



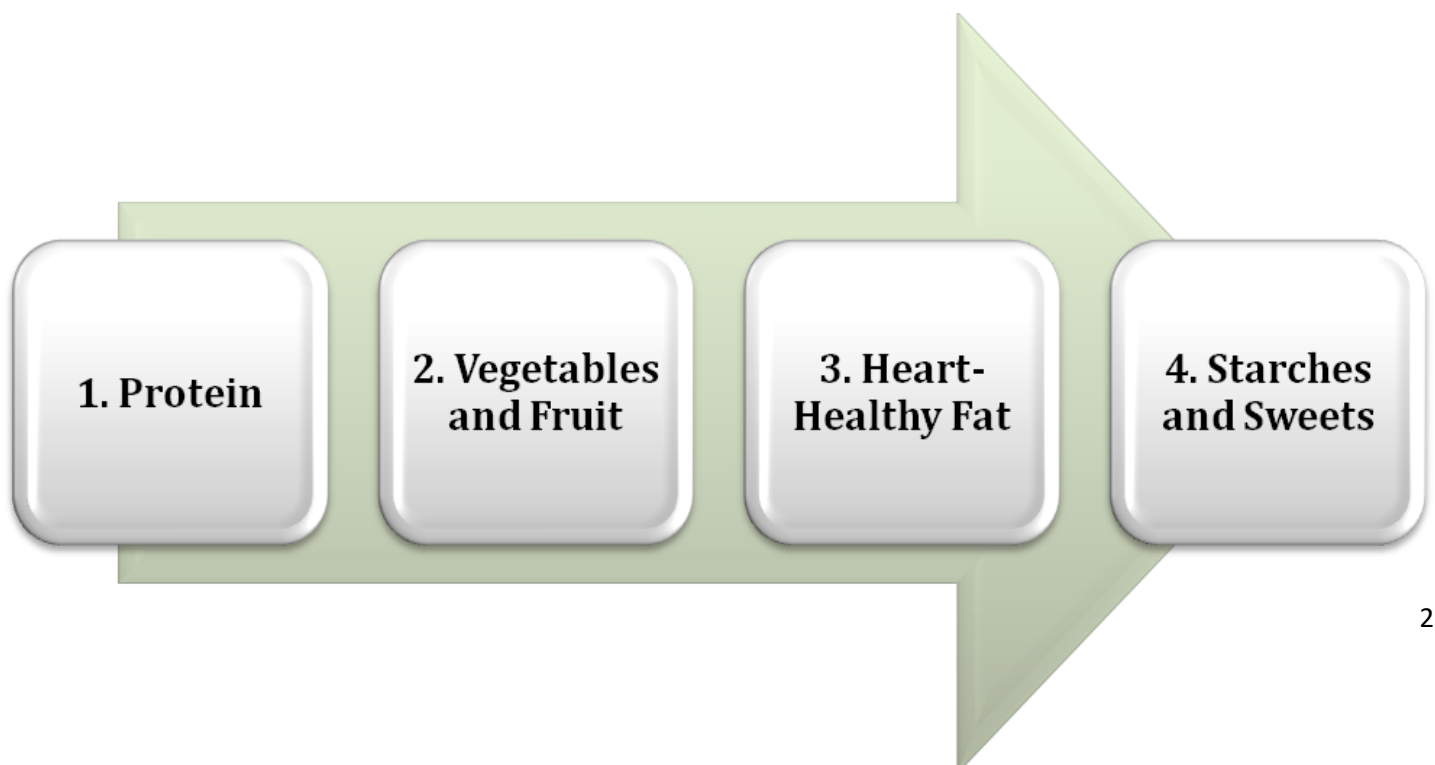
Nutrition Guidelines

RYGB/Sleeve Gastrectomy

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Goals for Nutrition Clearance

- Review materials
- Track Protein intake (in grams) on Food Record
- 3 meals/day containing _____g lean protein
- Increase vegetables
- Decrease starches
- Decrease alcohol
- Decrease caffeine and soda
- Trial protein shakes
- Purchase vitamins for surgery



The Power of Protein

Protein is essential for our good health. Our body digests protein slower than it does other foods, so you feel satisfied for a longer period of time. Due to the small pouch size, you must focus on protein in order to ensure that the body's needs are met and you do not get hungry between meals.

Your protein goals before and after surgery remain the same.

Daily Goal (g): _____

Meal Goal (g): _____ (approximately 3-4 oz per meal)

Example Serving Size:

3oz chicken breast =24g

8oz cup Cottage cheese =28g

High Protein Foods and Protein Content

Weight <u>After cooked</u>	Protein Food	Protein (grams)
1oz	Skinless Boneless Chicken Breast	8g
1oz	Skinless Boneless Chicken Thigh Meat	7g
1	Baked Skinless Chicken Drumstick	11g
1oz	Steak	8g
1oz	85-90% Lean Ground Beef	7g
1oz	Roast Turkey Breast	9g
1oz	93% Ground Turkey	7g
1oz	Deli Turkey, Chicken, Roast Beef, ham	5g
1oz	Lamb or Pork Loin/Chop	8g
1oz	Salmon/fish	7g
1oz	Shrimp (deveined, no shell)	7g
1oz	Lobster	5g
1oz	Scallops	6g
1 oz	Canned Tuna	6g
1	Large Egg	6g
1	Large Egg White	3.5g
¼ cup (2 Fluid oz)	Greek style Yogurt-Fat Free	6g
¼ cup	Cottage Cheese (1% or Fat-Free)	7g
1oz or ¼ cup shredded	Low fat/reduced fat cheese	6-7g
1 cup 8oz	Skim/low fat milk	8g
½ cup	Edamame	9g
½ cup	Cooked Beans/lentils	7-9g
1oz	Extra Firm Tofu	3g
Limit to 1 serving a day and only if tolerated		
1oz	Pumpkin Seeds	9g
1oz or 2TBSP	Peanuts or Peanut Butter	7g
1oz	Almonds, Pistachios, flax seed, sunflower seeds	6g
1oz	Cashews, Walnuts	4g

Fruits & Vegetables:

Benefits of fruits and vegetables

- ✓ Control of hunger
- ✓ Source of Fiber
- ✓ Source of Water
- ✓ Vitamins
- ✓ Antioxidant
- ✓ Phytochemicals
- ✓ Low in Calorie

Vegetables and fruits should be added to your routine after surgery when an adequate amount of lean protein can be comfortably consumed.

Non Starchy Vegetables		Fruit	
Asparagus	Spinach	Strawberries	Oranges
Broccoli	Beets	Blueberries	Grapefruit
Cabbage	Cucumber	Cherries	Kiwi
Cauliflower	Kale	Grapes	Plums
Peppers	Mushrooms	Bananas	Apricots
Turnips	Carrots	Watermelon	Cantaloupe
Tomatoes	Brussels Sprouts	Honey Dew Melon	Peaches
Onions	Spaghetti Squash	Apples	Nectarines
Celery	Summer Squash	Pears	Mango
Collard Greens	Bean Sprouts	Pineapple	Papaya
Parsnips	Zucchini		
Bean Sprouts	Green Beans		
Wax Beans	Rutabaga		
<p>Serving Size:</p> <p>1 cup raw or ½ cup cooked</p>		<p>Serving Size:</p> <p>1 small whole fruit or 1 cup chopped fruit</p>	
<p>Pre-operative goal: 4-6 servings/day</p>		<p>Pre-operative goal: 1-2 servings/day <u>at meals</u></p>	

Healthy Fats:

Fat gets a bad rap as it contains more calories than the same amount of protein or carbohydrate. It can still be included in a balanced bariatric friendly diet as long as portions are controlled.



Fat is needed for:

- ✓ Strong immune system
- ✓ Healthy skin
- ✓ Healthy hair
- ✓ Blood clotting
- ✓ Healthy brain

What to Eat:

Fats are not all created equal, and different types of fat have different effects on our health. Recommended sources of fat are listed below.

Serving Size (2-4 per day)	Food Item
1/8 whole	Avocado
1/4 cup/1oz	Nuts and Seeds
1 Tbsp	Peanut and Nut-Butters
1/2 Tbsp	Olive, Canola, Vegetable oils
1 Tbsp	Light Margarine Spread (Olivio, Smart Balance)
1-2 Tbsp	Light Mayonnaise
1-2 Tbsp	Salad Dressing
6	Olives

Saturated Fats: Use Sparingly

These fats may raise your total cholesterol and should be used sparingly.

Quantity	Food Item
1/2 Tbsp	Butter

Hydrogenated or Trans-Fatty Acids: Avoid

These increase your bad cholesterol markers (LDL) while decreasing your good (HDL) increasing your risk for heart disease. If the ingredient list has the words “hydrogenated” or “partially hydrogenated” in it, steer clear!

Starches and Sweets



What are starches and sweets?

- Generally, all foods that are made from grains, potatoes, or sugar.

Why do I have to eliminate starches pre-op?

- Shrinks your liver which makes surgery safer and easier (see 2 week pre-op diet)
- Allows you to get used to meal planning around protein, fruits and vegetables rather than bread pasta, rice or potatoes

When do I add starches back in? *(add in after 6 months to 1 year post-op)*

Starches may be added back 6 months to 1 year after surgery when:

- ✓ You are comfortably meeting protein goals
- ✓ You are meeting vegetable and fruit goals
- ✓ You are happy with your weight loss

Healthier Options

¼ - ½ cup cooked:

Starchy Vegetables (Potatoes, Corn, Peas, Winter Squash)
Whole Wheat Pasta
Brown or Wild Rice
Quinoa
Oatmeal
Whole grain cereal

Single serving:

6" whole wheat pita
Corn tortilla
1 slice whole grain bread
1 Sandwich Thin

Foods to Limit

White Bread, Rice, Pasta	Sugar	Brownies
Chips	Honey	Cake
Pretzels	Syrup	Granola
Candy	Special K Bars	Fiber 1 Bars
Cookies	Popcorn	Jam/Jelly-sweetened

Pre operative Menu Examples

Example Menu A		Protein
Breakfast	2 Eggs	
	1oz reduced fat cheddar cheese	12g
	1 cup chopped peppers and onions	7g
Lunch	3oz Chicken breast	24g
	1 cup salad greens	
	½ cup chopped tomatoes	
	¼ cup carrots	
	2 Tbsp Light balsamic vinaigrette dressing	
	1 cup strawberries	
Dinner	3oz Pork Chops	22g
	2 cups broiled broccoli drizzled with olive oil salt and pepper	
	1 plum	
Total		65g

Example Menu B		Protein
Breakfast		
Lunch		
Dinner		
Total		

Importance of Fluids

Hydration is important for all systems in your body. Your body is approximately 50-60% water!

Minimum Goal: 48-60+ oz/day non-caffeinated, non-carbonated, sugar-free, low-calorie liquids

Always remember the food/fluid rule:

- ✓ Do not drink with your meals
- ✓ Stop drinking 30-45 minutes before beginning your meal
- ✓ Wait 30-45 minutes after finishing your meal to drink again

Recommended

- ✓ **Water/Infused Water**
- ✓ **Decaf Green Tea/Herbal Tea**
- ✓ **Artificially Flavored Drinks (ex: Crystal light, Mio)**
- ✓ **Sugar- Free Electrolyte Drinks (ex: Powerade Zero, Gatorade zero, Vitamin water zero)**
 - These can help with dizziness post-operatively
 - Include at least 12 oz per day especially on warm days or with exercise post-operatively

Avoid/Limit

- ⊗ **Carbonated Beverages (Sodas and Seltzers)**
 - Experience shows that individuals who are most successful in reaching and maintaining their goal weight avoid these
 - Carbonation is generally uncomfortable after surgery, and may be a cause of distortion or stretching of the pouch
- ⊗ **Coffee/Black Tea**
 - Acids in coffee (even decaf) and black tea can irritate the lining of the stomach
 - Tannic acid in coffee and black tea can reduce iron absorption
 - Avoid coffee or black tea (caffeinated or decaf) for 4 weeks after surgery
 - Up to 12oz Coffee or black tea will be allowed 4 weeks after surgery
- ⊗ **Alcohol**
 - Avoid for at least 3 months after surgery
 - Tolerance may change after surgery
 - Risk of alcohol addiction increases
 - Alcohol contains calories and can promote weight gain
- ⊗ **Juice**
 - Contains large quantities of sugar and slows weight loss

Protein Supplements

You will need protein shakes starting 2 weeks prior to surgery. You will use them post-operatively to help with healing in the first 2 weeks after surgery and as long as needed to help meet protein goals

Type of Protein:

It is important to choose a complete source of protein that contains all the different kinds of amino acids (building blocks of protein) necessary to be healthy. See below for examples (Whey is the most popular):

- ✓ Whey protein isolate (*lactose free)
- ✓ Whey protein concentrate
- ✓ Casein
- ✓ Egg White
- ✓ Vegan-needs to be verified by your dietitian
- ✓ Soy

Protein Powders

Mix with 8oz of skim or low fat milk, unsweetened almond or coconut milk, or water

Designer



Nectar



Inspire



Body Fortress



- ✓ 18-25g protein
- ✓ Less than 10g Carbohydrates
- ✓ Less than 7g Fat

Unjury



GenePro



Health Smart



Isopure



Ready to Drink Shakes

Great options for on the go

Premier



Ensure Max



Lean Shake



Muscle Milk



- ✓ Under 250 calories
- ✓ 20-30g protein
- ✓ Less than 25g Carbohydrates
- ✓ Less than 12g Fat

Premier Clear



Cocotein



Isopure



Pure Protein



Where to purchase protein supplements and samples:

- ✓ GNC
- ✓ Vitamin Shoppe
- ✓ Vitamin World
- ✓ Target, Walmart, CVS, etc.
- ✓ Nashuanutrition.com
- ✓ Bodybuilding.com
- ✓ Netrition.com
- ✓ Bariatricchoice.com
- ✓ Vitalady.com
- ✓ Bariatriceating.com
- ✓ Amazon.com
- ✓ Unjury.com

Vitamin/Mineral Supplements:

Vitamin/Mineral Supplementation is critical after bariatric surgery and will continue for the **rest of your life**. Failure to comply with your supplements and regular lab testing will put you at risk for severe and sometimes permanent damage including but not limited to:

- | | | |
|-------------------------------|----------------------------|------------------------------------|
| ✓ Blindness, cataracts | ✓ Skin breakdown, rash | ✓ Problems with muscle contraction |
| ✓ Debilitating bone loss | ✓ Heart damage | ✓ Heart arrhythmia |
| ✓ Memory/concentration issues | ✓ Anemia | ✓ <u>Death</u> |
| ✓ Confusion | ✓ Sores in mouth, tongue | |
| ✓ Hair loss | ✓ Impaired immune function | |
| | ✓ Seizures | |

- Labs will need to be drawn every 6 months for the 1st year and then annually after
- If you are experiencing significant deficiencies, you may be required to come in for testing more frequently

What Supplements to Take:

Below is a list of the separate vitamin and mineral supplements you will need to take for the rest of your life.

We may need to add supplements or adjust doses depending on your lab results

Supplement	Dose/Frequency	Things to consider															
Multivitamin with Iron	<ul style="list-style-type: none"> - Typically 2x daily - Should include: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th colspan="2">200% Daily Value</th> <th>100% Daily Value</th> </tr> </thead> <tbody> <tr> <td>Vitamin A</td> <td>Thiamin</td> <td>Zinc</td> </tr> <tr> <td>Vitamin E</td> <td>Folic Acid</td> <td>Selenium</td> </tr> <tr> <td>Vitamin D</td> <td>Riboflavin</td> <td>Copper</td> </tr> <tr> <td>Vitamin B6</td> <td>Pantothenic Acid</td> <td>Iron</td> </tr> </tbody> </table> 	200% Daily Value		100% Daily Value	Vitamin A	Thiamin	Zinc	Vitamin E	Folic Acid	Selenium	Vitamin D	Riboflavin	Copper	Vitamin B6	Pantothenic Acid	Iron	<ul style="list-style-type: none"> - Chewables are needed for first 2 weeks after surgery. Then you can switch to tablets - Take with food/shake for better absorption <p><u>Avoid:</u></p> <ul style="list-style-type: none"> - Gummy vitamins - "Time release" or "extended release" - Tablets designed for men or ages 50+
200% Daily Value		100% Daily Value															
Vitamin A	Thiamin	Zinc															
Vitamin E	Folic Acid	Selenium															
Vitamin D	Riboflavin	Copper															
Vitamin B6	Pantothenic Acid	Iron															
Calcium	<ul style="list-style-type: none"> - Men and pre-menopausal women: 1500 mg/day - Post-menopausal women: 1500-2000mg/day - Take 500-600mg 3x daily 	<ul style="list-style-type: none"> - Take only 500-600 mg at one time to improve absorption - Tablets may need to be cut or crushed; - soft chews or powder are also available 															
Vitamin B12	<ul style="list-style-type: none"> - 500 mcg per day OR 3000 mcg weekly 	<ul style="list-style-type: none"> - Choose <u>sublingual</u> or quick dissolving form; place under tongue and let dissolve 															
Vitamin D	<ul style="list-style-type: none"> - Minimum of 2000IU daily (in addition to MVI) 	<ul style="list-style-type: none"> - Can be taken with calcium or multivitamin 															

Multivitamin Chewables (Needed for first 2 weeks after surgery)

Preferred:	Acceptable: *May need to be changed depending on labs*
<i>Opurity Bypass and Sleeve Optimized</i> (1 per day) (unjury.com) <i>Celebrate Multi-Complete 36</i> (2 per day) (celebratevitamins.com) <i>BariLife Powder</i> (1 Scoop per day) (BariLife.com) <i>Bariatric Advantage</i> (2 per day) (bariatricadvantage.com)	<i>Equate Children’s Multivitamin Complete</i> (2 twice per day) (Walmart, Amazon) <i>Flintstones Complete Multivitamin</i> (2 twice per day) (CVS, Walgreens) <i>Centrum Kids Chewable</i> (2 twice per day) (Walgreens, Amazon, Walmart) <i>Target Brand Kids’ Multivitamin Complete</i> (2 twice per day) (Target)

Multivitamin Tablets (Can be added after 2 week post-op appointment)

Preferred:	Acceptable: May need to be changed depending on labs
<i>Celebrate Multi-Complete with Iron</i> (3 capsules/day) (celebratevitamins.com) <i>Bariatric Advantage Ultra Multi with Iron</i> (3 capsules/day) (BariatricAdvantage.com) <i>Bari Life Multivitamin Tablet</i> (6 tablets/day) (BariLife.com)	<i>Alive Daily Energy or Women’s Energy</i> (2 Tablets/day) (Vitamin Shoppe, Amazon, CVS) <i>Centrum Adult Complete</i> (2 Tablets/day) (CVS, Walgreens, Rite Aid) <i>Vitamin Shoppe One Daily Multivitamin</i> (2 tablets/day) (Vitamin Shoppe)

Calcium (Can be added after 2 week post-op appointment)

Preferred: Calcium Citrate	Acceptable: May need to be changed depending on labs
<i>Citracal Petites</i> (2 tablets 3x per day) (Walgreens, Walmart) <i>Celebrate Vitamins Calcium Soft Chew</i> (3 chews/day) (Amazon, Walmart) <i>UpCal D Powdered Calcium Citrate</i> (3 packets/day) (Amazon)	<i>Caltrate Tablets</i> (3 Tablets per day) (CVS, Walgreens, Costco) <i>Viactiv Calcium Chews</i> (3 Chews/day) (Walgreens, CVS) <i>Tums Antacid</i> (3 Tablets/day) (CVS, Walgreens, Grocery store)

Vitamin B12 (500 mcg can be added after 2 week post-op appointment)

<i>Nature Made Sublingual B12</i> (Walgreens, Walmart, CVS) <i>Nature’s Bounty Sublingual B12</i> (Costco, Walgreens, CVS) <i>CVS Quick Dissolving Vitamin B12</i> (CVS)
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Vitamin D (2000 IU can be added after 2 week post-op appointment)

Many brands available at stores including Vitamin Shoppe, CVS, Walgreens, Amazon, Walmart etc.
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2 Weeks Prior to Surgery-Shrinking your Liver

For the 14 days prior to surgery, you will be on a low carbohydrate, low fat diet. This is the time when you will need to eliminate all starches and added sugars. This diet is designed to reduce the size of your liver, and make surgery easier and safer for you and your surgeon.

- ✓ Aim for 48-60oz+ non-caffeinated, non-carbonated, sugar free fluid/day
- ✓ Practice taking 20-30 minutes to eat meals
- ✓ Practice chewing food to applesauce consistency
- ✓ Practice not drinking fluid at meals
- ✓ Weigh and measure protein food portion

Meal	What to Eat	Example:
Breakfast	Protein Shake (20-30g protein)	1 Scoop Protein Powder in 8oz Milk
Snack (optional)	7g protein ½ to 1 cup non-starchy vegetables	1 Cheese Stick with ½ Cup Baby Carrots
Lunch	20-30g Protein with 1-2 cups non-starchy vegetables Or Protein shake (20-30g protein)	4oz Chicken Breast + 2 Cups Salad
Snack (optional)	7g Protein and ½ to 1 cup non-starchy vegetables	½ Cup Cottage Cheese +1 cup grape tomatoes
Dinner	20-30g Protein with 1-2 cups non-starchy vegetables and 1 cup or 1 Small Piece of fruit	1 Cup Refried Beans + 1 oz Reduced Fat Cheese +2 cups sautéed peppers and onions +1 cup diced Pineapple

48 Hours Prior to Surgery-Fluid Diet Only

- ✓ 2-4 Protein Shakes/day
- ✓ Sugar Free Jell-O
- ✓ Sugar Free Popsicles
- ✓ Broth
- ✓ Herbal Tea
- ✓ Sugar Free Beverages
- ✓ Low fat Cream Soup Strained
- ✓ No Caffeine

Day of Surgery:

Starting midnight the day of surgery, you cannot have anything to eat or drink.

Diet Stages At-A-Glance

This is just an overview of the diet stages. Please read through the following pages for more details

Pre-Op Diet

Start:	2 weeks before surgery
Duration:	14 days
Diet instructions:	At least 1 protein shake daily, avoid all starches and added sugars
Fluid Goal:	>48 oz-60 oz sugar-free, non-carbonated, non-caffeinated fluids
Protein Goal:	>60g protein/day

Stage 1 : Clear liquids

Start:	Post-op Day 1
Duration:	1 day
Diet instructions:	Sip sugar-free, low-calorie, non-carbonated, non-caffeinated liquids throughout the day
Fluid Goal:	1-2 ounces per hour

Stage 2: Protein Shakes

Start:	Post-op Day 1 or 2
Duration:	6 days
Diet Instructions:	Slowly sip fluids and protein shakes throughout the day
Fluid Goal:	Aim for >48-60 oz from clear liquids and protein shakes (see clear liquid guidelines)
Protein Goal:	Aim for >60g/day (usually 2-3 8-ounce protein shakes)
Vitamins:	Start 2 complete chewable multivitamins

You may not reach the fluid and protein goals right away. Just do your best sipping throughout the day

Stage 3: Pureed

Start:	Post-op Day 7
Duration:	7 Days
Diet Instructions:	Keep sipping fluids and protein shakes. Start adding small amounts of pureed foods
Fluid Goal:	Aim for >48-60 oz from clear liquids and protein shakes (see clear liquid guidelines)
Protein Goal:	Aim for >60g/day per RD guidance between protein foods and protein shakes
Vitamins:	2 complete chewable multivitamins

Stage 4: Soft Textures

Start:	Post op Day 14
Duration:	14 Days
Diet Instructions:	Keep sipping fluids. Start introducing a greater variety of soft foods. Reduce protein shakes as regular food intake increases
Fluid Goal:	Aim for >48-60 oz clear liquids and protein shakes (see clear liquid guidelines above)
Protein Goal:	Aim for >60g/day per RD guidance between protein foods and protein shakes
Vitamins:	2 complete multivitamins daily (can switch to tablets), 500mg calcium 3x daily, 2000 IU vitamin D3 daily, 500 mcg vitamin B12 daily

Stage 5: Regular Textures

Start:	Post-op Day 28
During:	Ongoing
Diet Instructions	Well-balanced, planned meals per RD guidance
Fluid Goal:	Aim for >48-60 oz clear liquids (see clear liquid guidelines above)
Protein Goal:	>60g/day per RD guidance
Vitamins:	2 complete multivitamins daily, 500 calcium citrate 3x daily, 2000 IU vitamin D3 daily, 500 mcg vitamin B12 daily

Stage 1 Diet - Clear Liquids

Start: Post op Day 1

Estimated Duration: 1 day

Diet Instructions: Sip sugar-free, non-carbonated, non-caffeinated liquids

Clear liquids include: <ul style="list-style-type: none">✓ Water✓ Sugar-free popsicles✓ Sugar-free gelatin✓ Herbal Tea	<ul style="list-style-type: none">✓ Crystal light✓ Fat-free/low-fat broth or bouillon✓ Sugar Free Sorbet
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Fluid Goal: 1-2 ounces per hour; you need to sip slowly throughout the day

Protein Goal: None

Tips:

- ✓ Sip slowly; use 1-ounce medicine cups to help prevent you from drinking too fast
- ✓ Stop sipping as soon as you feel full or if you have any nausea/vomiting

What to Expect:

- ✓ You will likely have gas pain from the procedure, often felt in the shoulder area.
- ✓ You will likely have nausea and will be provided anti-nausea medications



Stage 2- Full Liquids / Protein Shakes

Start: Post op Day 1 or 2

Estimated Duration: 6 days

Diet Instructions: Slowly sip fluids and protein shakes throughout the day. Hydration is #1 priority.

Fluid Goal: Aim for >48-60 oz from sugar-free, low-calorie, non-carbonated, non-caffeinated liquid and protein shakes; add at least 12 oz electrolyte beverages

Suggested fluids:	
<ul style="list-style-type: none"> ✓ Protein Shakes ✓ Water ✓ Herbal Tea ✓ Sugar Free Jell-O 	<ul style="list-style-type: none"> ✓ Sugar Free Popsicles ✓ Electrolyte Beverages (G0, Powerade Zero, Propel) ✓ Sugar Free Beverages (Crystal Light, Fruit-2-O) ✓ Broth/ Strained Low Fat Cream Soups

Protein Goal: Aim for 60-90g/day (usually 2-4, 8 oz protein shakes)

Vitamins: **Start 2 complete chewable multivitamins (see vitamin section for details)**

You may not be able to reach your fluid and protein goal right away. Just do your best each day

Tips:

- ✓ Take small sips slowly and frequently
- ✓ You do not need to separate protein shakes and other beverages
- ✓ Aim for 4-6oz/hour to help pace yourself
- ✓ Add multivitamins 2x daily

What to do if you don't like your protein shake

If shakes are no longer palatable, consider changing flavors, brands, texture, or protein source.

Unflavored Powders: (ex: Genepro, Unjury, Inspire)	Mix in broth, strained soup, crystal light, sugar free Jell-O or milk *If adding to a hot liquid, first add powder to a small amount of cold/warm liquid and then add slowly into hot liquid to avoid having protein congeal*
Clear protein shakes:	These supplements have a texture like clear juice (Ex: Isopure, Premier Clear, Trimino, Designer Whey Protein 2-Go)
Change Protein Type:	Egg White, Soy, Vegetarian (combination of vegetable and grain sources)
Dilute:	Add extra milk if the texture is too thick. 1 cup of milk has 8g protein; 1 cup of Fairlife milk has 13g of protein.

Stage 3- Pureed

Start: Post op Day 7

Estimated Duration: 7 days

Diet Instructions: Keep sipping fluids and protein shakes. Start adding small amounts semi-liquid foods or food pureed in blender with extra broth or fat free gravy.



<p>Trial 1/4 cup at a time of the following foods:</p> <ul style="list-style-type: none"> ✓ Cottage Cheese ✓ Unsweetened Applesauce ✓ Sugar-Free Pudding ✓ Greek Style Yogurt ✓ Refried Beans <p><u>*No fruit or seeds*</u></p>	<p>Blend any of the following foods into a smooth pudding consistency</p> <p>Add liquid (such as broth, fat free gravy) and use blender to <u>puree</u></p> <ul style="list-style-type: none"> ✓ Vegetable Soup (no potatoes, rice, pasta) ✓ Lentil Soup ✓ Black Bean Soup ✓ Moist beef, ham, turkey, chicken ✓ Pureed banana, canned peaches, or pears (in 100% fruit juice, not syrup) ✓ Cooked carrots ✓ Tofu
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The majority of your protein should still come from protein supplements

Fluid Goal: Aim for >48-60 oz from sugar-free, low-calorie, non-carbonated, non-caffeinated liquid and protein shakes; add at least 12 oz electrolyte beverages

Protein Goal: Aim for >60-90g/day per RD guidance between protein shakes and protein foods

Vitamins: Continue 2 complete chewable multivitamins

For your safety:

Do NOT advance your diet before instructed from surgical team.

Do NOT add foods not specifically listed in this education booklet.

Doing so increases your risk of severe complications including the risk of
death

Stage 4- Soft Textures

While you are still healing, you should stick to soft texture foods that can be chewed thoroughly

Start: Post op day 14

Estimated Duration: 14 days

Diet Instructions: Keep sipping fluids. Start introducing a greater variety of soft foods. Reduce protein shakes as regular food intake increases

Protein Foods	Fruit and Vegetables	
<ul style="list-style-type: none"> ✓ Greek Yogurt ✓ Eggs/Egg Whites ✓ Low-fat cottage cheese ✓ Low-fat ricotta cheese ✓ Fish, canned tuna ✓ Reduced Fat Cheese ✓ Lean Deli Meat ✓ Refried Beans ✓ Tofu ✓ Lean Ground Meat <ul style="list-style-type: none"> - Beef, Chicken, Turkey 	Cooked: <ul style="list-style-type: none"> ✓ Green beans ✓ Wax Beans ✓ Asparagus ✓ Mushrooms ✓ Tomatoes ✓ Beets ✓ Carrots ✓ Salsa ✓ Zucchini ✓ Summer Squash ✓ Pureed Cauliflower 	Raw: <ul style="list-style-type: none"> ✓ Watermelon (seedless) ✓ Cantaloupe ✓ Honey Dew Melon ✓ Banana Canned: <ul style="list-style-type: none"> ✓ Peaches ✓ Pears Peeled and Cooked: <ul style="list-style-type: none"> ✓ Apples ✓ Pears ✓ Peaches

Fluid Goal: Aim for >48-60 oz from sugar-free, low-calorie, non-carbonated, non-caffeinated liquid and protein shakes; add at least 12 oz electrolyte beverages

Protein Goal: Aim for >60-90g/day per RD guidance between protein shakes and protein foods

Vitamins: **2 complete multivitamins (chewable or tablet)**
1200-1500mg calcium citrate (500-600 mg 3x daily)
2000 IU vitamin D3 daily
500mcg vitamin B12 daily

Sample Schedule:

Breakfast:	Multivitamin tablets with Iron + 500-600mg Calcium + 500mcg Vitamin B12
Lunch:	500-600mg Calcium
Dinner:	Multivitamin tablets with Iron + 500-600mg Calcium + 2000IU Vitamin D

Expect to take vitamin or mineral supplements 3-5 times a day

Tips

- ✓ You may not feel hungry but you still need to eat regularly
- ✓ You will still likely need 1-2 shakes per day as portions at meals may not contain adequate protein yet. Continue logging to help assess number of shakes needed
- ✓ Do not eat and drink at the same time: hold fluids for 45 minutes after meals
- ✓ Introduce one new food at a time; take small bites and chew food thoroughly
- ✓ Keep a food record to ensure you are hydrated and eating enough protein
- ✓ Stop eating or drinking at the first sign of fullness. Sometimes this can feel like chest pressure or nausea
- ✓ Avoid alcohol. It irritates the stomach and can cause dehydration and ulcers
- ✓ Ensure food is moist for best tolerance

Moistening your Food

Following surgery patients often have complaints of foods being too dry and/or feeling that food is getting “stuck.” Below is a list of ways to moisten foods in an attempt to prevent such problems.

- ✓ Unsweetened Applesauce
- ✓ Broth (low sodium)
- ✓ “Butter” sprays: Non caloric
- ✓ Low sugar Barbeque Sauce
- ✓ Melted low-fat Cheese
- ✓ Fresh Citrus Juice: lemon, orange, lime, grapefruit
- ✓ Cottage cheese (low fat)
- ✓ Low Fat Cream Soups
- ✓ Gravy (low-fat)
- ✓ Greek Yogurt, plain 0% fat
- ✓ Low Sugar Ketchup
- ✓ Sugar Free Maple syrup
- ✓ Mayonnaise (low fat or light)
- ✓ Mustard (low sodium)
- ✓ Salad dressing (low fat or light)
- ✓ Salsa
- ✓ Sour Cream (low fat or light)
- ✓ Soy sauce (low sodium)
- ✓ Spaghetti Sauce (low sodium)
- ✓ Stewed tomatoes
- ✓ Teriyaki sauce or Soy sauce (low sodium)
- ✓ Tomato paste
- ✓ V-8 juice

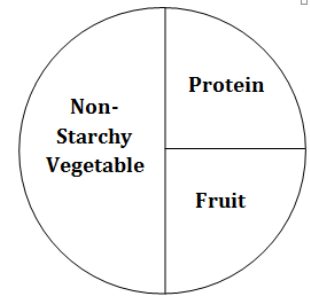
Stage 5-Regular Textures

At this stage, you can begin adding in foods with tougher textures

Start: Post op Day 28

Estimated Duration: Ongoing

Diet Instructions: Well-balanced, planned meals per RD guidance



<p>Foods to add:</p> <ul style="list-style-type: none"> ✓ Raw salad/Vegetables ✓ Raw fruits: berries, citrus fruit ✓ Nuts or seeds 	<ul style="list-style-type: none"> ✓ Steak ✓ Shellfish-scallops, shrimp, crab ✓ Roasted or grilled chicken
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Fluid Goal: Aim for >48-60 oz from sugar-free, low-calorie, non-carbonated liquids and protein shakes

Protein Goal: >60-90g/day between protein shakes and protein foods

Continue Vitamins: 2 complete multivitamins (chewable or tablet)
1200-1500mg calcium citrate (500-600 mg 3x daily)
2000 IU vitamin D3 daily
500mcg vitamin B12 daily

Sample Schedule:

Breakfast:	Multivitamin tablets with Iron + 500-600mg Calcium + 500mcg Vitamin B12
Lunch:	500-600mg Calcium
Dinner:	Multivitamin tablets with Iron + 500-600mg Calcium + 2000IU Vitamin D

Tips:

- ✓ Aim for 3 meals solid food/day 4-6 hours apart; eat mindfully
- ✓ Always eat protein food first
- ✓ **Limit caffeinated beverages to 12oz/day**
- ✓ Do not eat and drink at the same time
- ✓ Use protein supplements as needed

Learning About Your New Stomach or “Pouch”

Weight loss surgery is a learning process. There is no right or wrong experience along the way. All stomachs react differently. Here are some ways to help you get familiar with the newest part of your body!

How to know when you are full

Listen to your stomach. After surgery, especially with the bypass or sleeve, you may not necessarily feel hunger for months. However, regardless of the surgery, your stomach will remain very clear about when it is full. You may start to feel uncomfortable, and at times the feeling may happen very rapidly without warning. This is when eating slowly becomes vitally important. Take your time while eating so you can feel the restriction that surgery provides. If you eat too quickly or drink too soon after eating, you may become sick or immediately feel a false sense of hunger because you pushed your food out of the pouch. Trust that your stomach will communicate with you – you just have to make sure you are listening.

Is it possible to stretch your stomach or pouch?

Yes. Naturally over the course of a year, everyone’s stomach will stretch. This is expected and is beneficial because it allows you to consume more nutritious foods. However, it is possible to stretch a pouch even beyond the expected amount which is when weight regain can occur. Overeating, snacking, grazing, and drinking carbonated beverages are among the biggest contributing factors to stretching a pouch. If you think you are having trouble, be sure to contact your team for help.

But I’m Craving____: Tips for Dealing with Food Cravings

Food cravings come from your brain, not your belly. These are short-term things that are often affected by mood, emotion, environment, stress, poor sleep, boredom, old habits, etc. Dealing with food cravings is hard but will become easier with practice. Here are some ideas to help.

1. Remove the trigger. If it’s a commercial, change the channel, turn off the TV, etc.
2. Get busy: Engage in some activity whether it’s knitting, calling a friend, journaling, or cleaning. This will distract you from what triggered your craving.
3. Exercise regularly: Exercise changes your response to food in your brain, so it is easier to practice portion control. Exercise also improves stress management and sleep which will help prevent cravings for starches and sweets in the future.
4. Indulge smart: Can you make it healthy? If you feel like you are missing something, talk to your dietitian! He or she may have ideas to help you include or replace the food you are missing while still meeting your nutrition goals.

Take Time to Exercise

Benefits of Exercise:

- ✓ Improved function of heart and lungs
- ✓ Increased energy
- ✓ Maintaining/building muscle tissue
- ✓ Boost in mood
- ✓ Bone strength
- ✓ Better sleep
- ✓ Improved body image
- ✓ Better metabolism
- ✓ Weight loss and maintenance



Recommendations for adults

- At least 150 minutes per week of moderate-intensity aerobic activity
 - Ex: walking briskly, water aerobics, dancing, gardening, biking <10 mph
 - Exercise can be done all at once or split up throughout the day (30 minutes vs. 10 minutes 3x per day)
- Strength training (resistance or weights) at least 2 days per week
- Spend less time sitting

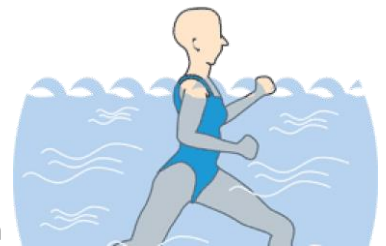


When is it safe to exercise after surgery?

- Start walking in the hospital after your surgery to help blood flow and eliminate gas
- Avoid heavy lifting (>10 lbs) until 6 weeks after surgery and cleared by surgeon
- Avoid swimming until your incision is fully healed and you have clearance from surgeon

Tips for getting started:

1. Start slowly
 - Get clearance from a doctor
 - Meet with a physical therapist if you have an injury or physical limitation
 - Start small and increase intensity gradually weekly
2. Set specific and realistic goals
 - Write out a detailed contract with yourself and log your activity (Day, Time of day, Activity, Duration)
3. Explore new activities
 - Join a group class at your gym
 - Rent a fitness DVD
 - **Find activities that you enjoy and want to continue!**

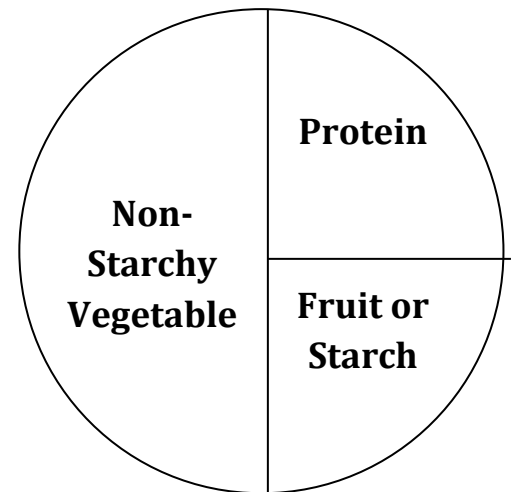


Maintenance

Congratulations! You have reached the weight you feel most comfortable and we could not be more excited for you! Where do you go from here? This “stage” focuses on maintaining your current weight and healthy eating and exercise behaviors, while liberalizing the diet as much as you feel comfortable. This “stage” is for the rest of your life.

Tips:

- Always take your Vitamin and Mineral supplements
- Always eat your protein foods first
- Drink at least 48-60oz calorie free sugar free fluid
- In times of struggle, go back to the basics – keep a food record.
- Limit Caffeinated beverages to under 12oz/day
- Make exercise routine
- Fill up your plate: remember your priorities
 - Protein
 - Vegetables
 - Fruit
 - Starch
- Practice mindful eating
 - Eat slowly-20-30 minutes/meal
 - Chew food thoroughly
 - Stop when satisfied
- Seek help: if you are struggling, call your surgical team and check in!
- Go to support group



What to Consider Before Adding Back Starches and Sugar

One of the most common questions asked is when to add back foods you gave up before surgery. There is no single answer for every patient. It depends on the food, the portion, where you are in your weight loss journey, and how you react physically and emotionally when you eat the food. For some patients, foods that triggered overeating or food cravings will cause the same effect when reintroduced and delaying reintroduction can be important for optimal weight loss.

If you feel like you want to begin adding some select foods back in you want to ask yourself the following:

- **Am I at least 6 months post-op?**
- Will I be able to control my portion?
- Am I getting all my protein in?
- Am I eating my fruit and vegetables?
- Am I happy with my weight?
- Am I exercising regularly?
- Am I willing to keep a food record to track my reaction to this food?
- Am I generally happy and free from stress?
- Am I getting enough sleep?
- Have I been seeing my dietitian regularly?

If you can answer yes to these questions, you can consider adding small portions of a food back in. Not all starches and carbohydrates are equal in nutrition value so refer to the Maintenance stage for the best choices. Remember, your dietitian is always available to help you in your transition!

Appropriate Portions for Starches:

½ cup cooked or 1oz after you meet protein, vegetable, fruit goals

Potatoes (white, sweet)	Brown or Wild Rice	Corn
Butternut Squash	Quinoa	Peas
Whole Wheat/grain bread, pasta	Oatmeal	Whole Grain Cereal

Goal: Avoid

White Bread, Rice, Pasta	Sugar	Brownies
Chips	Honey	Cake
Pretzels	Syrup	Granola
Candy	Special K Bars	Fiber 1 Bars
Cookies	Popcorn	Jam/Jelly-sweetened

Dining Out

Eating out can still be a part of your life following surgery. However, it is important that you continue to follow the habits you have established. This should be used as an opportunity to enjoy food and company rather than an opportunity to over-indulge in high fat, high calorie foods. Here are some guidelines to help you continue to eat healthfully away from home.

- ✓ Choose restaurants you know
- ✓ Check online for a restaurant's menu so you can plan what you will eat prior to arriving
- ✓ Choose high protein foods from the appetizer menu for your main course
- ✓ Split a meal with a friend
- ✓ Do not try new foods when eating out
- ✓ Continue to eat proteins first, followed by vegetables
- ✓ Avoid fried foods, cream and sugary sauces
- ✓ Avoid buffets as this can lead to overeating
- ✓ Take home leftovers
- ✓ Always be an informed consumer and ask the server what ingredients are in a sauce, etc.

Restaurant type	What to pick
Fast Food Chains	Chili, Salads with chicken, hamburger or chicken breast minus bread
Chinese	Steamed options, pass on the rice
Mexican	Fajitas, Chili, hold sour cream and tortillas
Seafood	Go for baked and steamed options over fried
Italian	Seafood, chicken, beef, meatballs



Vacation/Holiday

- ✓ Do your research. Find out what restaurants will be around where you are going. How far away are the different destination spots you want to visit? Is walking an option? Are there grocery stores around? Are the food/ingredients similar to what you are used to? What is the weather like? Can you bring water or fluids with you wherever you go?
- ✓ Plan accordingly. Bring comfortable shoes so you can exercise as often as possible.
- ✓ If you want to “treat yourself” be sure you are controlled. Don’t let one meal ruin your entire day or week.
- ✓ Enjoy your destination. Go on tours, speak with the people, be adventurous, have fun! Do the activities you couldn’t do before surgery. Rock climbing, parasailing, bungee jumping, horseback riding, skydiving – the sky’s the limit!
- ✓ Enjoy your new body! Go shopping! “Treat” yourself with new shoes, clothes, watch, etc.
- ✓ Enjoy the people you are with. Catch up, talk, listen.
- ✓ Stay busy with things other than food. Take a nap if you are tired. Read a book. Play a game.
- ✓ Bring portable coolers/lunch bags to pack your own food. Vacations and holidays tend to be spontaneous. You can be spontaneous - but also a little prepared!



Parties and Gatherings

- ✓ Be sure you are around people that are supportive of your weight loss
- ✓ Wear dressier, form-fitting clothes wherever you go. You will not only have a slimmer body to show off, but you will be less likely to eat more if you are not wearing loose clothing.
- ✓ Plan accordingly. Look up where you are going to see what your options are. Call ahead to the destination to ask about any alternative dishes or drinks you may have that are acceptable for the new you.
- ✓ Suggest going somewhere outside. Instead of going to a restaurant for food/drinks/dessert, meet outside somewhere and go for a walk. Catching up with friends, family, coworkers, etc. is much more enjoyable when you can interact with the outdoors. This may be particularly helpful if it is a first date or someone you may not know very well – the surroundings can be used as a distraction to break any awkwardness.
- ✓ Join a support group with others that have had weight loss surgeries.
- ✓ Get creative. Join an art class or go to a play.



Common Side Effects & Solutions for Weight Loss Surgery

Lactose Intolerance

Sometimes after surgery patients struggle with digesting dairy foods due to a type of sugar called lactose. Foods high in lactose include milk, cottage cheese, and yogurt (not Greek style). Lactose intolerance is a common cause of gas, bloating, cramping, and diarrhea. If you notice you are more sensitive, it is recommended you either remove the offending food from your diet, or:

- ✓ Switch to Lactaid brand milk, cottage cheese
- ✓ Take Lactaid tablets before having dairy foods
- ✓ Take a probiotic or Kefir regularly

Dumping syndrome

Dumping syndrome occurs when food passes too quickly from the stomach into the small intestine resulting in nausea, weakness, sweating, increased heart rate, lightheadedness and diarrhea.

- ✓ Avoid foods that are high in carbohydrate/sugar (25 g sugar is usually too high)
- ✓ Eat more protein and avoid drinking with meals
- ✓ Avoid foods that are too hot or too cold
- ✓ Lie down and rest

Nausea/Vomiting

Nausea and vomiting can occur during the first few months following weight loss surgery.

- ✓ Avoid eating too rapidly
- ✓ Chew thoroughly
- ✓ Avoid eating too much at one sitting
- ✓ Make sure foods are moist
- ✓ Return to a previous stage in the process that you can tolerate
- ✓ Avoid drinking with or too soon after meals
- ✓ Avoid lying down too soon after a meal
- ✓ Avoid foods that are poorly tolerated
- ✓ Drink plenty of non-carbonated, non-caffeinated beverages
- ✓ Avoid foods that may cause dumping syndrome
- ✓ Limit or avoid foods with lactose
- ✓ Log what foods you eat, how much and how quickly you eat when nausea/vomiting occur
- ✓ Contact Surgical Weight Loss staff if nausea/vomiting persists for several days after trying the above

Frothing

Frothing occurs when mucous is produced to help break down food as the new pouch heals. For some patients, the mucous backs up into the esophagus and causes frothy clear vomiting.

- ✓ Drink hot water, with tea or lemon, 30 minutes prior to a meal

Food intolerances

Intolerances after surgery vary from patient to patient. Foods that are not tolerated well shortly after surgery may be fine later on.

- ✓ If you are not tolerating the food, avoid it for now
- ✓ Re-introduce the food in small amounts about a month later
- ✓ Record foods you have tried
- ✓ Document symptoms
- ✓ Be patient with your new pouch
- ✓ Contact your physician or dietitian

Diarrhea

Most patients experience some degree of diarrhea in the early weeks after gastric bypass surgery. This is normal and usually only lasts about 1-2 weeks. Diarrhea is not a normal long term side effect for weight loss surgery.

- ✓ Eat slowly and chew thoroughly
- ✓ Do not drink fluids with food
- ✓ Avoid high sugar, high fat, and spicy foods
- ✓ Avoid sugar-free products containing sugar alcohols
- ✓ Avoid caffeinated beverages
- ✓ Avoid foods with lactose

Constipation

Constipation may occur due to inadequate fluids, less dietary fiber and inactivity following surgery

- ✓ Drink plenty of non-carbonated, non-caffeinated beverages (48-60 oz/day)
- ✓ Increase physical activity when possible
- ✓ If at stage IV or after, increase your fiber intake through fruits, vegetables, and whole grains
- ✓ Try stool softeners

Hair Loss

During periods of rapid weight loss and protein deficiency hair follicles may become inactivated causing hair to fall out. Patients should not seek hair treatments if this is to occur & the condition will generally resolve as gains are made in nutrition and rate of weight loss declines.

- ✓ Be sure to meet protein goals set by your dietitian
- ✓ Drink plenty of non-carbonated, non-caffeinated beverages
- ✓ Take MVI recommended by your dietitian daily

Bad Breath

- ✓ Take caution with gum as it can plug the stomach if swallowed
- ✓ Use mints with caution – most contain sugar alcohols which may not be tolerated well
- ✓ Drink fruit flavored beverages (ex: Crystal Light, Fruit 2 O)
- ✓ Meet fluid requirements of at least 48-60 oz/day

Muscle Wasting

After surgery, your body is not getting sufficient calories to maintain weight. Protein from muscle tissue becomes the body's primary source of energy which can lead to a decline in muscle tissue and a decrease in resting metabolic rate (the amount of calories you burn at rest).

- ✓ Exercise if possible. Participate in moderate to vigorous physical activity *daily*.
- ✓ Incorporate weight bearing exercise and upper body strength training 2-3 times per week
- ✓ Be sure to obtain protein from your diet, meeting your protein goal set by your dietitian

Protein Deficiency

Protein is the most essential nutrient after surgery to remain well nourished. The body does not store protein and therefore it must be obtained through the diet

- ✓ Eat protein rich foods to meet protein goal set by your dietitian
- ✓ Eat protein foods first at a meal
- ✓ Maintain prealbumin and transferrin within normal limits
- ✓ Be sure to avoid drinking 30 minutes before eating to allow room for protein foods

Vitamin/Mineral deficiency

After weight loss, surgery patients are not typically able to eat enough to supply complete nutrition through the diet.

- ✓ Take MVI daily per dietitian's recommendations. Refer to guide provided in this packet.
- ✓ Take calcium citrate daily to meet 1200-1500 mg/day
- ✓ Confirm your surgery weight loss team is monitoring your metabolic profile, vitamin B-12 and iron levels to detect any deficiencies following surgery.

Stomach Bloating

- ✓ Avoid overeating
- ✓ Avoid sugar alcohols
- ✓ Keep food records to review with dietitian
- ✓ Avoid carbonated beverages
- ✓ Be sure to eat slowly
- ✓ Exercise if possible

Dizziness/Headache/Light Headedness

- ✓ Drink at least 48-60 oz of non-carbonated, non-caffeinated beverages with electrolytes (G2, Propel, Powerade Zero)
- ✓ Do not skip meals

Slow Weight Loss

- ✓ Keep a food record to review with your dietitian
- ✓ Exercise if possible

Extreme Hunger

- ✓ Keep a food record to review with your dietitian
- ✓ Eat protein foods first, meeting protein goal set by your dietitian

Excessive Weight Loss

- ✓ Keep a food record to review with your dietitian
- ✓ Discuss weight loss with your physician

FOR WOMEN OF CHILD BEARING AGE: By having weight loss surgery, you are committing to **NOT** become pregnant for 18 months- 2 years. Pregnancy prior to 18-24 months post surgery may result in miscarriage, malnutrition, inadequate growth and development and cognitive impairment of the fetus.

- ✓ **MUST** use appropriate contraception as fertility levels increase with the rapid post-surgery weight loss.
- ✓ Speak with your physician to determine if any adjustments to your pill strength need to change after surgery.

Weight Loss Surgery Resources (in alphabetical order)

asbs.org

American Society of Bariatric Surgery Website

allrecipes.com

Website that includes numerous healthful recipes with detailed nutrient analysis.

bariatricsupportcenter.com

Website to provide support and comprehensive information to weight loss surgery patients. Articles by MDs, RNs, and RD's. Some information is accessible at no charge; other information requires a monthly membership fee.

facebook.com – search “Emerson Surgical Weight Loss Group”

Connect with those interested in the program, pre-op patients, and post-op patients. Of note, this website is not monitored by the program staff.

niddk.nih.gov/health/nutria.htm

Website of National Institute of Diabetes, Digestive, and Kidney Diseases

obesity.org

Website for the Obesity Society, the leading scientific society dedicated to the study of obesity.

obesityhelp.com

“Making the Journey Together”- A supportive website with an online support group, pictures, forum, etc.

Recommended Books

Eating Mindfully: How to End Mindless Eating & Enjoy a Balanced Relationship with Food

By: Albers, Susan. New Harbinger Publications, 2003.

- ✓ A technique that will help you maintain your weight loss long-term

Eating Well After Weight Loss Surgery: Over 140 Delicious Low-Fat, High-Protein Recipes to Enjoy in the Weeks, Months, and Year After Surgery

By Patt Levine, Michele Bontmpo-Saray, William B. Inabnet, and Meredith Urban-Skuros De Capo Press, 1st ed., 2004.

- ✓ Includes surgery-specific recipe instructions

Recipes for Life After Weight-Loss Surgery: Delicious Dishes for Nourishing the New You (Healthy Living Cookbooks)

By Margaret Furtado and Lynette Schultz, Fair Winds Press, 2007.

- ✓ Includes great meal pictures and ideas to keep things interesting!

Recipes for Weight Loss Surgery Success: Starting Your Journey Step-by-Step

By: Fouts, Dave and Vicki Bovee. iUniverse, 2011.

- ✓ A great resource for recipes especially during the early stages

Bariatric Foodie Guide to Perfect Protein Shakes (Yes, Every Time!)

By: Nikki Massie. CreateSpace Independent Publishing Platform. December 1, 2012.

- ✓ A helpful guide for both beginners and experts to enjoy protein shakes – finally!

