



# NUTRITION INFORMATION MANUAL

Healthy Eating and Healthy Behaviors  
Before and After Bariatric Surgery

This document is intended to be used with instruction from a Registered Dietitian. Please bring this manual with you to all appointments.

**Sebastian River  
Medical Center**

A STEWARD FAMILY HOSPITAL





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# Introduction

While you are reading and working through this nutrition manual for bariatric surgery please take the time to write down any questions, concerns or comments that you have related to nutrition or the program. Your Registered Dietitian is there to help you answer any questions or concerns you may have. Your complete understanding is our mission.

We are so EXCITED for YOU as you begin this journey!

Write your questions here:

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

## Objectives

The following should be completed and understood prior to surgery

- ☐ Purchase supplements:
  - Protein Liquid Supplements
  - Multivitamin/Mineral supplements
- ☐ Purchase any needed equipment (see Equipment Checklist in Appendix B)
- ☐ Purchase any other foods and beverages you will need during the liquid and softer texture phases of the diet(s). The diet after surgery progresses through several stages. Read each section carefully.
- ☐ Keep working on these behaviors to form habits:
  - Practice eating meals without liquids (Do not drink liquids 30 minutes before a meal, no liquids during a meal & no liquid for 30 minutes after a meal).
  - Practice taking small bites and chewing thoroughly
  - Pay attention to what you are doing while you are eating (Mindfulness)
  - Try to make your meals last at least 30 minutes
  - Sip fluids slowly- do not gulp!
  - Begin to wean yourself from excessive caffeine (limit to 16oz)
  - Find alternatives to carbonated beverages, caloric beverages (i.e. sodas, sweet tea)
  - Decrease air swallowing habits:
    - Do not chew gum
    - Do not use straws
- ☐ Find ways to incorporate at least 30 minutes of activity into your daily routine
- ☐ Complete Pre-Weight Loss Surgery Behavior Change Goal Worksheet (Appendix F)

This is an agreement to yourself to commit to the necessary changes needed to prepare for a successful weight loss journey. This page is for you. It does not need to be returned to anyone in the program. Use it as a reminder of the commitment that you made to yourself to improve your lifelong health and well being.

I (name)\_\_\_\_\_ understand the above preparations and behavioral changes need to be made prior to having bariatric surgery to ensure the best outcomes for my surgery.

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## Accountability

It is important that your Dietitian and the bariatric team understand how you are eating now and to gain a better understanding of your eating behaviors. You should be documenting your intake so that they can help you in the most effective way.

Options for recording your intake:

- Hand written or computer written journal (see next page for suggested guidelines)
- Mobile App that records specific foods and quantity (see Mobile app suggestions)
- Pictures (see Mobile app suggestions)

Website and mobile app suggestions will be provided by your dietitian at your appointment.

Keep in mind when journaling:

- Measure your food. Use a food scale, measuring cups and spoons or compare the amount of food eaten to common objects (i.e. golf ball size, palm of hand)
- Write down what you eat BEFORE you eat it and correct the quantity after if needed.
- Include as much detail as possible (brands, method of cooking, fat percentage of dairy, any added ingredients, name of restaurant etc.)
- Record any feelings associated with eating/drinking (i.e. happy, frustrated, angry, bored, hungry).

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## Your Weight Loss Journey

Everyone's weight loss journey is unique. As you begin your weight loss journey you will have expectations. These expectations could be based on what you've read online, heard from others or read in books. Please understand that you are a unique individual and should not compare yourself with others. It is important to set realistic goals for yourself. Not only weight goals but health and life goals.

Be kind to yourself and don't compare yourself to others who have had the surgery. You are one of a kind!

### Behavior Change Goals:

- Eliminate carbonated drinks
- Eliminate alcohol
- Eliminate simple sugars
- Limit fried foods and high-fat condiments
- Limit Caffeinated drinks to 8-16oz daily
- Eat protein with each meal
- Take small bites
- Chew food 20-40 times per bite (to paste consistency)
- Put your fork down between bites
- Stop eating when no longer hungry
- Eat 3 meals per day, including breakfast
- Limit snacks/nibbles to 3 per day
- Drink 64 ounces of non-caloric, non-carbonated fluids daily
- Begin regular physical activity
- Begin keeping a record of food, fluid and physical activity
- Identify sources of support
- Assess your hunger level before and after eating
- Avoid using straws
- Other goals: \_\_\_\_\_

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## Goal Setting

There are challenges along the way. Do not get discouraged by small setbacks. Sometimes you will gain and sometimes you will lose. Sometimes you will stall. Just as if you were playing a sport, weight loss can be frustrating. Keep focusing on your goals and don't lose hope. You are unique, and your body may take longer than expected to reach your long-term weight loss goal.

Note: Weight loss expectations for bariatric surgery depends on the type of surgery you have. You can expect to lose 70-80% of excess weight with a Roux-en-y gastric bypass, >65% of excess weight with a gastric sleeve and 80-90% of excess weight with a Duodenal switch gastric bypass.

Example: A person that is 100 lbs. over their ideal body weight of 150 lbs.  
Current weight = 250 lbs. After RYGB they experience 70-80 lb. loss

## Behavior Modification Techniques

- Don't eat in front of the TV.
- Don't read while eating.
- Pre-portion your food.
- Don't buy tempting foods.
- Don't grocery shop hungry
- Make a shopping list.
- Use smaller plates and bowls.
- Keep healthy foods available.
- Focus on activities other than eating.
- Brush your teeth if feeling hungry.
- Don't eat standing up at parties or buffets.
- Don't stand at the food table at parties.
- Bring healthy food to a party.
- Park far away from your destination.
- Take the stairs instead of the elevator.
- Keep a food and physical activity diary.
- Consistency over time is important.
- Stay "mindful" of your behaviors.

# Mindful Eating

## What is “Mindful Eating”?

Mindful eating means paying attention to your body’s signals of hunger and fullness. It helps you to make emotionally balanced choices about food. It is about creating a new relationship with food and your body.

## The 5 parts of mindful eating:

### 1. Slow down.

Set aside time to practice. Even short periods like 5 minutes, can go a long way. It will help you develop the ability to understand what you are thinking and feeling.

### 2. Be persistent.

It takes time and practice to feel the benefits of mindful eating. Trying it once or even every day for a week, usually is not enough.

### 3. Be open.

Mindfulness helps you to become aware and accepting of what is happening in the present moment. Sometimes you feel relaxed practicing mindfulness. Sometimes you may not. Both are okay. You are practicing mindful eating if you are bringing attention back to what is happening in the moment.

### 4. Let go of judgment.

People who struggle with their weight may have negative feelings about themselves. Sometimes the people around them are critical and judgmental. Mindfulness is an opportunity to notice those judgments for what they are- thoughts or opinions, not facts – and to come back to what is happening in the present moment.

### 5. Do just one thing.

Mindfulness involves paying attention to one thing at a time. This means focusing on eating instead of anything else such as the television or reading material.

# Nutrition Basics

Bariatric surgery is only a tool to help you lose weight. It is important for you to learn the basics of nutrition to lose weight and maintain your weight loss.

## Calories:

A measure of energy that the food or beverage will give you. There should be an equal balance for energy in versus energy out if you want to maintain your weight. If you want to lose weight, there should be a deficient amount of energy (either by eating less or expending energy or both).

## How many calories will you need after surgery?

Everyone needs a different number of calories. How many calories you will need will change over time before and after surgery and will depend on how active you are. Recording your intake and activity levels daily will help your Dietitian determine an appropriate calorie level for your goals. Try a mobile app or computer-based program to help you record this information. The programs may advise you on a Calorie level, but these levels may not be appropriate for bariatric surgery patients.

## Nutrients that give ENERGY:

### Protein: 1 gram of protein provides 4 calories of energy

- Meat, chicken, fish and eggs
- Meat alternatives (tofu, beans, lentils)
- Milk, dairy products and milk alternatives
- Nuts, seeds and nut butters

### Carbohydrates: 1 gram of carbohydrate provides 4 calories of energy

- Bread, pasta, cereal and grains
- Beans
- Fruit
- Starchy vegetables (examples: potato, corn, peas)
- Sugar, honey, jam, candy
- Pastries and baked goods

### Fat: 1 gram of fat provides 9 calories of energy

\*\*\*Note that fat is MORE THAN TWICE as many calories as carbohydrate or protein. High fat foods=High calorie foods

- Oil, butter, margarine, lard, bacon grease
- Nuts, seeds, nut butters
- Salad dressing
- Fried foods
- Fatty meats
- Full fat dairy products

To burn off a 250-Calorie chocolate bar, a person that is 240 pounds would need to walk at a 3.5 mile/hour pace for ~27 minutes, swim laps for ~18 minutes, do aqua aerobics for ~33 minutes or outdoor cycle for ~19 minutes.

# Protein

Protein is a part of every cell in our body. It is used to build, maintain and repair the body's cells and tissues.

After surgery it is important to eat foods high in protein because:

- Your body needs extra protein to heal
- Your body needs protein to prevent muscle loss while you are losing weight
- Your hair follicles need protein to maintain their strength to prevent hair loss
- You need the essential energy and vitamins that protein-containing foods provide

Getting adequate protein can be a challenge because you will be eating small amounts of food. You will need to take protein supplements for a few months after surgery and may even keep them on hand throughout your life to ensure adequate protein intake.

Protein is the most important nutrient to concentrate on as you prepare for surgery and when you resume consuming food and beverages after surgery.

Protein goal: Aim for a **goal of 90 grams** of protein daily and no less than **60 grams**.

Remember to eat protein foods first at each meal (Protein>Vegetables>Carbohydrate, P>V>C), followed by non-starchy vegetables, fruit, then starchy carbohydrate foods. You may notice your carbohydrate intake will decrease as you focus on nutrient rich foods at your meals.

## Measuring Hints

- 1 ounce of meat is equal to about 3-4 Tablespoons of chopped or ground meat
- 1 ounce of grated or cottage cheese, tuna or egg salad is ¼ cup (4 Tablespoons)
- 3-ounce portion size of poultry or meat is about the size of a deck of cards.

Protein Sources	Serving size	Protein (g)
<b>DAIRY FOODS:</b>		
Skim or 1% milk	1 cup	8
Evaporated skim milk (canned)	1 cup	19
Nonfat dry milk powder	1/3 cup	8
Nonfat, sugar free yogurt	1 cup (8 ounces)	8
Nonfat or low-fat cottage cheese	1/2 cup (4 ounces)	14
Nonfat or low-fat cheese slices or string cheese	*1 ounce/1 slice	7
<b>MEAT AND MEAT SUBSTITUTES:</b>		
LEAN meats - skinless chicken or turkey breast, fish, beef, ham, deli meats	* 1 ounce (thumb size)	7
Egg or Egg substitute	1 egg or 1/4 cup substitute	7
Peanut Butter	1 Tablespoon	4
Tofu	4 ounces	8

# Carbohydrate

Carbohydrates are an important source of energy and can be a part of healthy eating. Not all carbohydrates are the same. Some carbohydrates, like those made with whole grains, are high in fiber and vitamins and minerals. Fiber is an extremely important nutrient. Fiber gives your body minimal calories and is essential for regular bowel movements. Fiber also helps to provide feelings of fullness and satisfaction with meals. Choose whole grain, high fiber options whenever possible and avoid foods that are high in sugar.

**Fiber goal:** Women: 21-25 gm/day Men: 31-38 gm/day

\*\*As you gradually increase fiber intake, make sure you also increase fluid intake to prevent constipation

\*\*\*If you struggle with constipation please discuss with medical staff. It is important that you address this prior to surgery.

Carbohydrate tips and suggestions:

1. Stop adding regular sugar to foods and beverages. Consider using sugar substitutes such as Sweet & Low, Equal, Splenda, Stevia or none at all.
2. Decrease or avoid intake of desserts and candy.
3. Stop drinking sugar-sweetened beverages such as regular soda, juices, sweetened iced/hot tea and coffee drinks.
4. Eat more whole vegetables and fruits.

# Fat

Fat is an important part of our body. Our bodies need fat for many important jobs like:

- Building cell membranes
- Making hormones

Healthy eating includes some fat. However, when eating foods high in fat, it is important to keep portions small. This will help to prevent weight gain because fat is high in calories.

After surgery, high fat foods cause dumping syndrome and overall ill feeling. Dumping syndrome will be discussed later in the manual.

Fat tips and suggestions:

1. Choose low-fat foods and avoid fried foods.
2. Dairy products and meat can be high in fat. Look for “low fat” dairy alternatives, “lean” cuts of meat, and remove visible fat and skin from meats and poultry to reduce the amount of fat in these foods.
3. Make homemade salad dressings using citrus juices and vinegars instead of prepackaged salad dressings.
4. Use spices, herbs, vegetables and citrus to flavor foods instead of adding cheese, butter and oils.

# Food Labels

## Protein

- Goal of 90 grams daily  
Protein is essential to prevent hair loss, maintain immune system, and prevent a decrease in metabolism.  
Good sources: egg whites, skim/1% milk, low fat cheese/cottage cheese, light or Greek yogurt, lean meats, seafood, bariatric approved protein supplements.

## Carbohydrates

- Sugar: Identify added sugars using the new nutrition label or looking at ingredients.  
Hidden sugars may be listed as: high fructose corn syrup, cane sugar, dextrose, cane juice, honey, barley malt, raw sugar, refiner's syrup, molasses, maltose, fruit juice concentrate, dehydrated cane juice, agave nectar, beet sugar, buttered syrup, caramel, confectioner's sugar
- Fiber  
**Soluble:** increases feeling of fullness, lowers cholesterol, regulates blood sugar  
Food sources: oats, dried beans and peas, nuts, barley, flax seeds, apples, bananas  
**Insoluble:** promotes regular bowel movements and removal of toxic wastes  
Food sources: green beans, dark leafy greens, fruit skins, root vegetables

## Fats

- Saturated fats: Raise your LDL ("bad") cholesterol  
Butter, ice cream, whole milk, sour cream, cream cheese
- Monounsaturated fats: Lower your LDL cholesterol and may increase you HDL ("good") cholesterol  
Olive oil, canola oil, peanut oil, almonds, and avocado
- Polyunsaturated fats: Lower your LDL cholesterol  
Corn oil, sunflower oil, safflower oil, sesame oil, flax seeds, walnuts, salmon, soybeans, tofu, shrimp

## Sodium

- Monitoring sodium intake is often encouraged in individuals with high blood pressure
  - Limit to 2,000 mg daily (~1 teaspoon of salt)
  - Watch out for processed/convenient foods

## Current Label

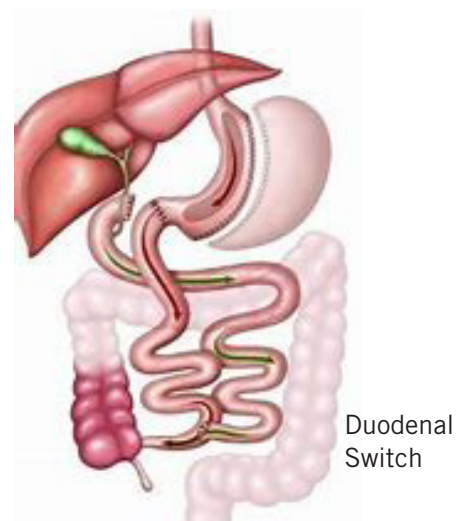
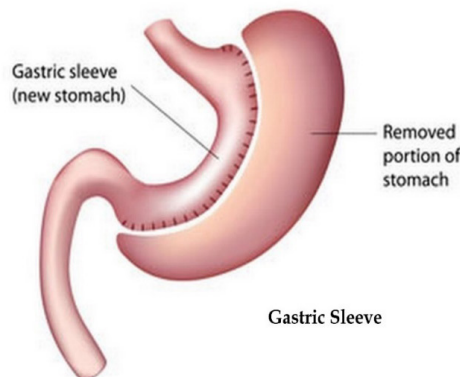
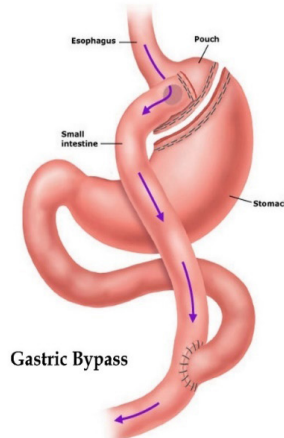
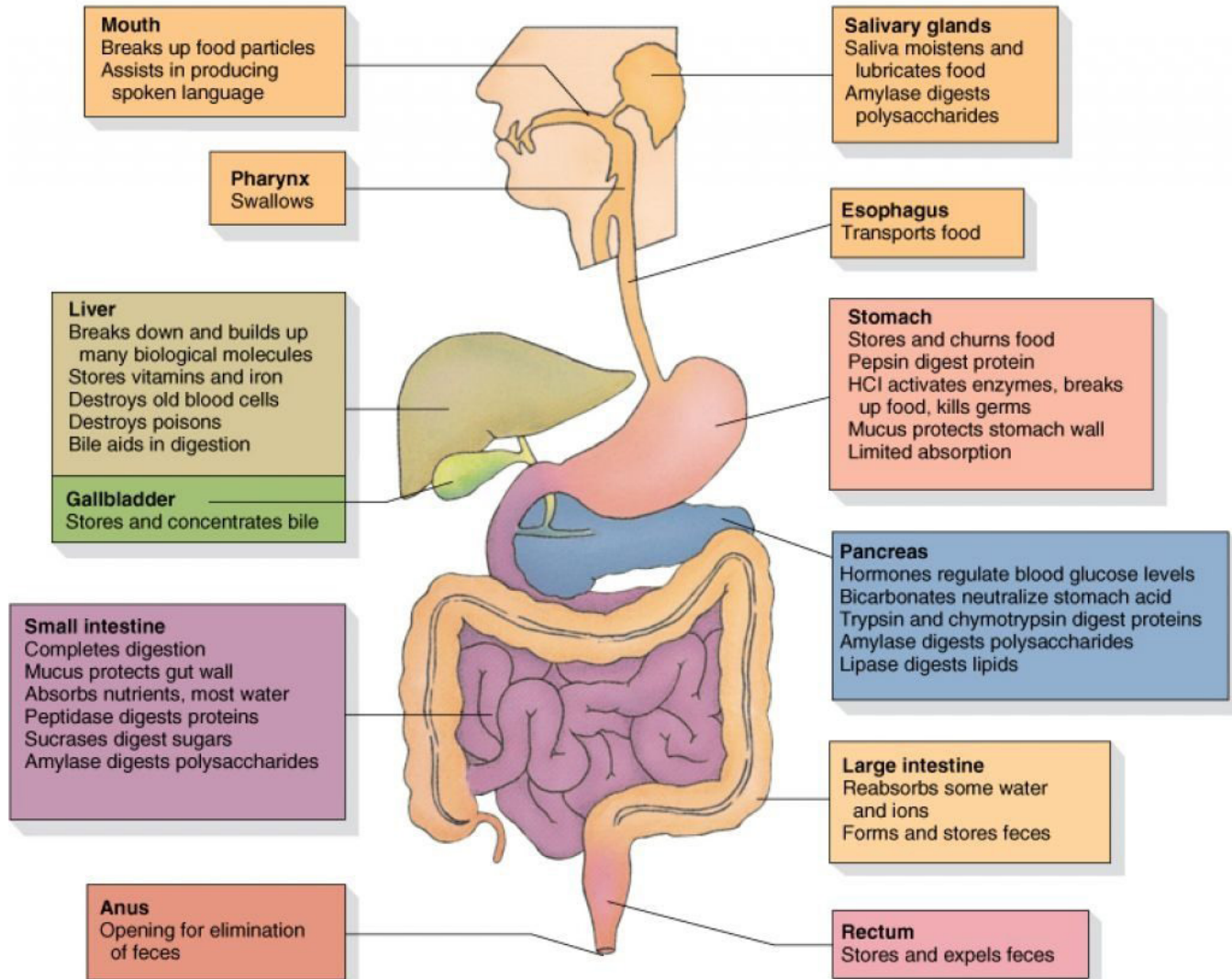
Nutrition Facts	
Serving Size 2/3 cup (55g) Servings Per Container About 8	
Amount Per Serving	
<b>Calories</b> 230	Calories from Fat 72
% Daily Value*	
<b>Total Fat</b> 8g	<b>12%</b>
Saturated Fat 1g	<b>5%</b>
Trans Fat 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 160mg	<b>7%</b>
<b>Total Carbohydrate</b> 37g	<b>12%</b>
Dietary Fiber 4g	<b>16%</b>
Sugars 1g	
<b>Protein</b> 3g	
Vitamin A	10%
Vitamin C	8%
Calcium	20%
Iron	45%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily value may be higher or lower depending on your calorie needs.	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g

## New Label

Nutrition Facts	
1 8 servings per container <b>Serving size 2/3 cup (55g)</b>	
2 <b>Amount per serving</b> <b>Calories 230</b>	
% Daily Value*	
3 <b>Total Fat</b> 8g	<b>10%</b>
Saturated Fat 1g	<b>5%</b>
Trans Fat 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 160mg	<b>7%</b>
<b>Total Carbohydrate</b> 37g	<b>13%</b>
Dietary Fiber 4g	<b>14%</b>
Total Sugars 12g	
4 Includes 10g Added Sugars	<b>20%</b>
<b>Protein</b> 3g	
5 Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%
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.	



# Digestion




## Protein Supplements

Because of the limited volume capacity of the stomach, in the beginning, it will be very difficult for you to meet your protein needs from food sources alone.

- You will need a protein supplement in the form of a protein powder or a protein drink. **The protein supplement will need to be continued until you are able to meet your protein goal of 90 grams daily through foods.**
- Once off the liquid diet after surgery, it is suggested to “most often” consume your protein drinks between meals, rather than as a meal. However occasionally replacing a meal with a protein drink is allowed.

Guidelines for selecting a protein supplement:

- Review the label to find a product that is high in protein, low in carbohydrate or sugar and low in fat.
- 
- **Protein:** Whey protein isolate is preferable. Each supplement should contain 20-45 grams of protein per serving.
  - **Fat:** No more than 3 grams of fat per 100 calories.
  - **Carbohydrate and sugar:** Avoid products with more than 10 grams total carbohydrate per serving.

Where to purchase protein drinks:

- Grocery stores
- Online
- GNC
- Wholesale discount stores

Examples: Premier Protein, Ensure Protein Max (high protein only), Genepro, WonderSlim, Bariatric Advantage, Bariatric Choice drinks

Websites to purchase ONLINE Protein Supplements:

[www.bariatricchoice.com](http://www.bariatricchoice.com)

[www.mybariatricpantry.com](http://www.mybariatricpantry.com)

[www.unjury.com](http://www.unjury.com)

[www.barilife.com](http://www.barilife.com)

[www.bariatricadvantage.com](http://www.bariatricadvantage.com)

[www.bariatricfoodsource.com](http://www.bariatricfoodsource.com)

[www.celebratevitamins.com](http://www.celebratevitamins.com)

[www.store.bariatricpal.com](http://www.store.bariatricpal.com)



# Vitamin and Mineral Supplements

## Malnutrition is a possible complication of bariatric surgery.

- You are eating very small amounts of food because your stomach pouch is small.
- Your body is not absorbing as many nutrients as it was before surgery.

It is important to take your supplements to prevent malnutrition.

You will learn:

1. How to choose your supplements
2. When to take your supplements

For the rest of your life you will need to take at least two supplements daily.

1. Multivitamin-mineral
2. Calcium with Vitamin D

Some may require an additional:

3. Iron (liquid, tablet, chewable, IV)
4. Vitamin B12 (chewable, sublingual, injectable)

Other supplements may be recommended by your Doctor, Nurse Practitioner or Registered Dietitian.

Not having enough vitamins and minerals could have serious effects on your:

Mood	Coordination	Bone strength	Eyesight
Memory	Skin, Hair and nails	Sense of taste	Metabolism

# Vitamins and Minerals Guidelines

## Multivitamin (MVI) with Minerals

- Take 2 chewable or liquid MVI daily
  - Take separately
  - NO GUMMY VITAMINS or PATCHES
  - MVI must contain 100% RDA as listed in the ASMBS guidelines (in 1-2 doses)
  - Taking the MVI with food may help with tolerance

Suggested timing of supplements	
Breakfast	1 multivitamin
Two hours after breakfast	500-600 mg Calcium
Lunch	500-600 mg Calcium
Two hours after lunch	500-600 mg Calcium
Dinner	1 multivitamin

## Calcium

- Take 2-3 chewable or liquid calcium supplements daily (Total 1,200-1,500mg/day)
- If you consume dairy products you may only require 1-2 calcium supplement doses daily.
- Calcium Citrate is best absorbed in bariatric surgery patients. Try to Avoid calcium carbonate (Tums®, Viactiv®, OsCal®), oyster shell, bone meal, etc., although these may be used as last resort for a short period of time.
- Must contain Vitamin D (at least 400 IU) and some Magnesium.
- **If your MVI contains Iron, take the MVI separately from your Calcium supplement by two hours to maximize absorption of these nutrients.**

## Vitamin B12

- Some patients may require additional Vitamin B12
- Please refer to your Physician's instructions.

## Iron

- For menstruating young women and/or patients with iron deficiency anemia, additional iron may be needed in MVI or separately.
- Cooking in cast iron pans increases the iron content of food and can contribute to your iron intake. It may be acceptable for men and non-menstruating women to take an MVI without iron.
- Please be aware of the constipating effects of iron. You may need to take a stool softener if constipation becomes an issue.

Websites and resources for bariatric vitamins and minerals:

[www.bariatricchoice.com](http://www.bariatricchoice.com)

[www.bariatricadvantage.com](http://www.bariatricadvantage.com)

[www.wellesse.com](http://www.wellesse.com)

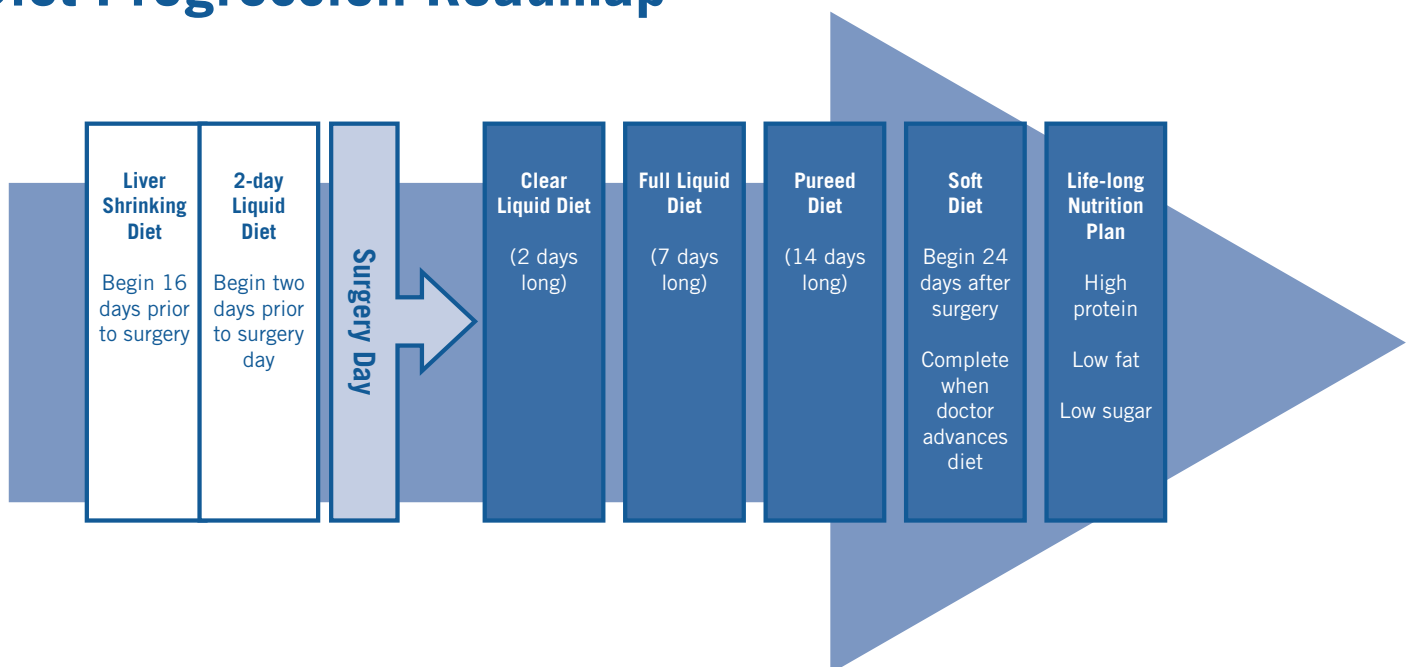
[www.celebratevitamins.com](http://www.celebratevitamins.com)

[www.opurity.com](http://www.opurity.com)

# ASMBS Guidelines for Vitamin and Mineral Supplementation

Vitamins	Sleeve Gastrectomy	Gastric Bypass	BPD/DS
Thiamin	12 mg/day	12 mg/day	12 mg/day
Thiamin (at risk patients)	50-100 mg/day	50-100 mg/day	50-100 mg/day
Folic Acid	400-800 mcg/day	400-800 mcg/day	400-800 mcg/day
Folic Acid (female, child bearing age)	800-1,000 mcg/day	800-1,000 mcg/day	800-1,000 mcg/day
B12	Oral: 350-500 mcg/day	Oral: 350-500 mcg/day	Oral: 350-500 mcg/day
Vitamin D	3,000 IU (75 mcg)/day	3,000 IU (75 mcg)/day	3,000 IU (75 mcg)/day
Vitamin A	5,000-10,000 IU (1,500-3000 mcg)/day	5,000-10,000 IU (1,500-3000 mcg)/day	10,000 IU (3000 mcg)/ day
Vitamin E	15 mg/day	15 mg/day	15 mg/day
Vitamin K	90-120 mcg/day	90-120 mcg/day	300 mcg/day
Copper	1 mg/day	2 mg/day	2 mg/day
Zinc	8-11 mg/day	8-22 mg/day	16-22 mg/day
Iron	45-60 mg/day	45-60 mg/day	45-60 mg/day
Calcium citrate	1,200-1,500 mg/day	1,200-1,500 mg/day	1,800-2,400 mg/day

## Diet Progression Roadmap



## Liver Shrinking Diet

<b>Pre-Surgery Diet</b>	
Diet Name: Pre-Surgery Diet	Sleeve Gastrectomy/Gastric Bypass/ Duodenal Switch
<b>Start Date:</b>	<b>16 days before surgery</b>
End Diet:	Prior to beginning 2-day pre-op liquid diet
Protein Shakes:	As meal replacements, if desired
Bariatric Multivitamin (chewable or liquid):	2 doses daily
Calcium Citrate:	1200-1500mg/day
Daily Fluids:	64 oz

The liver shrinking diet helps reduce the glycogen stored in the liver, reducing the liver's size. This will make laparoscopic surgery safer for you. In this diet, foods are divided into 4 groups: A, B, C, and Free Foods. The chart on the following page indicates how much of the foods from these groups you may eat each day.

- Eat 3 meals per day. You are also permitted 1-2 snacks per day.
- Protein shakes may be used for meal replacements and fiber supplements may be used to promote bowel regularity. If you are feeling constipated or if your bowel movements become less regular, you may begin a bowel regiment such as a stool softener. Avoid using laxatives as they may cause excessive fluid and nutrient loss.
- You may eat free foods if you feel hungry. Most people find they are less hungry on this diet as time goes on.

### Sample Meal Plan:

Breakfast: 1 protein shake  
 Fluid: 16 oz or more  
 Lunch: 1 protein shake  
 Fluid: 16 oz or more  
 Snack: 1 cup spinach salad with 1 tsp oil & vinegar  
 Fluid: 16 oz or more  
 Dinner: 3 oz skinless chicken breast, 1 cup cauliflower, 1 small apple or 1/3 cup brown rice  
 Fluid: 16 oz or more  
 Snack: 6 oz fat free, sugar free yogurt, 1/4 cup high fiber cereal

## Detailed Liver Shrinking Diet (Starts 16 days prior to surgery)

	Breakfast (eat within 1 hour of rising)	Lunch	Dinner	Snacks (1-2 per day)
Group A: Meats, Protein Foods, Nonfat Dairy	2 servings or a protein shake	2 servings or a protein shake	3 servings	0-2 servings
Group B: Nonstarchy Vegetables	0 servings	0 servings	1-3 servings	1-2 servings
Group C: Grains, Starchy Vegetables, Fruits	0 servings	0 servings	1-2 servings	0-1 servings

### Group A: Meats, Protein Foods, and Nonfat Dairy

Very Lean Meats and Protein Foods (35 calories and ~7gm protein per oz) A food scale should be used to accurately measure your protein servings.

Chicken or turkey breast (skinless)	1 oz serving	Water packed tuna	1 oz serving
Cod, tilapia, trout, haddock, snapper	1 oz serving	Crab, scallops, shrimp, oysters, clams	1 oz serving
Egg whites or egg substitute	1/4 cup serving	Soy milk (no added sugar)	6 oz
Vegetarian meat substitute with less than 3g fat per serving	1 oz serving	Vegan Burger	1/2 patty

### Lean Meats and Protein foods (55 calories and ~7 gm protein per oz)

Pork or beef tenderloin	1 oz serving	Dark meat chicken or turkey	1 oz serving
Salmon	1 oz serving	Lean ham or Canadian bacon	1 oz serving
Sirloin, flank steak	1 oz serving	Veal	1 oz serving

### Nonfat Dairy & Dairy Alternatives (limit to 3 servings per day)

Fat free milk	1 cup serving	Fat free, sugar free yogurt	6 oz serving
Fat free cheese	1 oz serving	Fat free cottage cheese	1/4 cup serving
Fat free ricotta cheese	1/4 cup serving	Soy milk (no added sugar)	1 cup serving
Tofu	1/2 cup serving		

### Group B: Nonstarchy Vegetables

Serving= 1/2 cup cooked or 1 cup raw

Alfalfa sprouts	Greens	Spinach	Tomatoes
Brussels sprouts	Onions	Kale	Beets
Green beans	Bean Sprouts	Cauliflower	Leeks
Okra	Carrots	Cucumbers	Mushrooms
Asparagus	Jicama	Zucchini	Broccoli
Cabbage	Bell pepper	Eggplant	

### Group C: Grains, Starchy Vegetables, and Fruits

Brown rice	1/3 cup serving	Oatmeal	1/2 cup serving
Whole grain pasta	1/2 cup serving	Potatoes	1/2 cup serving
High fiber cereal	1/2 cup serving	Winter squash	1/2 cup serving
Yams/sweet potatoes	1/2 cup serving	Berries	1 cup
Banana	1/2 (medium size)	Melon	1 cup serving

### Free foods

Sugar free gelatin	Sugar free popsicles	Sugar free beverages
Salad greens	Broth	Dill Pickles

# Two Day Pre-Op Liquid Diet

## Two days prior to surgery date

It is recommended by your surgeon and dietitian to follow a low sugar, liquid diet before surgery. You will need to be on a liquid diet for 2 days prior to surgery unless otherwise instructed. The purpose of this liquid diet is to leave no undigested residue in your intestinal tract. Here are examples of liquids you can have during this time. Please keep in mind that this is NOT a strict CLEAR LIQUID diet. The morning of your surgery we ask that you drink 12 ounces of a regular sports drink like Gatorade or Powerade beginning 4 hours before your surgery start time and finished 3 hours before your surgery start time (not sugar free, not carbonated).

### The nutritional guidelines are:

1. Protein Supplements.  
(Guidelines on Page 19)
2. Limit caloric liquids to 16 ounces or less each day as they contain larger amounts of sugar (diluted 1:1 ratio water: Juices/Gatorade/Powerade).  
Try to choose beverages lower in sugar like  
G2 brand Gatorade.
3. Limit regular gelatin, popsicles, or no sugar added fudgsicles to 3 or less per day.
4. Dairy products: 3 or less each day. Examples include: 1 cup of milk (skim, 1%, Lactaid), 6oz Light Yogurt (Oikos Tripple zero, Publix No sugar added low fat, Dannon light and Fit Greek) or ½ cup low fat cottage cheese.
5. Continue to take your Vitamins and Minerals (Guidelines on Page 23).

**These liquids can be taken in any amount since they do not contain sugar. (Always read the Nutrition Facts at the back of your beverage to assure it contains zero grams of sugar).**

1. Sugar-free beverages such as Crystal Light, Sugar-free Kool-Aid or Sugar-free Tang, diet Snapple, Propel, decaffeinated coffee or tea with sugar substitute and water.
2. Broth soups (all varieties) - (low salt/sodium preferred)
3. Sugar-free popsicles and sugar-free gelatin

## Weeks Prior to Your Surgery

### ☐ **Stay Active**

- Continue your exercise program or if you haven't been exercising, make time to walk every day for as much as you are able. Keep a record of your progress.

### ☐ **Get Plenty of Sleep**

- Come to surgery mentally sharp and well rested.

### ☐ **Follow Your Diet**

- If your team has recommended a special diet for preoperative weight loss, follow the plan. This will help you lose weight quickly before the operation and allow for a safer surgery for your surgeon to perform. If you have diabetes, keep a close eye on your blood sugars. You will need to work with your team (PCP, Endocrinologist, Nurse Practitioner etc.) to manage your diabetes medications as you lose weight and decrease your calorie intake before surgery.

### ☐ **Review your list for post surgery needs:**

## Night Before Surgery

### ☐ **Drink Clear Liquids**

- Water
- Decaffeinated tea or coffee (no cream)
- Broth
- No Alcohol

### ☐ **Do Not Drink (Or Eat) Anything After Midnight except:**

- The morning of your surgery we ask that you drink 12 ounces of a regular sports drink like Gatorade or Powerade beginning 4 hours before your surgery start time and finished 3 hours before your surgery start time (not sugar free, not carbonated).

### ☐ **Clean Your Skin**

- Wash, but do not shave the area where you will be having surgery

# Bariatric Clear Liquid Diet

## (2 days long) Days 1 through 2

Day of surgery: You may have clear liquids the day of surgery beginning with one ounce every 15 minutes for the first 24 hours then gradually increasing.

It is EXTREMELY IMPORTANT to sip to prevent any feelings of nausea.

\*\*\*A “sip” can be best described as just enough fluid to wet your tongue.

The clear liquid diet means fluids or foods that are liquid at body temperature and can almost be seen through (non-dairy).

### Examples of Clear Liquid Diet (No Added Sugar/Sugar Free/Non-Carbonated):

Food Group	Include	Avoid
Soup	Low-sodium bouillon or broth	All other soups
Unsweetened Beverages	Water, ice chips, regular caffeinated or decaffeinated beverages (coffee, tea, or herbal teas), Gatorade (G2), Crystal Light, sugar-free Kool-Aid and water enhancers	All others, including carbonated beverages
Miscellaneous	Sugar-free gelatin, sugar-free popsicles, small amount of non-dairy creamer and/or sugar substitute is okay (no regular sugar)	Sugar/honey/syrup Carbonated beverages Regular gelatin



# Bariatric Full Liquid Diet

## (7 days long) Days 3 through 9

The next stage is the full liquid diet which consists of sugar-free, low-fat milk products and the clear liquids listed on the previous page. **You will need to resume the liquid protein supplement** (drinks or powder) after surgery.

### Examples of Full Liquid Diet (low sugar / low fat):

Begin Vitamin and Mineral Supplements after discharged from the hospital.

- MVI w/ minerals (chewable or liquid) twice daily
- Calcium Citrate preferred (chewable or liquid) 2-3 doses (1200-1500 mg total/day). Do not take doses at the same time to improve absorption.

\*\*\*Take MVI w/ Iron separate from Calcium Citrate by 2 hours for maximum absorption.

Food Group	Include	Avoid
Milk/dairy	Nonfat or 1%/soy/almond/Lactaid milk, plain or sugar-free Greek yogurt, low-fat yogurt (without fruit, skins and/or seeds) Consider vanilla, lemon, coffee or plain flavored. Sugar-free pudding or custard made with nonfat or low-fat milk	Milkshakes Eggnogs Yogurt with fruit pieces
Soup	Low-sodium broth; strained, blended-vegetable or low-fat cream soups	Soups containing gaseous/high fiber vegetables or whole pieces of food
Juices	50% diluted juice/50% water: diet cran-apple/ crangrape juice, white grape juice, apple juice, grape juice (pulp-free), light/low sugar preferred	All others, including carbonated beverages
Miscellaneous	Spices as tolerated, calorie-free beverages, sugar-free gelatin, sugar-free popsicles; sugar-free cocoa (made with non-fat milk) Protein Liquid Supplements; (See section on protein liquid supplements), sugar-free instant breakfast; No Sugar Added Carnation Instant Breakfast	Sugar/honey/syrup Carbonated beverages Regular gelatin Ice cream/sherbet Regular pudding

## Bariatric Pureed Diet

### (14 days long) Days 10 through 23

You may now begin a pureed diet. This includes all items listed for clear and full liquids, and the items listed for the pureed (blenderized) diet.

#### Examples for the Pureed Diet (Sugar-Free/No Sugar Added, Low Fat):

Food Group	Include	Avoid
Milk/dairy (High protein)	Nonfat or 1%/soy/almond/lactaid milk, plain or sugar-free low fat or fat free Greek yogurt, or regular yogurt (with NO fruit, skins or seeds, consider vanilla, lemon, coffee or plain flavored)  sugar-free pudding or custard made with nonfat or low-fat milk, cottage cheese, 2-4% low fat small curd	Milkshakes Eggnogs
Meat, Poultry, Fish, Eggs (High protein)	Loose scrambled eggs or egg substitute or low fat cheese omelet; melted low-fat cheese, low-fat or non-fat cream cheese, low fat ricotta cheese, very smooth/mashed soft cheese such as part skim mozzarella, low fat string cheese, low fat or non-fat smooth or small curd cottage cheese  Baby food meat or pureed meat or poultry moistened with broth or low-fat gravy, blenderized shrimp, scallops or fish, Pureed tuna or salmon (canned in water) or pureed egg salad with low-fat or non-fat mayonnaise	Raw eggs, nuts, all other foods not listed under "include"
Vegetables	pureed cooked vegetables (no corn or peas) or baby food vegetables, mashed winter squash, tomato juice or sauce, pureed salsa, marinara	Whole vegetables (cooked or raw)
Fruit	Baby food fruits (bananas, pears, applesauce, peaches, mango, etc.), Unsweetened applesauce (smooth), Water-packed or packed in own juice canned fruit- blenderized, Unsweetened fruit juice (diluted, no sugar added)	Whole fruit (fresh or canned)
Fat and Oils	Light margarine, low-fat mayonnaise, cooking spray or spray butter, canola oil	Bacon, cream, butter and highfat gravy
Soup	Strained, low-fat cream soup made with skim milk; fat-free broth, blenderized lentil or split pea soup or chili	Soup with whole pieces of food or chunks
Miscellaneous	Unsweetened instant oatmeal (strained), baby oatmeal, cream of wheat or rice cereal, grits, mashed potatoes or mashed sweet potatoes, smooth polenta, hummus, refried beans	

## Bariatric Pureed Diet Guidelines

Everything you eat on the pureed diet should be sugar-free or no sugar added, low-fat and blended to the consistency of baby food or smooth applesauce.

- You will need a blender or food processor, or you can purchase baby food.
- Make sure foods are well blended as chunks of food can obstruct the stomach opening.
- Remember: IF YOU CAN CHEW IT, DON'T DO IT.
- Eat PROTEIN foods first (P.V.C. Protein>Vegetables>Carbohydrate).
- You can try adding plain/unflavored protein powders to oatmeal, cream of wheat, cream soups, yogurt, mashed potatoes, pureed vegetables or fruit.
- Start slowly. If you do not tolerate pureed foods, go back to the liquid diet and try again in a few days.
- Start with 2-4 tablespoons of puree food per meal. Listen to your body and stop eating as soon as you experience a feeling of food stopping at the top of your stomach.
- Once you are 4-6 weeks out from surgery, you should be eating between 6-8 level Tablespoons (3-4 ounces) of pureed food per meal.
- Continue liquid protein supplements (90 gm protein per day or more from supplements and meals).
- Remember to drink liquids between meals, not with meals.

### Helpful Hints for Blenderizing Your Own Food:

- Cut foods into small pieces (size of fingernail) before putting into the blender or food processor.
- Remove seeds, skins, and fat.
- Add liquid for ease of blending. Add enough liquid to cover the blades. Options include skim milk, broth, strained low-fat cream soup, low-fat gravy, low-fat or non-fat sour cream or fat-free half & half.
- Blend the item to a smooth, applesauce consistency.
- You may add low sodium seasonings that dissolve easily in food when mixed, such as, garlic powder and onion powder.
- If you have leftover blenderized foods, try freezing in single portions in ice cube trays and put the frozen cubes into plastic freezer bags.

Meats- Very lean and dry meats puree better by adding a small amount of fat (margarine, oil, light mayonnaise, low fat gravy, etc.). Fish also tends to be dry. Improve the texture by adding a small amount of lemon juice and/or light mayonnaise.

Vegetables- Cook vegetables until they become a soft texture. If using canned vegetables, drain them first. Add melted margarine and puree. Add a small amount of water or broth until it reaches the smooth applesauce consistency.

Fruit- If using canned fruit, use water-packed or packed in own juice and drain first. Add a few drops of lemon juice to help prevent fruit from discoloring.

Starches- Try canned sweet potatoes or yams and puree. Starches puree better when hot. Rice and pasta tend to puree into a gummy paste and are not recommended. Substitute these with cream of rice cereal prepared with a flavorful broth and seasoned with margarine.

## Bariatric Soft Diet

**(Continue until Doctor or ARNP approves tough solid texture)**

### Guidelines

- Introduce soft foods first
- Go slowly and try one new food at a time. Take a small bite of the new food and chew it well. Wait a while and see how you feel before you eat more.
- Avoid high sugar and high fat foods to prevent dumping syndrome and to avoid a high calorie intake. This is especially important if you have had the Gastric Bypass surgery.
- Continue protein shakes between meals until you can consume 90 grams of protein with food.

### Points to Remember:

- Solid foods will fill your stomach pouch more than liquids, so you will be eating smaller quantities of foods versus liquids.
- If you don't tolerate a food for the first time, wait a week and try again.
- It is normal to tolerate a food one day, but not the next.

If you experience nausea, vomiting or diarrhea, ask yourself:

1. Did I chew to a paste consistency?
2. Did I eat too fast?
3. Did I eat too much volume?
4. Did I drink fluid with my meal or too close to my meal?
5. Did I eat something high in sugar or fat?
6. Was the food moist or was it too dry?

# Possible Problem Foods When Advancing to Solid Food

## Avoid these foods for 2 months after surgery

These foods are known to be difficult to digest after bariatric surgery. Be sure to avoid these foods for at least the first 4 weeks to 3 months after surgery. After this time interval, individuals will vary in their tolerance to these foods:

- Red meat such as steak, roast beef, and pork  
*Red meat is high in muscle fiber which is difficult to separate even with a great deal of chewing.*
- Dry pieces of poultry or fish  
*Always make sure meats are very moist and tender.*
- Un-toasted soft bread  
*Toasted bread is better tolerated than un-toasted bread.*
- Pasta and rice  
*These foods tend to expand and become gummy after being consumed so we recommend avoiding or consuming in very small amounts.*
- Crunchy peanut butter (caution: smooth peanut butter may be too thick)
- Salads, fresh fruits (except banana) and fresh uncooked vegetables
  - *Fibrous vegetables such as corn, asparagus, celery, broccoli spears; fibrous fruit such as pineapple*
- Seeds and skins of fruits and vegetables
  - Membrane of citrus fruits
- Dried fruits, nuts, popcorn, coconut

Foods to Avoid: Hard/crunchy foods may never be tolerated.

- Corn chips, potato chips, hard taco shells
- Nuts and seeds are difficult to break down.
- Fried foods and greasy foods are hard to digest and are very high in calories.

## Steps for adding solid foods:

Try only 1 small bite of the new food and chew well. Wait a while and if tolerated, take another bite.

If at any time you feel too full, nauseated or vomit, stop eating immediately and rest. Take only clear liquids at the next meal and add blended foods (pureed) and liquids at the following meal. Try one solid food again the next day and if tolerated, you can resume solid food.

## Lifelong Nutrition Plan Daily Goals

- Drink a minimum of 64 ounces of fluid daily.
- Sip fluids between meals. Do not drink 30 minutes before, during, and 30 minutes after a meal.
- Walk/exercise for 30 minutes daily or at least most days of the week.
- Eat 3 meals and use protein shakes to help meet protein needs; when your food intake alone provides 90 grams of protein daily, you can discontinue the protein liquid supplements.
- Supplements: YOU NEED THESE FOR LIFE
  - Multivitamin (with iron if indicated by age/gender and/or lab values) - 2 chewable or liquid daily (for the first 6 months after surgery, then 1 chewable or liquid multivitamin dose daily if solid meals are tolerated well). Multivitamin capsules may be used in place of chewable or liquid after advanced onto Lifelong Nutrition Plan to help improve tolerance.
  - Calcium Citrate – 1,200-1,500 mg/day (from food and supplements)
- Meals should be 3 to 5 hours apart.
- No carbonated beverages (carbonation can stretch your pouch and should be avoided).
- Avoid alcoholic beverages for 4 weeks post-op. Use with caution thereafter. After the surgery you are at increased risk for intoxication, alcohol poisoning and stomach ulcers. Alcohol also contributes to excess calories.
- Limit consumption of simple sugars and foods high in fat as they contribute to excess calories and can cause Dumping Syndrome.
- Practice portion control by weighing or measuring your food initially after your surgery and then periodically to help you stay on track.
- It is important to note that adherence to dietary recommendations, life-long vitamin-mineral supplementation and follow up compliance is the key to long term weight loss results and good health

## Final Portion Expectations

Upon reaching your weight goal, you can have higher calorie foods, but you must continue to follow proper portion sizes for a meal.

For example:

3-4 oz meat, ¼ cup of vegetable, ¼ cup of potato/starch, ¼ cup of fruit

## Possible Complications

Your dietician will review the following possible complications:

- Nausea/Vomiting
  - Hair Loss
  - Constipation
  - Gas
  - Dumping Syndrome \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

## Tips to Reduce Food Intolerances

There are several tricks that may help with reducing your risk of experiencing a food intolerance.

**Pasta and rice** – Some patients do well with slightly undercooking or overcooking. However, most patients do not tolerate these foods until 9-12 months post-op. These are starches and expand quickly in your new pouch, often causing discomfort.

**Fresh bread** – Try toasting to make it more tolerable. However, most patients do not tolerate bread until about 6-12 months post-op. Again, bread is a starch and can expand rapidly.

**Beef, chicken, pork** – Make sure you're using a cooking method that maintains moisture. Only cook to the safe temperature. Overcooking dries food out making it less tolerable. You can also try using a meat tenderizer or a marinade (watch sugar and fat content) to make meat more tolerable.

**Shrimp** – Many patients have said the smaller the shrimp, the better they tolerate them. It may be best to avoid these lovely prawns until you get further out from your surgery. Be careful and chew, chew, chew!

**Eggs** – This one is tricky. Some patients can tolerate hard-boiled eggs, while others cannot. Some patients can tolerate scrambled eggs, while others cannot. Try varying the method of how you cook your eggs to see if that makes a difference.

**Stringy vegetables** – Use a blender and a strainer to separate indigestible fiber. Some patients may need to wait until 6-12 months post-op to eat certain foods, such as celery, asparagus, pineapple, artichokes etc.

**Fruit membranes** – Remove the membranes of oranges, grapefruits, and other citrus fruits to increase tolerance.

**Skins of fruits and vegetables** – Remove the skin of fruits until better tolerated, such as apples, plums, peaches, pears, cucumbers, potatoes, etc.

**Lettuce** – Lettuce also seems to not be very well tolerated for some patients. Even though we know dark, leafy greens are more nutritious, some patients tolerate iceberg lettuce better initially and then can try the greener lettuce when a little further out from surgery. Other patients have shared that the fresher the lettuce is the better it's tolerated.

**Foods with seeds** – Avoid eating the seed if possible or wait to eat this food until a little further out from your weight loss surgery (examples include strawberries, kiwi, blackberries etc.).

**Dairy/Cow's milk products** – Try soymilk, lactose-free milk, rice milk, or almond milk (look for light or lower calorie options) instead of cow's milk.

**Portion size** – Oftentimes it may not be the actual food itself that's not tolerated, but the portion size of the food. Many times, the foods that seem to be "not tolerated," are actually foods that fill us up faster, therefore requiring that you eat less of them. It's difficult to ascertain exactly how much of each food you can tolerate in the beginning, as it takes time and practice to figure out what you as an individual can tolerate. For example, chicken is a common food that's not well tolerated. Even if you can eat 6 bites of yogurt, you most likely cannot eat 6 bites of chicken. Chicken is a more solid protein and 1-2 bites may be all that you can tolerate early out of surgery. Even eating 1 bite extra is considered overeating, which can cause its own discomfort. Work to retrain your mind on recognizing the feeling of fullness, so you can avoid the uncomfortable "stuffed" feeling.

**Pace of eating** – It's important to keep in mind the speed at which you're eating. You may be able to tolerate a certain food much better if you eat it at a slower pace and ensure that you're chewing properly.

# Sebastian River Medical Center

A STEWARD FAMILY HOSPITAL



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