

Chapter 3: Nutrition



This chapter provides nutrition information and tools for your bariatric journey. The first step is to read each section and plan the steps you will take. We will explore topics that will help you make informed decisions about nutrition and start your journey toward a healthy future. There is a lot to learn, but you are not alone! Your UW bariatric team is here to help you every step of the way!



The path to a successful surgery begins with good nutrition!

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*You must complete each section above **BEFORE** committing to surgery.*

Please Complete These Items Before Meeting with Your Dietitian

- ☐ Explore Your Current Eating Habits (*page 42*)
- ☐ Food Diary and Hunger Scale (*page 43*)
- ☐ Attend the “Key Concepts in Weight Management” class
- ☐ Watch the “Eat Well, Be Well” videos sent after the Weight Management class
 - Protein and Hydration
 - Fat and Fiber
 - Carbohydrates and Sugars
- ☐ Download a calorie-tracking app and start logging all your meals, snacks, and drinks
- ☐ Complete the Pre-Surgery Assessment (*page 78*)

Handout Guide

You will get the following handouts during your pre-surgery and post-surgery appointments. For each one mark the date that you received it and add it to your binder behind this guidebook.

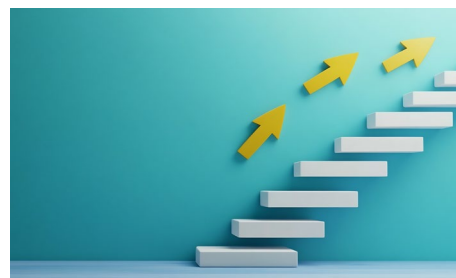
DATE RECEIVED	PRE-SURGERY HANDOUTS	DATE RECEIVED	POST-SURGERY HANDOUTS
	Alcohol and Weight Management		Bariatric Liquid Diet
	Choosing Protein Supplements		Bariatric Meal Plan Table
	Foods Rich in Vitamins		Required Bariatric Vitamins
	Goals for the Week		Top Tips for Staying on Track
	Hydrating Liquids Table		Transitioning to a Regular Diet
	Liver-Shrinking Diet		Transitioning to the Soft Foods Diet
	Meal Planning Table		
	My Plate Meal Plan		
	Non-Nutritive Sweeteners		
	Resources		
	Sources of Carbohydrate		
	Sources of Fat		
	Sources of Fiber		
	Sources of Protein		
	Sources of Vegan Protein		

Section 1:

Goal Setting

Trying to accomplish everything at once is too much. Instead, set small goals. These are more manageable and will help you transition into your lifestyle changes.

Note: Make copies or use blank paper to continue setting goals!



You can reach big goals by breaking them down into small ones!

Example

Goal #1: I will commit to... Separating drinking from eating	
Possible Barriers Eating quickly Not chewing enough	Strategies Don't get too hungry Allow enough time to eat slowly

Goal #2: I will commit to... Measuring my food	
Barriers Too busy Rushed in the moment	Strategies Planning my menu ahead of time

Goal #3: I will commit to... Logging my food in my calorie app	
Barriers Forgetting to log my food after I eat	Strategies Set a timer to remind me to log right after I eat

Reflection

	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Goal #1	X		X	X	X	X	X
Goal #2	X	X	X	X	X	X	X
Goal #3			X	X		X	

Ideas for next week

I did a great job measuring my food and meal prepping each day, and I'm doing well taking time for myself to eat. Next week, I'll try Alexa reminders to help me remember to log after eating.

My Goals for Week _____

Goal #1: I will commit to...	
Barriers	Strategies

Goal #2: I will commit to...	
Barriers	Strategies

Goal #3: I will commit to...	
Barriers	Strategies

Reflection

	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Goal #1							
Goal #2							
Goal #3							

Ideas for next week

My Goals for Week _____

Goal #1: I will commit to...	
Barriers	Strategies

Goal #2: I will commit to...	
Barriers	Strategies

Goal #3: I will commit to...	
Barriers	Strategies

Reflection

	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Goal #1							
Goal #2							
Goal #3							

Ideas for next week

Section 2:

Introduction: Planning For Your Journey

Congratulations! You are starting a personal lifelong journey toward good health. Now is the time to start practicing healthy eating habits. For long-term success, it is important to learn about nutrition before your bariatric surgery.

In the sections ahead, you will find tools and information that will help you:

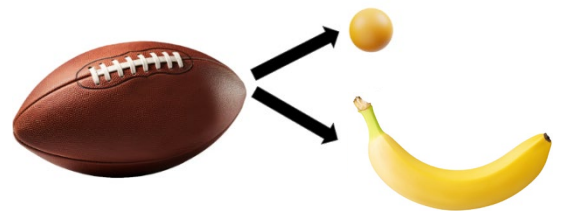
- Make diet and lifestyle changes to prepare for surgery
- Reach and maintain your weight loss goals
- Prevent side effects
- Develop a bariatric mindset to help you think about food



Preparing for weight loss surgery is as important as packing a suitcase before a trip!

What to know before committing to bariatric surgery

- *Bariatric* (weight loss) surgery changes your stomach size to limit the amount of food you can eat at one time. Your stomach shrinks from the size of a football to the size of a ping-pong ball after a bypass surgery or a banana after a gastric sleeve.
- It is important to understand that surgery is a tool. It does not change everything.
 - Surgery will not stop you from making unhealthy food choices.
 - Surgery will not stop your emotional hunger.
 - Surgery will not change disorganized eating patterns.
 - Surgery will not prevent you from gaining weight back.
- You will not be able to eat many of your favorite foods. This may include bread, soda, alcohol, and food that is high in fat or sugar.
- You will need to eat 3 to 4 small, **high-protein** meals each day.
- It is important to eat nutritious whole foods, not packaged or pre-made food.
- You will need to learn new shopping and cooking habits.
- Each bite of food must be no larger than a dime.
- You must take time to chew each bite until it is smooth like yogurt, which means meals may take 20 to 30 minutes.



Your stomach will shrink after surgery.



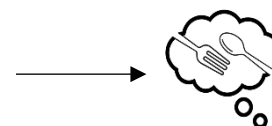
Bites of food must be dime-sized

- You will have to sip at least 64 ounces (8 cups) of fluids each day to avoid dehydration. These fluids must not have calories, caffeine, alcohol, or protein.
- You will not be able to drink any liquid 30 minutes before, during, or 30 minutes after eating any food.
- You will always need to take certain vitamins and minerals to stay healthy.
- Lifelong, consistent exercise is an important part of reaching and maintaining your health and weight-loss goals.
- If you start changing your habits now, it will be easier for you to be healthy, lose weight, and stay at a healthy weight.

Taking Time to Think and Plan

There is a lot of information you need to know as you learn about and prepare for surgery. To make it easier to process, you will have many chances to pause and process.

1. **Food for Thought:** These are quick checkpoint questions to help you think about how the information fits into your life. Look for this icon as you read
2. **Section Reflections:** At the end of each section, you'll find a chance to look back at what you've read, think about how you will use the information, and write down any questions you'd like to ask your care team. Your dietitian will review these with you.



Section 2 Reflection

Date I Read Section 2: _____

Things from this section I'm already doing well:	Things from this section I'd like to work on:
Questions:	

Section 3:

Explore Your Current Eating Habits

Before you start your nutrition journey, it is important to think about your current eating habits. This reflection will help you find ways that you can improve your health and weight management.

Remember that your bariatric team will give you tools and guidance during your journey, whether you are doing well or facing challenges.



Learning how you think about food now will help you make healthy changes.

Ask yourself these questions:

When do I eat?	
What do I eat, and how much ?	
How quickly do I eat?	
Where do I eat?	
Why do I eat? <i>See the Emotional Eating faces on page 26 in the Social Work chapter.</i>	

It is important to reflect on your eating habits and think about ways you may want to change. Come back to this exercise after a month to see how much you have been able to change!

Food Diary and Hunger Scale

Your dietitian will review your Food Diary and Hunger Scale with you. You must complete this BEFORE your first individual visit.

- The Food Diary and Hunger Scale is different from your calorie and nutrient tracking.
- Your food diary will take a few days to complete.
- Using your food diary will help you be aware of physical signals that tell you, "it's time to eat" or "we can stop eating now."
- You will also think about what emotions (feelings) you have related to eating, including snacking when you are bored. To help you think about this, see the Emotional Eating faces on page 26 in the Social Work chapter.

Food Diary and Hunger Scale

Hunger Rating*	Time of Day	Any Food, Snacks, or Drinks	Amount	Fullness Rating*	Mood or Emotions <i>How am I feeling?</i>
3	Breakfast 8:30 AM	Black coffee Yogurt Strawberries Wheat toast	1 cup ½ cup 4 ounces 1 slice	7	A little stressed about work

*Rate hunger before eating and fullness after eating using the number scale below

Hunger Scale

1. Starving, weak, grouchy
2. I could eat everything and anything
3. I am ready to eat NOW
4. I can wait a little longer to eat
5. Not hungry, not full

Fullness Scale

6. Lightly comfortable, like after a snack
7. Satisfied. I could eat more but I can stop
8. A little too full, a bit of tummy pressure
9. Very full, uncomfortable tummy pressure
10. Too full, may be painful

Name: _____ Date: _____

Food Diary and Hunger Scale

Hunger Rating*	Time of Day	Food, Snacks, or Drinks	Amount	Fullness Rating*	Mood or Emotions <i>How am I feeling?</i>

Water (total number of glasses or ounces): _____

*Rate **hunger before eating** and **fullness after eating** using the number scale below

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Trigger Foods

Trigger foods make you want to keep eating until the bag, box, or container is empty. You may want to eat trigger foods when you feel a certain emotion, such as comfort or joy. Identifying your trigger foods will help you stay on track with your eating goals. Look back at your food diary to see if you can spot any trigger foods. *Examples: pizza, candy, cookies, ice cream, chips, soft drinks, coffee drinks, etc.*

Read pages 25-26 in the Social Work chapter to learn more about emotional eating.

What trigger foods do you have?	When do you usually eat these foods?

Now think about which emotions, or feelings, these foods connect with. What is a non-food alternative that provides that same emotion?

Emotion	Non-food alternative
Example: Stress	Example: Going for a walk

Teaser Foods

Teaser Foods are snacks that are often kept in the cupboard or fridge. Having them around can lead to cravings and mindless snacking. These are tempting to eat when you see them, even when you're not hungry, such as chips, cookies, or soda.



What teaser foods do you keep in your home? _____

Section 3 Reflection

Date I Read Section 3: _____

Reflect on how you are feeling about changing your eating habits and choose the number that best matches how you are feeling today. Return to this page every month to see how far you've come!

①	②	③	④	⑤
I'm not sure that I am ready to make changes yet.	I know that I need to make changes but I have not started yet.	I will be ready to start making changes in the next month.	I have been practicing new behaviors for at least 1 month.	I have made changes to my nutrition and kept these new habits for at least 4 months.

Things from this section I'm already doing well:

Things from this section I'd like to work on:

Questions:

Section 4:

Understanding Nutrition



Learning about nutrition is an important step in preparing for your surgery.

Water

Each cell in your body needs water to function. Water can:

- reduce hunger
- help you feel full
- help with digestion
- reduce constipation
- protect and moisturize skin
- reduce joint pain and headaches
- improve thinking, memory, attention, and energy
- prevent kidney stones and UTIs

How much water should I drink?	• Drink 64 ounces (8 cups) of hydrating liquids each day. • You may need more water when it is hot, when you are exercising, or if you are eating more than 80 g protein per day. • Note: There are exceptions to the 64-ounce rule for certain medical conditions. Talk with your doctor about your water goals.
How should I drink water after surgery?	• Practice sipping liquids. Gulping is not tolerated well after surgery. • After surgery you must separate fluids from food by 30 minutes. For example: – 7:30-8:00 nothing to drink – 8:00-8:30 food only – 8:30-9:00 nothing to eat or drink – 9:00 start sipping • Start practicing eating food without drinking any liquids today. The more you practice, the easier it will be! – Try not to put a glass on the table while you're eating. – Once that is a habit, set an alarm to not drink for the 30 minutes after food. – Once those 2 habits are consistent, set an alarm to not drink 30 minutes before food. • After surgery you may not tolerate water or ice water. Try room temperature or warm liquids. Try sugar-free flavors or alkaline waters, which may be easier to sip.
How can I meet my water goal?	• Always carry a water bottle with you. • Set an alarm to remind you to drink. • Try flavoring your water with fresh fruit, fresh vegetables, or fresh herbs. • You may feel hungry when you are actually thirsty. Try drinking first. • Hydrating liquids do not contain protein, caffeine, or alcohol. See page 70 and the "Hydrating Liquids Table" handout for a list of hydrating liquids.

Good nutrition is vital!

Your food choices have a direct effect on your weight and health. All food contains different types of nutrients that keep your body healthy. The basic 4 nutrients we need are water, protein, fats, and carbohydrates (including fiber).

Protein

*Before you read this section, watch the “**Protein and Hydration**” video sent after the class “Key Concepts in Weight Management”!*

You must eat protein to help your body:

- Build muscle and hormones
- Build *enzymes* (used for digestion and energy)
- Build *antibodies* (used to fight infections)

Amino acids are the tiny building blocks that make up a protein. Many foods contain a small amount of partial protein, meaning they have some of the essential amino acids. Some food contains full proteins, meaning they have all 9 of the essential amino acids in every bite. Both partial and full proteins are good for you and contain other nutrients, so it's important to eat a variety of foods each day.



Examples of protein-rich foods

Your meal portions will be very small, so you will need to eat high-quality, lean, moist, protein-rich foods each day for the rest of your life. Your body will need the most protein during the first 6-12 months after surgery because of the rapid weight loss.

After surgery it is most important to **eat protein-rich foods first** at meals. Your new stomach size is very small, and you will feel full quickly. Remember: “Protein first, then produce.” See the handout “Sources of Protein” for a list of examples.

- Your new stomach will feel tightest for several months after surgery. You may feel full after eating just a few bites of dense foods like steak. Vegetarian (partial) proteins are good options to try.
- Your dietitian will talk with you about how much protein you need.
 - Track how many grams (g) of protein you're eating to make sure you reach your goal.
 - Right after surgery your goal will be 15-20 g of protein per meal or 7 g per snack.
 - Slowly increase the amount of protein you eat to a goal of 2-3 ounces (oz), or 14-20 g at each meal.

Daily Protein Goal:

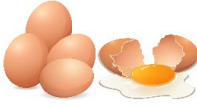
- **85 g** protein during the 3 weeks before surgery
- **60 g** protein during first 2 weeks after surgery
- **80 g** protein 2-6 weeks after surgery
- _____ g protein from 6 weeks to 1 year

This goal will change with time but **should never be less than 60 g**. To meet your goal, include protein with every meal and snack.

There are exceptions to the very high protein rule if you have certain medical conditions. Talk with your doctor about your protein goals.

How to Tolerate Protein After Surgery

After surgery, your new stomach will not be able to grind or break down food as well. You will need to cut proteins into dime-sized pieces and chew 1 bite at a time, very well. Ground, shredded, chopped, and thin-sliced meats will be easier to tolerate. **Choose naturally moist and soft proteins such as:**

Eggs 	Cottage cheese, Greek yogurt, cheese, cow or soy milk, protein-enhanced (lactose-free) milk 	Canned tuna, chicken, or salmon 	Small shrimp, crab, boneless salmon, or white fish 
Ground meat, deli meat 	Chili (mild), stew with small chunks 	Quinoa, farro, freekah, lentils, beans 	Soy products like tofu, edamame 

Protein Drinks and Powders

For the first 6 to 12 months after surgery, you must take protein supplements. This will help you heal and decrease muscle loss during your rapid weight loss. Use a protein shake to **replace** a meal, not in addition to a meal. You can also add protein powder to food.

There are different types of protein supplements. Isolated whey is the best protein source as it is often easiest to digest. If you use vegan proteins, try to choose supplements with combinations of pea, brown rice, bean, lentil, seed, or nut. Avoid **any** form of collagen as a primary protein powder, but it is okay as a supplement for hair, skin, and nails. **See your handout “Choosing Protein Supplements.”**

Protein supplements should meet the following guidelines:

One serving should contain:

- less than 180 calories
- less than 31 g protein
- Grams (g) of **carbohydrates** should be lower than total grams (g) of **Protein**

Nutrition Facts	
75 servings per container	
Serving size	1 scoop (30g)
Amount Per Serving	
Calories	130
% Daily Value*	
Total Fat 2g	3%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 50mg	17%
Sodium 55mg	2%
Total Carbohydrate 2g	1%
Dietary Fiber 0g	0%
Total Sugars 2g	
Includes 0g Added Sugars	0%
Protein 25g	50%

Nutrition Facts	
Serving size	1 Shake (11 fl oz)
Amount per serving	
Calories	160
% Daily Value*	
Total Fat 3g	4%
Saturated Fat 0.5g	3%
Trans Fat 0g	
Cholesterol 20mg	7%
Sodium 180mg	8%
Total Carbohydrate 5g	2%
Dietary Fiber 3g	11%
Total Sugars 1g	
Incl. 0g Added Sugars	0%
Protein 30g	60%



List three high-protein foods you enjoy eating: _____

Fats

Before you read this section, watch the **“Fats and Fiber”** video sent after the Weight Management class!

Eating healthy fat in moderation will help fuel your body. Healthy fats provide energy and help you feel full longer. Fat also:

- Helps your body absorb vitamins and minerals
- Builds structures for cells and nerves
- Makes hormones
- Supports brain function, blood clotting, and inflammation control



Examples of foods high in fats

Fats are an important part of your diet, but they can be high in calories!
Remember these top tips for fats:

Choose healthy fats such as nuts, seeds, avocado, and olive oil.

Eat limited amounts. Fat has 2 times the calories per gram as proteins and carbohydrates.

Measure all portions!

Healthy fats

Foods with fat often have a mix of different types of fat. Even healthy foods like chicken and nuts have small amounts of unhealthy fat so it is important to think about your portion sizes. We recommend that no more than 20% of your calories come from **unsaturated fats**, 10% of calories from **saturated fats**, and 0% from **trans fats**. If you need to decrease your cholesterol, your saturated fat should be less than 6% of your calories. Talk with your dietitian about your fat goals.

- **Unsaturated fats:** Unsaturated fat is the healthiest type of fat! Unsaturated fats are helpful because they can improve cholesterol levels and decrease inflammation. Unsaturated fats are liquids at room temperature, like olive oil. These fats mostly come from plants, such as vegetable oils, nuts, and seeds.
- Read handout “Sources of Fat” for a list of healthy fat sources.

Unhealthy fats

There are two types of “unhealthy” fats, which increase the risk of cardiovascular disease, stroke, and diabetes. These types of fat are usually solid at room temperature, like butter.

- **Saturated fats** are found in foods including meat, dairy, and palm or coconut oil. There are also saturated fats in pizza, fast food, cookies, and cake. Eating too much saturated fat can cause problems with your cholesterol and heart health.
- **Trans fats** are usually artificial and are added to most packaged and processed foods. **Trans fats are the worst type of fat for your heart, blood vessels, and the rest of your body.** Eating trans fats, even in small amounts, can lead to health problems.
- See handout “Sources of Fats” for more information and examples of fat sources.



What is your favorite type of healthy fat to eat? _____

Think about unhealthy fats in your diet. What are two foods you will try to limit?

Carbohydrates

*Before you read this section, watch the “**Carbohydrates and Sugars**” video sent after the Weight Management class!*

Carbohydrates (carbs) are the main source of energy for your brain and muscles! They can also help restore the energy storage in your muscles during rest. There are many types of carbohydrates. Make sure you do not limit carbohydrates too much. Try to eat at least 80 grams a day unless your provider tells you otherwise.



Examples of foods high in carbohydrate

Choose

Complex carbs take longer to digest and provide long-lasting energy.

Examples: fruits, vegetables and whole grains

Why should I choose complex carbs?

- They provide the most vitamins, minerals, and fiber
- They help you feel full longer



Avoid

Refined carbs are digested quickly and provide a quick source of energy.

Examples: white bread, white rice, white pasta, jelly, syrups, ice cream, candy, desserts, soft drinks, sugar

Why should I avoid refined carbs?

- They can raise blood sugar, make you feel hungry, and lead to food cravings.
- To encourage your body to use your stored fat as energy.
- Sugary foods can promote “dumping syndrome” (see page 74) after gastric bypass surgery.
- Starchy foods such as breads may leave you feeling bloated and uncomfortable.



See a list of carbohydrate examples in the handout “Sources of Carbohydrate”.

Fiber

Fiber is a type of complex carbohydrate found in all plants. It is made of many linked sugar molecules which cannot be entirely digested (broken down). There are two types of helpful fiber:

- **Soluble fiber** forms a gel that lowers cholesterol. This decreases risk of cardiovascular disease and helps keep blood sugar levels regular.
- **Insoluble fiber** passes through the intestine undigested, which decreases the risk of constipation.



Examples of foods high in fiber

Fiber supports weight loss and helps your body in many ways:

- Helps you feel full with less food
- Reduces risk for heart disease and colon cancer
- Decreases blood sugar
- Supports healthy gut bacteria (*microbiota*)
- Relieves and prevents constipation
- Decreases “unhealthy” LDL cholesterol

Fiber-rich foods are also high in essential vitamins, minerals, and antioxidants, which keep you healthy and prevent disease. High-fiber foods include vegetables, fruits, whole grains, beans, lentils, nuts, and seeds.

How to Increase Fiber in Your Diet

As you add fiber to your diet, go slowly! If you add fiber to your diet too quickly you may have abdominal discomfort, bloating, and gas. Drink plenty of liquids to avoid nausea and constipation. If you have significant constipation, talk with your care team before increasing your fiber.

How much fiber should I eat?

Add 1 serving of fiber-rich food each day, then increase over a few weeks to reach your daily goal:

- 20 - 30 grams for females
- 30 - 40 grams for males

Fiber Tips

- Instead of juice, eat fresh vegetables and fruits with peels or skins
- Add beans and peas to casseroles and soups
- Choose brown or wild rice instead of white rice
- Use whole wheat flour instead of white or all-purpose flour
- Choose packaged items that show “whole grain” in the first ingredients
- See handout “Sources of Fiber” for a list of examples

Write down three ideas for meals or snacks that are high in fiber or complex carbohydrates:



1. _____
2. _____
3. _____

Choosing Nutrient-Packed Foods

Eating a variety of foods from all food groups each day will give you a balanced diet! Try to eat more whole foods than processed or packaged foods. This will help you avoid added sugars, fats, and sodium (salt). To save time, you can buy pre-cut or frozen raw foods. These are usually healthier than prepared or precooked food.



Frozen and pre-cut vegetables are a healthy and easy option.

Here is a variety of good foods to eat often in their natural form, either fresh or cooked:

Vitamin or Mineral	Examples
Beta Carotene	Orange, yellow, red, and green veggies and fruits
Biotin	Eggs, whole wheat products, cheddar cheese
Calcium	Dairy products, fortified non-dairy milks, fish bones
Chromium	Whole grains, bran cereals, green beans, broccoli, nuts, egg yolk
Copper	Liver, oysters, sesame seeds, dark chocolate, cocoa
Folic Acid	Leafy greens, legumes, oranges, broccoli, cauliflower
Iodine	Dried seaweed, cod, iodized salt, baked potato peel, milk, shrimp, turkey, navy beans
Iron	Squash, pumpkin seeds, beef, dark leafy greens, dark chocolate, tofu, whole grains, fortified cereals/bran, white beans, lentils, cashews, almonds, peanuts, seafood, liver
Magnesium	Beans, nuts, whole wheat, brown rice, leafy greens
Manganese	Whole grains, nuts, leafy greens
Molybdenum	Beans, lentils, peas, whole grains, nuts
Niacin	Poultry, beef, fish, legumes, peanut butter, nuts
Pantothenic Acid	Avocado, broccoli, kale, cabbage, eggs, legumes, lentils, milk, mushrooms, organ meats, poultry
Riboflavin (Vitamin B2)	Dairy products, leafy greens, oysters
Selenium	Brazil nuts, shiitake/white button mushrooms, lima/pinto beans, chia seeds, brown rice, seeds, broccoli, cabbage, spinach
Thiamin (Vitamin B1)	Whole grains, brown rice, legumes, pork, oysters
Vitamin A	Liver, carrots, fortified milk
Vitamin B6	Meat, fish, poultry, eggs, potatoes, fortified cereals, peanuts, soybeans
Vitamin B12	Fish, shellfish, meat, eggs, fortified soy, rice, or almond milk, fermented soy products, cheese, nutritional yeast, poultry
Vitamin C	Fruits and vegetables, especially peppers and citrus fruits
Vitamin D	Fortified milk, fatty fish, beef liver, egg yolk, cheese
Vitamin E	Wheat germ, vegetable oils, cashews, hazelnuts
Vitamin K	Green leafy vegetables, Brussels sprouts, broccoli, cress
Zinc	Seafood, meat, seeds, beans, peas, lentils

Foods to Avoid:

It is best to avoid foods that provide little or no nutrition. These are known as “empty calories” or “slider foods.” These foods are easy to eat but do not help you feel full for long, which can lead to weight gain. If you decide to eat these:

- Significantly limit your portion size
- Do not eat them often
- Avoid bringing them into your home
- Carefully avoid any trigger foods

While it is important to limit eating empty calories, do not be too restrictive. If there is a special occasion, you may want to eat a special treat. Enjoy and savor 2 to 3 bites. It is best to avoid eating these treats daily or weekly to help you maintain your health and weight goals.

No matter what your calorie goal is, avoid or limit these foods:

Category	Examples	Notes
Added Sugars	Agave, baked goods, candy, chocolate, honey, ice cream, maple syrup, molasses, etc.	Limit added sugars to less than 25 g for women and 36 g for men per day
Diet, Low-Carb Foods	Any packaged food, snack, sauce, dip, or beverage item that includes: diet, net-carb, low-carb, zero-carb, carb-balance, low-fat, light, or keto	These are highly processed and can be high in sodium, fat, carbs, and excess fiber powder.
Fast Food	Burgers, chicken nuggets, French fries, hot dogs, pizza, etc.	These are highly processed and high in saturated fat and sodium.
Fatty Meats	Bacon, hot dog, pepperoni, rib-eye, sausage, salami, barbeque	These can be highly processed and high in saturated fat and sodium.
Fried Foods	Fish and chips, fried chicken, potato chips, donuts, etc.	These are highly processed and high in sugar, fat, and sodium.
Processed and Refined Carbs	Bagels, chips, cookies, crackers, sugar-sweetened cereals, white bread, etc.	These are highly processed and high in sugar and sodium, and often in fat.
Sauces, Dips, and Dressings	Barbeque sauce, cheese sauce, ketchup, ranch, tartar sauce, etc.	These are highly processed and high in fat and sodium.
Sodas and Sugar-Sweetened Beverages	Energy drinks, juices, sodas, sports drinks, sweet tea, or flavored coffee drinks (latte), etc.	These are highly processed and high in sugar.



Which 3 foods from the table on the previous page are the biggest triggers for you?
Write down a healthy alternative you can try for each one.

Portion Practice: Enjoying special treats in moderation is a skill that takes practice. Choose a treat you enjoy and take your time to savor 2 to 3 bites of it. Then put the rest away.

- Which treat did you choose? _____

Write about your experience:

- What did it feel like to enjoy just a couple of bites? _____
- How did it feel to put the rest away without finishing it? _____

- If you felt tempted to continue eating more, what strategies could help you next time?

Section 4 Reflection

Date I Read Section 4: _____

Things from this section I'm already doing well:	Things from this section I'd like to work on:
Questions:	

Section 5:

Portions and Meal Planning

Nutrition Labels

What to look for on Nutrition Facts labels:

- What is the serving size?
- How many servings are in the container?
- How many servings are you eating?
- Choose snacks with less than 200 calories per serving.
- Try to choose foods with at least 3 grams of fiber per serving.
- Use a free app while you are shopping, such as “Fooducate”
- Read the first 3 ingredients. Do they match what the package shows or says?
- 4 grams of sugar = 1 teaspoon of sugar

Packaged foods often contain artificial sweeteners, such as xylitol and acesulfame K. If you are sensitive to these, always check the ingredient list. See handout “Non-Nutritive Sweeteners” for more information.



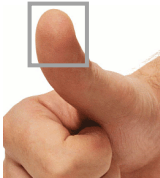
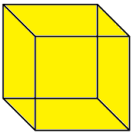
Healthy choices start with good planning!

Serving Size →		Nutrition Facts			
		2 servings per container			
		Serving size		1 cup (255g)	
Calories →		Per serving	220	Per container	440
Total Fat →		% DV*			
		Total Fat	5g	6%	10g 13%
		Saturated Fat	2g	10%	4g 20%
		Trans Fat	0g		0g
		Cholesterol	15mg	5%	30mg 10%
		Sodium	240mg	10%	480mg 21%
Total Carbohydrate →		Total Carb.	35g	13%	70g 25%
Fiber →		Dietary Fiber	6g	21%	12g 43%
		Total Sugars	7g		14g
		Incl. Added Sugars	4g	8%	8g 16%
Protein →		Protein	9g		18g
		Vitamin D	5mcg	25%	10mcg 50%
		Calcium	200mg	15%	400mg 30%
		Iron	1mg	6%	2mg 10%
		Potassium	470mg	10%	940mg 20%
		* 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.			

Portions

It is important to learn about food labels, marketing tricks, and serving sizes so you can make healthy food and portion choices. You will attend an online group class that explores these topics. Start to weigh and measure your food and pay attention to serving size. This helps you understand the calories and nutrients in your food portions.

Use the pictures below to help you guess portions if you can't weigh or measure:

				
Baseball = 1 cup	Deck of cards = 3 ounces	Thumb = 1 ounce	Thumb tip = 1 tablespoon	Small handful = 2 ounces or ¼ cup
				
Crease to tip = 1 teaspoon	1 walnut = 2 tablespoons	1 inch cube = 1 ounce		

Portion Tips

- Buy a digital kitchen scale to help you check your portion size.
- Weigh and measure the weight of proteins after you cook them.
- **Before surgery**, use a salad plate no larger than 8-9 inches across. Keep a 1-inch border or frame around your food instead of filling your plate to the edge.
- **After surgery**, use a child's plate no larger than 5-6 inches across. The total amount of food should be the size of your fist or smaller.
- **After 12 months:**
 - After bypass: total meal size should be 1 cup or less
 - After gastric sleeve: total meal size should be 1 ½ cups or less



Write down two things that you own or plan to buy that will help you limit portion sizes:

Meal Planning

Planning your meals is an important step in meeting your nutrition goals! This section will explain why meal planning is important and includes tips for success.

Why should you plan meals?

- It prevents last-minute options like fast food or vending machines
- It simplifies one part of your busy life
- Eating a variety of whole foods helps your weight and health
- It makes it easier to control what you eat, helping you stay on track!

What should you plan?

- 3 meals a day (avoid snacking / eating more than every 3 hours)
- 1-2 snacks a day, if needed
- Meals at work or school and home
- Grab-and-go snacks for traveling, appointments, etc.

A healthy meal includes:

- Protein
- Low-carbohydrate vegetable
- Small amount of healthy fat
- Small amount of carb from fruit, grains, or starchy vegetable
- See the “My Plate Meal Plan” handout for more information

Healthy snacks include:

- Protein
- Low-carbohydrate vegetable or a small amount of carb from fruit or grains
- Total snack size is 1/2 cup or less

How to meal plan

- Start by planning your meals and snacks for a few days or a week, depending on how often you go grocery shopping.
- Consider a plan that includes ingredients that can be used in multiple recipes. This can decrease your cost and size of your grocery list.
- Find recipes that sound good for that week. Think about:
 - How much time does the recipe take?
 - How many ingredients does it need?
 - How many servings does it make?
 - Can I reuse it (or part of it) in another meal?

**Write down
3 healthy snacks
you would like
to keep in your kitchen.**



-
-
-

- Make a shopping list with the ingredients for all your meals so you can stock your kitchen with the foods you need and not buy too much.
 - There are many free grocery shopping apps!
- Set yourself up for success: Buy the foods that fit your meal plans and avoid high-calorie trigger foods and treats.
- Use your measuring tools and smaller dishes to help manage portion sizes.
- Make time to wash and prepare vegetables and fruits, slice cheeses, etc.
- Make grab-and-go bags or small plastic containers that store well in the refrigerator or cupboard for 2-3 days at a time. For example:
 - Bags of cut vegetables or fruit
 - Small containers of sliced cheese and deli meat or jerky (not pepperoni)
 - ¼ cup of nuts in a container
 - Single serve, pre-packaged foods like cheese, yogurt, or hummus
- Make meals and snacks to keep in the freezer or refrigerator. Consider items that are easy to heat up, like egg muffins.

Think about your weekly schedule. Which day is the easiest to meal plan and shop for groceries?



Cooking Tips

- To tolerate meat after surgery you must use moist (wet) cooking. Try using the crock-pot, insta-pot (pressure-cooker), and air fryer to increase moistness. Avoid deep frying, grilling, roasting, pan frying, or microwaving as they can overcook and make food dry.
- Adding marinade, plain Greek yogurt, or avocado can help add moisture, but be aware of the extra calories.
- To help control calories:
 - Remove extra fat and skin before cooking.
 - If you are using the air fryer, use a light breading like panko instead of a heavy egg-and-flour batter.
 - Use very small amounts of added fats.
 - Measure all foods! If you use packaged food, check the label for the serving size.
- Avoid prepared frozen foods or meals. These often are low in protein and high in sugar, salt, and fat.
- Fresh or frozen vegetables and fruits are nutritious and convenient, and you can easily add them to cooked foods. Avoid foods that already are pre-seasoned or have sauces added to them.

Set Up Your Home for Success

Your home environment can lead you to overeat, or it can help you succeed! Follow these tips to set up your home for success:

Set up your space:

- Donate or compost unhealthy foods, *teaser foods*, and *trigger foods* (see page 48)
- If you share a kitchen, choose a cupboard for storing your food, snacks, and bariatric dishes.
- Put the most nutritious foods at eye-level in the refrigerator.
- Only eat in your kitchen or dining room!
 - If you do not have a dining room, choose a specific spot in your home for eating. You can use a placemat on a computer desk or use a nightstand or tv stand while sitting on your couch.
 - Use your bedroom only for sleeping and relaxing so you do not expect to eat there.

Be aware of your eating:

- Read page 27 in the Social Work chapter to learn about mindful eating.
- Avoid eating when you are bored. When you're bored, your brain may suggest you get a snack. Instead you can:
 - Create an entertainment basket for the living room or bedroom if you need an added distraction.
 - Try Sudoku, word games, adult coloring books, knitting, etc.
 - Get up and do a quick 3-minute dance during television commercials.
- Put up a schedule for your meals and snacks in the kitchen.
- Eat every 3-5 hours but not sooner.
- While you're relaxing, have a sugar-free liquid to sip on instead of snacking.

Making meals special:

- Play soft music in the background. Avoid your phone or anything that takes your attention away from the mindfulness and enjoyment of your food.
- Try using pretty dishes and glasses to make the mealtime special!

Section 5 Reflection

Date I Read Section 5: _____

Things from this section I'm already doing well:	Things from this section I'd like to work on:
Questions:	

Section 6:

Exercise and Activity

Exercise has many health benefits! It can:

- Decrease muscle loss as you lose weight and get older
- Improve your metabolism
- Improve movement and balance
- Decrease joint stiffness and pain
- Strengthen your muscles and bones
- Increase energy
- Improve your mood by reducing stress, anxiety, and depression
- Support thinking, learning, and memory
- Improve your sleep
- Help you keep a healthy weight



Talk with your primary doctor about starting an exercise routine that is safe for you.

Exercise Tips

- Start slow
- Walking is always a good place to start!
- Start with low-impact exercises like seated chair exercises, yoga, or tai chi.
- Add strength training with resistance bands or light weights.
- Start by moving for 5 minutes. Then increase your movement by 1 minute every day until you can exercise for at least 15 minutes before taking a break.
- Slowly increase low intensity to moderate intensity. **How do I know if I'm exercising at a moderate intensity level? See the table below.**

Low Intensity 	Moderate Intensity 	High Intensity 
You might feel like: <i>I have enough air to do my exercise, talk, or sing.</i>	You might feel like: <i>I have enough air to do my exercise and talk but I can't sing.</i>	You might feel like: <i>I barely have enough air to do my exercise. I can't sing or talk.</i>
You might think: <i>"I'm enjoying my stroll."</i>	You might think: <i>"I'm moving fast enough that I'm breathing hard."</i>	You might think: <i>"I'm gasping for air."</i>

If you have high blood pressure:

- If you are taking a beta-blocker medication for high blood pressure, please talk with your provider or see the handout "Get Active" for safety information.

How much should I exercise?

- Your goal is to exercise for 30 minutes at a time, 5 days a week, before surgery.
- Add exercise to your daily routine. Try walking to work, or doing calf raises or squats while brushing your teeth.
- Do “**exercise snacks**” during the day. These are high-energy exercises that last for 1 to 10 minutes. Try fast dancing, walking upstairs without stopping, etc.
- Continue to challenge yourself with different exercises and increasing time.
- Make an appointment with yourself every day to exercise.
- You should feel a little bit sore, but not so sore that you cannot move.
- Be safe and go at your own pace!

Enjoy Your Exercise!

- Keep a record of your success! Write down the exercises you try and notice how you are getting stronger.
- Try something new and fun!
- Find a workout buddy. You can connect with friends and family over the phone or a video call.
- Set up your routine now so you are ready to succeed after surgery!

Exercising After Surgery

- **After your surgeon says it’s safe to start exercising:** Start low, and slowly increase to 60 minutes a day, 5 days a week. This will help you minimize muscle loss and improve your metabolism.
- Include both cardio and strength training.

Cardio	Strength Training
• Cardio exercise increases your heart rate and breathing. It helps your cardiovascular (heart) system. • Goal: After surgery, do cardio exercise 3 days a week. • Examples: Running, cycling, swimming, fast walking, climbing stairs 	• Strength training is exercise that builds muscle and strength. It is an important way to reduce muscle loss. • Goal: After surgery, do strength training 3 days a week. • Examples: Hand weights (dumbbells), exercise bands, body weight (for example push-ups, squats), or yoga 
Try combining cardio and strength training! Exercises like rowing machine, group dance classes, or kickboxing keep your heart rate up while building muscle. These can be fun options!	

Exercise Resources

There are many free and paid exercise programs that can be done at home.

Seated Chair Exercises:

These are great exercises to start with. These are easy on knees or other sore joints. You can choose low-intensity or high-intensity exercises.

- “Sit and Be Fit” is free on YouTube or Public TV, Mon-Fri, between 9 a.m. and 10 a.m., across Washington state. Visit sitandbefit.org to learn more.
- There are many free options online! Find one that fits your style.

Yoga:

- You can find many free yoga classes on YouTube
- Free and paid video options are available on: yogawithadriene.com/free-yoga-videos/

Tai Chi:

This exercise involves slow and steady movements. It improves balance, coordination, and flexibility. There are many free options online. Find one that fits your style.

Other Exercises:

You can find many other fun and free exercise resources, including cardio, cycling, and family-friendly workouts! Visit: thesportsinstitute.com/exercise-anywhere/

What type
of exercises
would you
like to try?



Think about your weekly
schedule. When can you
add time for exercise into
your routine?

Section 6 Reflection

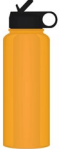
Date I Read Section 6: _____

Things from this section I'm already doing well:	Things from this section I'd like to work on:
Questions:	

Section 7:

Preparing for Surgery

What to Buy Before Surgery

Food Scale 	Measuring Cups 	Measuring Spoons 	Sugar-Free Liquids 
Blender or Food Processor 	Mesh Strainer 	Water Bottle(s) 	Protein Shakes/Powders 30 g of protein and less than 180 calories per serving 
Bariatric-Size plate less than 6 inches wide 	Very Small Utensils 	Very Small Bowls (1/2 cup - 1 cup) 	Vitamins and Minerals Allow up to 2-3 weeks to arrive! 

Pre-Surgery Diet: Start 3 Weeks Before Surgery

Liver-Shrinking Diet (LS Diet)

- It is very important that you follow a **Liver-Shrinking Diet (LS Diet)** starting at least 3 weeks before your surgery.
- This diet softens and decreases the size of your liver, which makes surgery quicker. This means you will spend less time under anesthesia (asleep) and have a lower risk of complications.
- The LS Diet includes mostly protein and low-carb vegetables. **You must avoid ALL sugar and carbs.**

Why is the LS Diet important?

- Your liver is too large right now for the surgeon to safely do surgery *laparoscopically* (an operation that is done through tiny holes with a camera).
- If the doctor cannot do surgery because your liver is very large, they may need to stop the surgery.

LS Diet Class

You will take the LS Diet class with a dietitian about 4-8 weeks before your surgery. This group class will be held online and lasts 1 hour. During this class you will learn how to follow this diet safely, and we will give you a handout with more information. We will also share information about the protein liquid diet you will follow after surgery.

1 Week Before Surgery

- Starting 7 days before your scheduled surgery:
- **Stop ALL the following items** to lower your risk of problems with anesthesia, blood pressure, and blood thinning during surgery.
 - Herbal supplements, fish or krill oil pills, multivitamins, Vitamin D, prebiotics, probiotics, caffeine, energy drinks or additives, and alcohol
- Review all the materials and handouts you received from the surgeon just before surgery.
- Make smooth blended foods that you can pour into an ice cube tray and freeze for quick heating to increase flavor variety. In most ice cube trays, 1 cube = 1 ounce.
- Make sure you have all items from the “What to Buy Before Surgery” table on page 67.

Planning for Your Food After Surgery

After surgery you will follow a liquid diet. Your food cannot have **any** lumps, bumps, or chunks of anything. Have a blender ready to prepare your food, and a strainer to remove lumps. You should be able to pour all your food, so stock up on pourable liquids now!

You will sip ½ cup portions. After surgery you will need to sip a ½-cup portion over 20-30 minutes. Purchase small glasses or cups for your meals.

Focus on protein. You will need to have 15-20 grams of smooth liquid protein 4 times per day. This will help you reach your goal of 60 g a day. Before surgery, stock up on liquid protein. You will drink it every 3 to 4 hours.

Stay on track. Set up your meal schedule and reminders in case you have no appetite. Be ready to record all your food and nutrition!

Section 7 Reflection

Date I Read Section 7: _____

Things from this section I’m already doing well:	Things from this section I’d like to work on:
Questions:	

Section 8:

Eating During Recovery

Starting immediately after surgery, follow these guidelines until your first appointment with your surgeon:

Your main goal for the first 2 weeks after surgery is preventing dehydration.

- Drink at least 60 ounces of hydrating liquids each day.
- You cannot drink carbonated liquids for **at least** the first 3 months.
- Avoid coffee. It is very acidic and can cause heartburn and stomach pain.
- Avoid caffeine and alcohol. These liquids are dehydrating.
- Protein drinks are **not** hydrating liquids.
- Do not drink with a straw for the first 3 months. Straws increase air and pressure in your new stomach.

Your next goal is to have plenty of protein.

- Protein goal: 60 g total per day for women, 80 g total per day for men.
- Sip 4 ounce (½ cup) protein-rich liquids 4 to 5 times a day. Sip this portion over 20 to 30 minutes.
- Have 15 g protein in each liquid meal.
- See a sample day on the handout given to you in the purple folder.

Choose your food carefully.

- Drink only smooth, pourable liquids without lumps. Avoid all other food textures until you meet with the surgeon.
- Avoid any solid food that is not drinkable. This will help you avoid vomiting, which can cause problems with your healing stomach.
- Avoid any vitamins or minerals unless your provider tells you otherwise. At your first online group class appointment after surgery, your dietitian will talk with you about taking vitamins.

Day 1 of Recovery

When you wake up after surgery, you will feel uncomfortable, very thirsty, and very sleepy. **Walk as soon as your nursing team allows you to get up.** This will help decrease the gas pressure in your abdomen.

Drinking Liquids:

- Your mouth will feel very dry, but you will not be able to drink anything immediately after surgery.
- When you wake up from anesthesia, your nurse will bring you water in small medicine cups. It may take 1 hour to finish 1 medicine cup of water.
- When you can tolerate 1 medicine cup of water over an hour, you will start the Bariatric Liquid Diet. Your dietitian will review this with you.
- Sip on liquids **very slowly**. Drink 1 medicine cup (1 ounce) over 15 minutes.
- **Do not use a straw**, even if it comes on your hospital tray.
- Order diet Jello, broth, or water. **Do not** order carbonated liquids like soda or sparkling water.



Focus on healing through careful eating and drinking choices.

Day 2 of Recovery

- If you are recovering well, you will likely go home.
- You will start your Bariatric Liquid Protein Diet.

When you get home:

- Continue to increase the amount of hydrating liquids you drink each day.
- Work up to ½ cup of Bariatric Liquid Diet items 4-5 times a day.
- Continue walking.

Staying Hydrated

It is important to drink enough fluids. After surgery you may not feel thirsty, but it is still important to drink enough fluids. Always carry your water bottle with you and set mini goals during the day to help you stay on track. Take small sips instead of gulps to reduce pain. After surgery you will not be able to drink quickly, so it is a good idea to start practicing sipping now!

Sip at least 48 ounces of hydrating liquids each day to prevent dehydration. Try to reach 60 ounces a day between meals. Sip slowly to avoid pressure or pain caused by drinking too much at one time. Drink 8 ounces (1 cup) every hour that you're not having protein.

There are exceptions to the fluid recommendations for certain medical conditions. Talk with your provider about your fluid goals.

Do not drink with your meals. After surgery you **must** separate your hydrating liquids from your meals by 30 minutes, before and after. Drinking hydrating liquids during or too close to your meals can:

- Make food pass more quickly into the intestine. This can make you feel hungry.
- Increase the risk of dumping syndrome after Gastric Bypass. See page 74 for more information about dumping syndrome.
- Increase the risk of GERD and regurgitation after sleeve gastrectomy.
- Cause pain in your *esophagus* (throat) or stomach.

What should I drink?

- **Hydrating Liquids** do not have any caffeine, protein, or alcohol.
- You can drink water or non-sugar-sweetened flavored water. If plain water causes cramping or discomfort, try drinking it at room temperature. You can also try alkaline water or electrolyte water.
- Make flavored water by adding slices of non-citrus fruit, herbs, or cucumbers. Try using a water bottle insert that allows you to add items. Experiment with different combinations and amounts to find a flavor that you like!
- Try drinking zero-calorie electrolyte waters that are less sweet:
 - Powerade Zero - Gatorade Zero - Sobe Life Water Zero
 - Vitamin Water Zero - Propel Zero - Core
 - Smart Water - Hint Water - Water flavors (Mio, Crush, Crystal Light)

What drinks should I avoid?

Avoid caffeine, coffee, tea, and energy drinks, and carbonated beverages, such as soda, seltzer, or beer. These cause gas, cramping, and stomach pain. Avoid anything citrus or acidic, such as lemon, lime, orange, grapefruit, tomato, or vinegar.

Avoid alcohol, as it is high in calories and low in nutritional value. It is important to know that **there is an increased risk of addiction to alcohol after bariatric surgery.**

Watch for Dehydration

Dehydration is the most common reason people must go to the emergency room. Dehydration may cause these symptoms:

- Thirst
 - Dark or decreased urine
 - Feeling lightheaded
 - Dizziness
 - Headache
 - Dry skin or mouth
 - Fatigue
 - Nausea
 - Rapid heart rate
- If you notice any of these symptoms and are not drinking at least 48 ounces a day, your first step is to **drink**. If you cannot drink enough for your urine to be light, or if your symptoms do not improve in 3-4 hours, call 206-598-2274. Choose #2 to speak with a provider.
 - If you have a rapid heart rate, feel dizzy, and you are urinating $\frac{1}{2}$ as much as usual, **go to the emergency room.**

Listen to your body!

It's important to focus while eating so you can listen to your body's signals. Sit down to eat all your meals and snacks and avoid eating in front of the TV or other distractions. Listen to what your body is telling you about being satiated (full). You may be getting full if you have a hiccup, sneeze, runny nose, watery eye, 1 burp or sigh. Pay attention to signals that your body is **not tolerating your food**:

If you notice these signs...	You might have...
Lots of burping, hiccupping, <i>foamies</i> (foamy mucus regurgitation), regurgitation of food, nausea, chest pressure, or stomach pain	• Eaten too much • Had liquids too close to food • Eaten food that is too dense • Eaten too quickly • Taken too large a bite • Not chewed well enough

Recovery Tips

<u>Choose Food Carefully</u>	<u>Stay on Track</u>	<u>Stay Active</u>
• Eat 4-5 very small meals or snacks daily • Limit your meal size to $\frac{1}{2}$ cup after gastric bypass and $\frac{3}{4}$ cup after gastric sleeve.	• Set alarms on your phone or download a bariatric app to help stay on track for meals, liquids, and exercise. • Ask a support person to help you.	• Do not sleep all day. • Walk each day. Start slowly and increase your time and pace as you can. This will help your bowels move and decrease pressure in your abdomen. • Work up to 60 minutes a day, 5 days a week.

Transitioning to Your New Diets

Soft Diet: You will start this diet about 2 weeks after surgery. During your first online group class appointment after surgery, your dietitian will talk with you about how to transition to a very soft foods diet and about taking vitamins. In a soft diet, your food must be very moist and easy to chew, and you must avoid anything with a crunchy, crispy, or firm texture. Protein will continue to be the focus at all your meals. You will get more instructions and handouts during your group class.

Regular Diet: Transitioning to a regular diet may take weeks to months! You will learn how to slowly transition from the very soft foods diet to solid meat, raw fruits and vegetables, bread, pasta, rice, etc. Your dietitian will review your diet at your second clinic appointment. This is usually 6 weeks after surgery. You will learn more about this diet in an online class with other participants.

As you transition to a soft-texture or regular-texture diet, keep these important notes in mind:

- You will **always** need to cut your food into small, dime-sized pieces.
- Your food will **always** need to be very moist.
- Chew each bite until it is smooth.
- You might find that you can no longer eat some of your favorite foods.
- Keep your meals small and stick to the approved foods.
- Protein must **always** be the focus of meals and snacks.
- Your goal is to avoid going back to the foods or eating patterns from before your surgery. This is the next part of your journey.

Place your Bariatric Diet handouts here for quick reference.

Section 8 Reflection

Date I Read Section 8: _____

Things from this section I'm already doing well:	Things from this section I'd like to work on:
Questions:	

Section 9:

Preventing Problems

All journeys have some challenges. In this section you will learn about some possible problems that can happen, and tips on how to fix or avoid them.



This section has tips on stopping problems before they start.

Vitamins and Minerals

- You must take certain vitamins and minerals after surgery to lower your risk of *deficiencies* (shortage). Deficiencies can be harmful to your long-term health. Problems include *osteoporosis* (weak bones), change in vision, nerve damage, poor memory, *anemia* (low iron), etc.
- Your dietitian will talk with you about the vitamins and supplements you will need after surgery. Ask your dietitian for current pricing.
- You must remember to take your supplements every day.
- Before surgery you should take an adult multivitamin and at least 100 mcg (4,000 IU) of Vitamin D3 each day if your Vitamin D level is *deficient* (low).
- You **MUST** take a 100 mg Thiamine (also called Thiamin and Vitamin B1) capsule to prevent complications. Begin taking this every day beginning at the Liver-Shrinking Diet and continue through the first 9 months after surgery.
- There are exceptions to these vitamins and minerals for certain medical conditions like kidney disease, heart disease, or liver disease. Talk with your provider about your supplement plan.
- Do **NOT** take gummy, liquid, or patch vitamins.
- See handout “Required Bariatric Vitamins” for suggested products.

Schedule for taking vitamins and minerals

TIME	SUPPLEMENT	AMOUNT

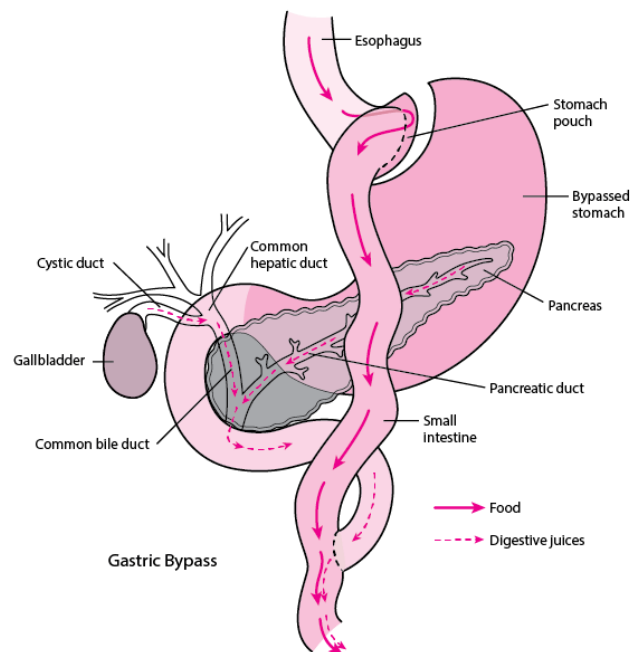
Dumping Syndrome

Dumping syndrome happens when a concentrated food or liquid passes too quickly from your stomach pouch into the intestine. The intestine adds fluid to *dilute* (thin out) the concentrated sugary food. Follow the arrow in the diagram below.

Dumping is a possible problem after gastric bypass surgery and may get better over time. Not everyone gets dumping syndrome as each person has a different tolerance level.

If you do experience dumping syndrome, the symptoms start within 20 minutes after eating a food or drink that is not tolerated. The symptoms may last 1 hour. If this happens, rest for 45-60 minutes to allow the symptoms to pass. Symptoms may include any of these:

- Shaking
- Rapid heart rate
- Pounding heart
- Liquid diarrhea
- Overheated, flushing
- Body aches like having the flu
- Sweating
- Very tired
- Nausea
- Abdominal cramping



Prevention is the best way to avoid dumping syndrome!

- Avoid ANY liquid with ANY food! Wait 30 minutes after eating to have liquids.
- Avoid sweets like ice cream, frosting, candy, flavored latte, cookies, etc.
- Avoid large portions of high-fat foods like greasy, fried foods, or creamy sauces.
- Keep portions small and do not overeat.
- Listen to your body's signals and stop eating before you are full.
- Notice what type and amount of food is a trigger and avoid it in the future!



Wait to drink until at least 30 minutes after eating.

Preventing Common Problems

Going Out to Eat	• Plan to spend a long time enjoying your meal. Tell your family and/or friends that this will not be a quick meal. • Check restaurant menus ahead of time so you do not have to make a quick decision. • Push the glass of water aside and do not order any drinks. • Instead of an entrée, try 1-2 side dishes, a non-fried appetizer, or sharing a meal. • Ask the restaurant for alternative items or preparations. For example, ask for grilled instead of fried fish, request to have your salad dressing on the side, etc. • Pack your leftovers immediately to avoid snacking while talking.
Hair Loss	It is so exciting to lose weight very rapidly, but it does cause the side effect of some hair loss. It will begin about 6-12 weeks after your surgery and continue for about 12 months. Biotin and many other store-bought products unfortunately do not stop hair loss. A very low-calorie diet means rapid weight loss which causes hormone changes that affect hair loss and growth. The best way to decrease hair loss is to have enough protein, hydration, vitamins, exercise, and calories. If you are not eating enough calories, then you are likely to lose more hair. This does not mean you should overeat to prevent hair loss. It is a trade-off.
Dental Problems	• Avoid overeating, as this can lead to regurgitation of food or foamy mucus. • Avoid snacking, as digestive enzymes start each time you have a sip or bite with calories. • Floss after each snack or meal. • Brush your teeth 2 times each day. Don't brush more often as this can harm your enamel. • Rinse your mouth well with warm water. • Take all the vitamins your dietitian recommends. • Do not smoke or inhale any type of nicotine or cannabis (marijuana).
GERD (Heartburn)	• Avoid any liquid 30 minutes before, during, or after any food. Sometimes you need to wait 60 minutes. • Avoid eating beyond your satiation signal which is about 1 cup after gastric bypass and 1½ cups after gastric sleeve. • Take small bites and chew very well. • Avoid eating and lying down for at least 1 hour after eating anything. • Avoid any inhaled products (unless prescribed by your healthcare provider). • Avoid any carbonation, caffeine, and alcohol. • Avoid acid, spicy, and citrus foods and beverages. • Avoid chocolate and any type of mint.
Alcohol	Avoid alcohol for at least 1 year. After bariatric surgery having 1 drink is like having 3 drinks! Your stomach can no longer make enough of the enzyme that breaks down alcohol, so it goes directly to your blood. This means that 2 ounces of wine or ½ ounces of hard alcohol can stay in your body for many hours. Your blood alcohol level is 2-3 times as high as before surgery if you had a gastric bypass. If you must drink, choose a low-sugar beverage. Eat food before you drink and sip slowly. There are many low- or no-sugar mocktails (non-alcoholic drinks) to enjoy.
Constipation	For guidance, see page "Stomach Problems After Surgery" in the Nursing chapter.



What is your favorite restaurant? Write down two strategies you can use after surgery to enjoy going out to eat with family and friends.

How do you feel about avoiding alcohol for at least one year? What are some ways you can enjoy socializing and relaxing without alcohol?

Old Habits

Bariatric surgery is a great tool to reduce the portion size of your meals. However, in the future you may notice that you can eat larger portions, crave foods and drinks like you used to, or even return to some old habits.

About 2 years after surgery, you may notice that you do not get as much feedback or “fullness” signals from your stomach. This can lead you to eat larger portions of food. The more food you eat, the more hunger hormones you will have. Both of these can cause an increase in calories and weight.

To prevent this, you must forever continue to use and practice your new knowledge and tools. Set yourself up for success by choosing dense, whole foods instead of highly processed foods or sweets. We encourage you to work with a therapist to help heal and manage your emotional relationship with food.

Section 9 Reflection

Date I Read Section 9: _____

Things from this section I’m already doing well:	Things from this section I’d like to work on:
Questions:	

Section 10:

Skills for Lifelong Success

Be Ready to Change

- You must be willing to change to succeed after surgery!
- Be consistent! Practice your healthy habits every day.
- Be accountable to yourself – track all food and exercise.
- Remember: Weight-loss surgery is a tool but is **not** a cure for obesity. Use your skills and tools to meet your goals.
- It takes about 3 months before a behavior becomes a habit. It is important to start practicing changes now!

Eat a Balanced Diet

- Choose whole foods instead of processed foods.
- Eat from all the food groups for balanced nutrients.
- Eat protein first at every meal and snack!
- Eat high-fiber foods: vegetables, fruits, whole grains.
- Choose colorful, low-carb vegetables.
- Snack on fresh fruit instead of sweets.
- Include a small amount of healthy fat each day.

Practice Your Portions

- Meals should be smaller than your fist.
- Cut food into dime-sized bites.
- Chew each bite until it is smooth.
- Use small plates and cups.
- Measure and weigh your food.
- Track all snacks/meals in your app:
 - At least 3 days a week for weight loss.
 - Track at least 3 days a month for weight maintenance.

Plan Ahead

- You will make healthier choices if you plan for each day!
- Plan 4-5 small meals each day
- Eat every 4-5 hours.
- Do not snack or nibble between your planned meals.
- Keep a backup food option with you so you are always prepared.
- Shop from a list to avoid bringing home *teaser* or *trigger* foods.

Avoid Trigger Foods

- Find non-food substitutes for trigger foods.
- **Limit** these foods to less than 1 small serving a week:
 - Smoothies (limit to 1 cup)
 - Processed meats
 - Sugar-sweetened foods
- **Avoid** carbonated, sweetened, and alcoholic beverages.

Mindful Meals

- Eat only 1 bite of food per minute.
- Eat with your non-dominant hand.
- Put your fork down between each bite.
- Use chopsticks.
- Leave 1-2 bites of food on your plate.
- Listen to your body's signals and stop eating when you are full.
- Each meal should take 20-30 minutes.
- Avoid distractions while eating.

Preventing Problems

- **Always** separate liquids and food by at least 30 minutes.
- Have at least 8 cups (64 ounces) of hydrating liquids each day.
- Take daily vitamins and minerals.
- Eat fiber to decrease constipation.
- Exercise each day! Include cardio and strength training.
- Avoid dumping syndrome (see page 74)

Seek Support

- Participate in support groups.
- Ask your family and friends to help support you.
- Join bariatric communities and forums online.
- Go to all your appointments.
- If you need help or have questions, contact us! We are here to help you stay on track.

Date I read section 10: _____

Section 11:

Pre-Surgery Nutrition Assessment

Before we approve your surgery, you must understand how your body will change and how to adjust your eating habits. You must show that you are ready and able to make these changes in your daily life. Answer the questions in this section as you work on your new habits. Your dietitian will review this with you.

Requirements

- ☐ I read my Bariatric Notebook
- ☐ I purchased and read / listened to Bariatric Mindset Success, by Kristin Lloyd (available on Amazon)
- ☐ I spoke with someone or watched videos about their bariatric surgery experience
- ☐ I understand that bariatric surgery helps me reduce my portion size, but I still must be aware of my calories and food choices
- ☐ I attended the "Key Concepts of Weight Management" on (date) _____
- ☐ I need to weigh less than _____ pounds before qualifying for surgery

Nutrition Knowledge

Write down 2-3 food examples for each of the terms below:

- Protein: _____
- Fat: _____
- Carbohydrates: _____
- Fiber: _____

Describe a **balanced meal** that you know how to make at home:

Write down **2 healthy snacks** you enjoy eating:

- _____
- _____

Write down 3 nutrition habits that will be different for you after bariatric surgery:

1. _____
2. _____
3. _____

Vitamins

- ☐ I understand that for the rest of my life, I will need to take daily vitamins that are not a gummy.
- ☐ I understand that vitamins aren't usually covered by insurance.
- ☐ I am currently taking the following vitamins: _____

For the next questions, rate yourself from 1 to 5 for how often you are currently doing this habit.

1	2	3	4	5
<i>I am not doing this yet</i>	<i>I am just starting to do this</i>	<i>I do this sometimes</i>	<i>I do this most of the time</i>	<i>I do this consistently</i>

Meal Planning	☐ I plan and cook most of my meals for the week and weekend. ☐ I plan 1-2 snacks for the day that include protein with vegetables or fruit. ☐ I shop from a grocery list to prevent buying <i>trigger</i> or <i>teaser</i> foods.
Nutrient Tracking	☐ I track calories and grams of protein, carbs, and fiber with a journal or an app. <i>Which app are you using?</i> _____ ☐ I use measuring cups and/or food scales to make sure my tracking is accurate. ☐ I track every single food, soup, sauce, dip, candy, treat, or liquid that I eat or drink.
Eating Habits	☐ I eat 3 small meals that include protein every day. ☐ I prepare and eat more whole foods than processed or packaged foods or snacks. ☐ I eat while sitting in a chair, without looking at a tv, phone, or computer. ☐ My meal plate is ¼ protein, ½ green or low-carb vegetable, and ¼ higher-fiber carb. ☐ I use small plates (8 - 9 inches across) or 1 ½-cup bowls. ☐ I put ½ cup of food in a dish beside my plate at meals to get used to seeing small meals. ☐ I remind myself to take small bites of food and chew very well. ☐ I can leave 1-2 bites of food on my plate at any meal. ☐ I do not eat second servings of anything. ☐ I take 20 minutes to slowly eat meals. ☐ I listen to my body and stop eating before I get too full. ☐ I can recognize my hunger signals, such as: _____ ☐ I recognize my satiation (fullness) signals, such as: _____ ☐ I keep food only in my kitchen (not in my bedroom, office, or living room). ☐ I do not eat out of a bag, box, package, or large dish. ☐ I recognize the emotions that may lead me to eat, such as: _____ ☐ When I have the emotional urge to eat, I can choose other non-food activities, such as: _____
Liquids	☐ I do not drink liquids during meals or snacks. ☐ I do not drink any sugar-sweetened or carbonated liquids or alcohol. ☐ I have practiced avoiding all alcohol in social settings. ☐ I am sipping (not gulping) at least 64 ounces of hydrating liquids each day.
Exercise	☐ I exercise 5 days a week, for at least 30 total minutes. ☐ I can be active for at least 15 minutes at a time.