Honey
- Glucose
- Confectioner's sugar
- Malt syrup
- Sucrose
- Granulated sugar
- Cane juice
- Dextrose
- Corn syrup solids
- Agave nectar
- Maple syrup
- Lactose
- Maple sugar
- Molasses
- Xylose
- Raw sugar
- Rice syrup
- Corn syrup
- Maltodextrin
- Fructose

Sugar Alcohols:

Sugar alcohols do not cause dumping syndrome, but may cause nausea, gas, cramping and diarrhea. Avoid ingredients with the suffix "ol" which are often sugar alcohols such as:

- Arabinol
- Glycerol
- Glycol
- Mannitol
- Maltitol
- Xylitol
- Sorbitol



Sample Meal Plans (Stages 2-5)

Stage 2 – Smooth Foods (Weeks 1-2)

Typical portion = $\frac{1}{4}$ cup

Time	Food	Liquids	Protein
Morning	Protein Drink	14 oz	30g
Mid-Morning	2 T low fat Greek yogurt	10 oz water	2g
Lunch	2 T refried beans with 1 T plain Greek yogurt	16 oz water	2g
Mid-Afternoon	1 scoop chocolate protein whey powder with 8oz skim milk	8 oz (from milk)	28g (20 + 8)
Dinner	2 T cottage cheese	12 oz water	4g
Evening	$\frac{1}{2}$ protein drink	7 oz	15g

Total Protein: 81 grams

Total Liquids: 67 ounces

Stage 2 – Smooth Foods (Weeks 1-2)

Typical portion = $\frac{1}{4}$ cup

Time	Food	Liquids	Protein
Morning	$\frac{1}{4}$ cup plain cream of wheat with 1 scoop protein powder	8 oz herbal tea, 8 oz water	14g (4 + 10)
Mid-Morning	Premier Protein	11 oz protein shake 8 oz water	30g
Lunch	$\frac{1}{4}$ cup Greek yogurt	8 oz water	4g
Mid-Afternoon	Protein powder mixed with 8 oz unsweetened almond milk	8 oz	22g (21 + 1)
Dinner	$\frac{1}{4}$ cup FF refried beans	8 oz water	4g
Evening	$\frac{1}{4}$ cup sugar-free pudding	8 oz water	0g

Total Protein: 74 grams

Total Liquids: 67 ounces

Stage 3 – Mashed/Soft Foods (Weeks 3-7)

Typical portion = ½ cup or 1-2oz)

Time	Food	Liquids	Protein
Morning	6 oz Greek yogurt + 1T oats (mix yogurt and oats and let sit overnight)	8 oz water	15g
Mid-Morning	Protein shake	12 oz	20g
Lunch	½ cup of turkey chili with black beans	12 oz Crystal Light	8g
Mid-Afternoon	½ cup cottage cheese	12 oz water	14g
Dinner	2-3 oz soft, flaked white fish, 1-2 T soft cooked broccoli w/ sprinkled parm	12 oz decaf iced tea with lemon	14-21g
Evening	¼ soft banana mixed with 1 tsp peanut butter	8 oz decaf hot tea	2 grams

Total Protein: 73-80 grams

Total Liquids: 64 ounces

Stage 3 – Mashed/Soft Foods (Weeks 3-7)

Typical portion = ½ cup or 1-2oz)

Time	Food	Liquids (oz)	Protein (grams)
Morning	2 scrambled eggs + sprinkle of melted, shredded cheese (½ cup total)	8 oz decaf coffee	12 g
Mid-Morning	½ protein shake (homemade)	6 oz	11.5 g
Lunch	Canned tuna + 1 Tbsp light mayo (½ cup total)	16 oz water	20 g
Mid-Afternoon	½ protein shake (homemade)	6 oz	11.5 g
Dinner	Ground chicken or turkey (¼ cup) + cooked green beans (¼ cup)	16 oz water	10 g
Evening	Sugar-free popsicle	2 oz 12 oz water, broth, or decaf tea	

Total Protein: 65 g

Total Liquids: 66 oz

Stage 4 – Solid Foods (Weeks 7-12)

Typical portion = ½-1 cup or 2-3oz

Time	Food	Liquids	Protein (grams)
Morning	Plain oatmeal (¼ cup) with plain Greek yogurt (¼ cup), topped with unsweetened strawberry puree	12oz water	8g
Mid-Morning	Homemade protein shake	8 oz water	20g
Lunch	Low carb taco salad made with ¼ cup cooked beans, 1/8 cup shredded or melted cheese, ¼ cup ground turkey	8oz water	20g
Mid-Afternoon	Protein2O	16oz	15g
Dinner	Ground chicken (1/4 cup) + cooked green beans (1/4 cup)	8oz water	7g
Evening	Low-fat Ricotta (1/4 cup) with 2T protein powder and cinnamon	12oz water	4g

Total Protein: 74 grams

Total Liquids: 64 ounces

Stage 4 – Solid Foods (Weeks 7-12)

Typical portion = ½-1 cup or 2-3oz

Time	Food	Liquids	Protein (grams)
Morning	1 scrambled egg + 1 T cheese	8-12oz water	9g
Mid-Morning	½ cup unsweetened applesauce mixed with 1 scoop of vanilla protein powder	12 oz water	20g
Lunch	½ veggie burger + 1T mashed avocado	12 oz water	5g
Mid-Afternoon	Protein shake	11oz + 8oz water	20g
Dinner	2 oz braised chicken breast + 1T low sugar BBQ sauce + 2T cooked carrots	8-12 oz water	14g
Evening		8 oz SF hot cocoa made with skim milk	6g

Total Protein: 68 grams

Total Liquids: 67-75 ounces

Stage 5 – Solid Foods + Raw Fruits & Veggies (Weeks 12+)

Typical Portion = 1 cup

Time	Food	Liquids	Protein (grams)
Morning	1 low carb wrap with 2 oz smoked salmon + light cream cheese + cucumber	12oz water 8 oz decaf coffee	19g
Mid-Morning	Greek yogurt	8-12 oz water	15g
Lunch	2-3 oz of cubed tofu marinated in SF teriyaki sauce + steamed broccoli and cauliflower	8-12 oz decaf iced tea	8g
Mid-Afternoon	½ cup cottage cheese + 2 apple slices + 2 baby carrots	12-15 oz water	15g
Dinner	3 oz lean ground beef with low sugar tomato sauce + ½ cup spaghetti squash	12-15 oz water	21g
Evening	Protein shake (optional)	8 oz hot tea	20g

Total Protein: 78-98 grams

Total Liquids: 68-82 ounces

Stage 5 – Solid Foods + Raw Fruits & Veggies (Weeks 12+)

Typical Portion = 1 cup

Time	Food	Liquids	Protein (grams)
Morning	1 egg + 1 slice whole grain toast + ¼ avocado	12oz water 8 oz decaf coffee	7g
Mid-Morning	1 oz cheese + 6 Triscuits	8-12 oz water with calorie-free flavoring	7g
Lunch	2-3 oz egg salad on small green salad	8-12 oz decaf iced tea with lemon	21g
Mid-Afternoon	Greek yogurt	12-15 oz water	15g
Dinner	2 oz pork tenderloin + ½ cup cooked green beans + ¼ cup brown rice	12-15 oz water	14g
Evening	Sugar-free pudding + 3-4 sliced strawberries	8 oz decaf hot tea	1g

Total Protein: 68 grams

Total Liquids: 67-75 fluid ounces

Eating 4 a Lifetime

Tips to remember:

- Don't advance stages too quickly, even if you feel ready
- Eat moist and tender meats, cook in the slow cooker, add tomato sauce, broth, fat-free gravy, etc.
- When trying a new food, eat one bite, then wait ten minutes to see if you will be comfortable with it
- If you have pain from eating the new food, wait at least another week before you try this food again
- Remember sometimes a food will be tolerated well one day and not the next
- Read labels to make sure you choose appropriate foods
- Do not force yourself to eat more than you are comfortable eating

Tips to lose weight and keep it off:

- Avoid grazing or nibbling between meals
- Make sure all meals and snacks contain protein
- Eat regular meals
- Avoid empty calories
- Avoid sugary and fatty foods

Use portion control:

- Use smaller plates (salad plate/dessert plate)
- Use smaller utensils (baby utensils/appetizer fork)
- Weigh and measure out foods
- Cook just enough or put leftovers away immediately

Try mindful eating:

- Allow 20-30 minutes for mealtimes
- Take small bites and chew your food well before swallowing
- Savor each bite! Pay attention to flavors, textures, and consistencies
- Relax! Take a deep breath or two between bites
- Eat without distraction: sit at the table, avoid watching tv
- Stop eating once you feel satisfied

Get support:

- Go to support groups monthly
- Meet with the Weight and Wellness Team regularly

Be physically active and get moving:

- Walk the dog, take the kids for a walk, or start a walking group with friends
- Take the stairs whenever possible
- Park your car far away at shopping centers/malls
- Take a walking break at work, instead of a coffee break
- Include yard work gardening, or household chores in your daily routine
- During commercials, walk around your house, lift light weights, or do chair exercises
- Buy or borrow exercise videos
- Exercise shows on TV, OnDemand, or Youtube.com
- Join a gym, an indoor/outdoor pool, or a dance class

FAQs

Can I use spices and condiments on foods as I add them back into my diet?

Yes. Condiments and spices/herbs are good ways to add flavor if used in moderation. The important thing is that you choose low-fat, sugar-free varieties. You also want to avoid using spicy (hot) herb/spices or sauces in the first 3 months, as they can irritate your slowly healing stomach.

Can I add flavoring to my protein shake to make it less boring?

Yes, it is fine to add sugar-free syrups or extracts to your shake to give them a different taste/flavor. You can find the sugar-free syrups often in the coffee aisle or online. However, you do not want to add large amounts of juice, yogurt, or nut butters to your shake because it can increase the calories too much.

How many calories should I be eating after surgery?

Normally in the first few months you will be eating around 400-600 calories per day. As you get further out from surgery, your calorie intake should be between 800-1200 calories per day.

I cannot tolerate meats, what can I do?

It is not abnormal to have a hard time tolerating dry/tough cuts of meats. Some individuals may find that they cannot tolerate a certain type of meat (i.e. chicken, beef, and pork). Try to make sure meats are kept moist, or add low calorie sauces/gravies. If you are unable to tolerate any types of solid protein, this may indicate a stricture or some type of complication, and you should call the Weight and Wellness clinic.

When can I add starches (rice, breads, etc.) back into my diet?

It is recommend that you wait until 6 months after surgery before adding starches back into the diet. Starches tend to slow down weight loss, as well as take up volume which makes it difficult for you to reach your protein needs. When you do add starches back into the diet, it is important to remember to always eat protein first, then vegetables, fruit next, and starches last (if you have any room left). We recommend that you choose grains with at least 3 grams of fiber per serving whenever possible.

Are there any foods that may cause blockage?

Foods such as coconut, persimmons, pomegranate seeds, pumpkin or sunflower seed shells/husks contain fibers that may not digest completely. If they are eaten on a regular basis, there may be build up over time of this fiber. This may cause a ball (bezoar) and in many cases we may not know it is there, but it could lead to a blockage – although this is very rare.

Menu Assignment

Instructions for Menu Assignment

1. Complete 1 days' worth of a menu (handout titled "daily food log") for each stage of the post-operative diet (total of 4 menus, one menu each for stages 2-5). Write in the stage at the top of the page and circle which surgery you would like to have.
2. Choose foods and beverages you prefer to consume from the examples provided in Bariatric Nutrition Guide (pages 20-24). Enter food/beverage choices with appropriate portion sizes for each of your meals and snacks.
3. Enter the grams of protein for each of your food/beverage choices (including protein shakes and milk) under the "protein" column, and then total the grams of protein at the bottom of the page to see if you meet your protein goal for that day (60-70g).
4. Enter when you plan to take your vitamins throughout the day under the "vitamins/minerals" column.
5. Review your fluid intake for the day, including your protein shakes and total the number of ounces at the bottom of the page. Did you meet your goal of 64 ounces per day? If not, think about how and when you could drink more to meet your fluid goal.
6. Bring completed assignment to RD visit.

Daily Food Log

Stage _____ Surgery Type (circle one): GBP or Sleeve

Time	Food with Portion Size	Fluid with Portion Size	Protein (g)	Vitamins
Morning				
Mid-morning				
Lunch				
Mid-afternoon				
Dinner				
Evening				
		Total fluids: _____oz	Total protein: _____g	

Daily Food Log

Stage _____ Surgery Type (circle one): GBP or Sleeve

Time	Food with Portion Size	Fluid with Portion Size	Protein (g)	Vitamins
Morning				
Mid-morning				
Lunch				
Mid-afternoon				
Dinner				
Evening				
		Total fluids: _____oz	Total protein: _____g	

Daily Food Log

Stage _____ Surgery Type (circle one): GBP or Sleeve

Time	Food with Portion Size	Fluid with Portion Size	Protein (g)	Vitamins
Morning				
Mid-morning				
Lunch				
Mid-afternoon				
Dinner				
Evening				
		Total fluids: _____oz	Total protein: _____g	

Daily Food Log

Stage _____ Surgery Type (circle one): GBP or Sleeve

Time	Food with Portion Size	Fluid with Portion Size	Protein (g)	Vitamins
Morning				
Mid-morning				
Lunch				
Mid-afternoon				
Dinner				
Evening				
		Total fluids: _____oz	Total protein: _____g	

Daily Food Log

Stage _____ Surgery Type (circle one): GBP or Sleeve

Time	Food with Portion Size	Fluid with Portion Size	Protein (g)	Vitamins
Morning				
Mid-morning				
Lunch				
Mid-afternoon				
Dinner				
Evening				
		Total fluids: _____oz	Total protein: _____g	

Daily Food Log

Stage _____ Surgery Type (circle one): GBP or Sleeve

Time	Food with Portion Size	Fluid with Portion Size	Protein (g)	Vitamins
Morning				
Mid-morning				
Lunch				
Mid-afternoon				
Dinner				
Evening				
		Total fluids: _____oz	Total protein: _____g	

Daily Food Log

Stage _____ Surgery Type (circle one): GBP or Sleeve

Time	Food with Portion Size	Fluid with Portion Size	Protein (g)	Vitamins
Morning				
Mid-morning				
Lunch				
Mid-afternoon				
Dinner				
Evening				
		Total fluids: _____oz	Total protein: _____g	

Daily Food Log

Stage _____ Surgery Type (circle one): GBP or Sleeve

Time	Food with Portion Size	Fluid with Portion Size	Protein (g)	Vitamins
Morning				
Mid-morning				
Lunch				
Mid-afternoon				
Dinner				
Evening				
		Total fluids: _____oz	Total protein: _____g	

Eating 4 life: Thinking ahead...

Right now, you are learning about eating after surgery. An important tool on this journey is having a plan in place for when things don't go as expected. Please take a few minutes to think about each of these scenarios and how you will manage them if they occur after surgery. This plan will give you the tools and confidence you need to succeed!

Scenario 1:

You are 1 week out from surgery and are having a hard time drinking enough fluid. You think you may be getting dehydrated.

What are a few signs of dehydration? _____

What is your plan to help you drink enough water?

1. _____
2. _____
3. _____

What should you do if you can't drink at least 32 ounces a day for 2 days in a row or more?

Scenario 2:

You are 3 weeks out from surgery and you are tracking your food each day and see you are only getting 25 grams of protein each day.

How much protein do you need a day? _____

What are 3 ways to get more protein?

1. _____
2. _____
3. _____

Scenario 3:

You are 3 weeks out from surgery and have had no problem with stage 2 (soft/moist) foods. You know you have to wait to move ahead to stage 3, but you feel ready to move ahead now.

What problems could happen by moving ahead too quickly?

1. _____
2. _____

What are 3 things you can do to make stage 2 foods more interesting?

1. _____
2. _____
3. _____

Understanding Your Body Weight

Your weight is affected by many factors. Understanding all of these factors will help you focus on the factors you can change, which will help you reach your weight loss goals!

What are the most important factors that affect my body weight?
Your habits and actions are the most important factors affecting your weight.

What are other factors that affect my body weight?
Your body weight is affected by a number of factors including how much and what you eat, how much and what type of exercise you do, your medications, fluid, your conditions and disease states (especially edema), the time of day and the scale you weigh yourself on.

Why should I weigh myself?
Research has shown that the people who weigh themselves regularly lose more weight and keep it off longer than people who do not weigh themselves regularly. Weighing gives you information which tells you if your habits and actions are leading you to weight loss or if changes can be made. You will then be able to decide which habits to continue and which habits to change. Remember, you can't change what you don't know!

How often should I weigh myself?

You should weigh yourself regularly, no more than once a week. After you weigh yourself, writing it down or graphing it will help you see the changes.

When should I weigh myself?

You should weigh yourself at the same time of the day. Morning tends to be the best time of day since you have not eaten or drank yet. We also recommend weighing yourself on the same day of the week and mid-week (Tuesday-Friday) tends to be more reliable.

What should I wear when I weigh myself?

You should wear the same thing each time. For example, you should always weigh with your shoes off unless you wear the same shoes every time you weigh in.

Understanding Your Body Weight (cont.)

Where should I weigh myself?

You should use the same scale every time because not all scales are the same and you may weigh differently on each one. We recommend weighing yourself at the Weight and Wellness, as our scale is calibrated. You can then go weigh yourself on your home scale to see how accurate it is—just remember not to eat or drink between weighing on each scale.

Why does my weight sometimes increase when I am doing all the right things?

As we discussed, there are a number of factors that affect your body weight. For example, your body weight can be affected by how much you drank that day, a new medication you are taking, your menstrual cycle, or the time of day you are weighing. Any of these factors can make your body weight, temporarily increase by up to 5 pounds (or more due to fluid retention). On these days, focus on the positive changes, like having more energy or your clothes fitting better, instead of focusing on the number on the scale.

What if I feel embarrassed or ashamed to be weighed by the Weight and Wellness team?

We are here to help you. You will never be judged or made to feel bad by our team members. We know that this is a hard process and by weighing you at each visit, we can help give you the tools to reach your goals.



Physical Activity

Exercise is an important factor for losing and maintaining weight!

Be Physically Active and Get Moving:

- Walk the dog, take the kids for a walk, or start a walking group with friends
- Take the stairs whenever possible
- Park your car far away at shopping centers/malls
- Take a walking break at work, instead of a coffee break
- Take a family walk after dinner
- Include yard work, gardening, or household chores in your daily routine
- During commercials, walk around your house, lift light weights, or do chair exercises
- Buy or borrow exercise videos
- Exercise shows on TV or On Demand
- Join a gym, an indoor/outdoor pool, or a dance class
- Try standing at a table and doing knee bends
- Dance to music

Other Physical Activity Resources:

www.fitbit.com
www.bodybugg.com
www.healthybodyfitmind.com
www.sacobaypt.com (The M.O.G)
www.mainemasters.org/pools.htm
www.mapmywalk.com
www.curves.com
www.fitnessblender.com
www.basicsfitnessme.com
***Ask for our chair exercises hand-out!



Resources

Online Bariatric Resources:

- www.mmc.org/weight-wellness-program
- www.obesityhelp.com
- www.preciseportions.com
- www.bariatriceating.com
- www.nashuanutrition.com
- www.setpointhealth.com
- www.unjury.com
- www.gastricbypassupplements.com
- www.bariatricadvantage.com
- www.choosemyplate.gov
- www.hungry-girl.com
- www.theworldaccordingtoeggface.blogspot.com
- <http://recipefinder.nal.usda.gov/>
- www.mybariatricpantry.com
- www.howmuchprotein.com
- www.healthy.gov
- <http://7-min.com>

Book Resources:

- [Eat It Up!](#) by Connie Stapleton
- [Food Rules](#) by Michael Pollan
- [Crave- Why You Binge Eat & How to Stop It](#) by Cynthia Bulik
- [Stop Eating Your Heart Out](#) by Meryl Hershey Beck
- [Salt, Sugar, Fat](#) by Michael Moss
- [The End of Overeating](#) by David Kessler
- [Fit from Within](#) by Victoria Moran
- [Before and After: Living and Eating Well After Weight-Loss Surgery](#) by Susan Maria Leach
- [Recipes for Life After Weight-loss Surgery](#) by Margaret M. Furtado
- [Eating Well Post Weight-loss Surgery](#) by Patt Levine & Michele Bontempo-Saray
- [Cook Wise with Chef Dave, \(Volume 1\)](#) by Chef Dave Fouts
- [The Complete Idiot's Guide to Eating Well After Weight Loss Surgery](#) by Margaret Furtado & Joseph Ewing
- [The Everything Post Weight Loss Surgery Cookbook](#) by Jennifer Whitlock Heisler
- [The Beck Diet Solution](#) by Judith S. Beck
- [Eating Mindfully](#) by Susan Albers
- [Mindless Eating: Why We Eat More Than We Think](#) by Brian Wansink
- [The Emotional 1st Aid Kit: A Practical Guide to Life After Bariatric Surgery](#) by Cynthia Alexander

Online Calorie Counting:

- www.fitday.com
- www.caloriecount.about.com
- www.sparkpeople.com
- www.calorieking.com
- www.myfitnesspal.com

SmartPhone Apps:

- MyFitnessPal
- Fat Secret
- Lose It!
- Baritastic
- Fooducate