

# Torrance Memorial Medical Center's Surgical Weight Loss Program

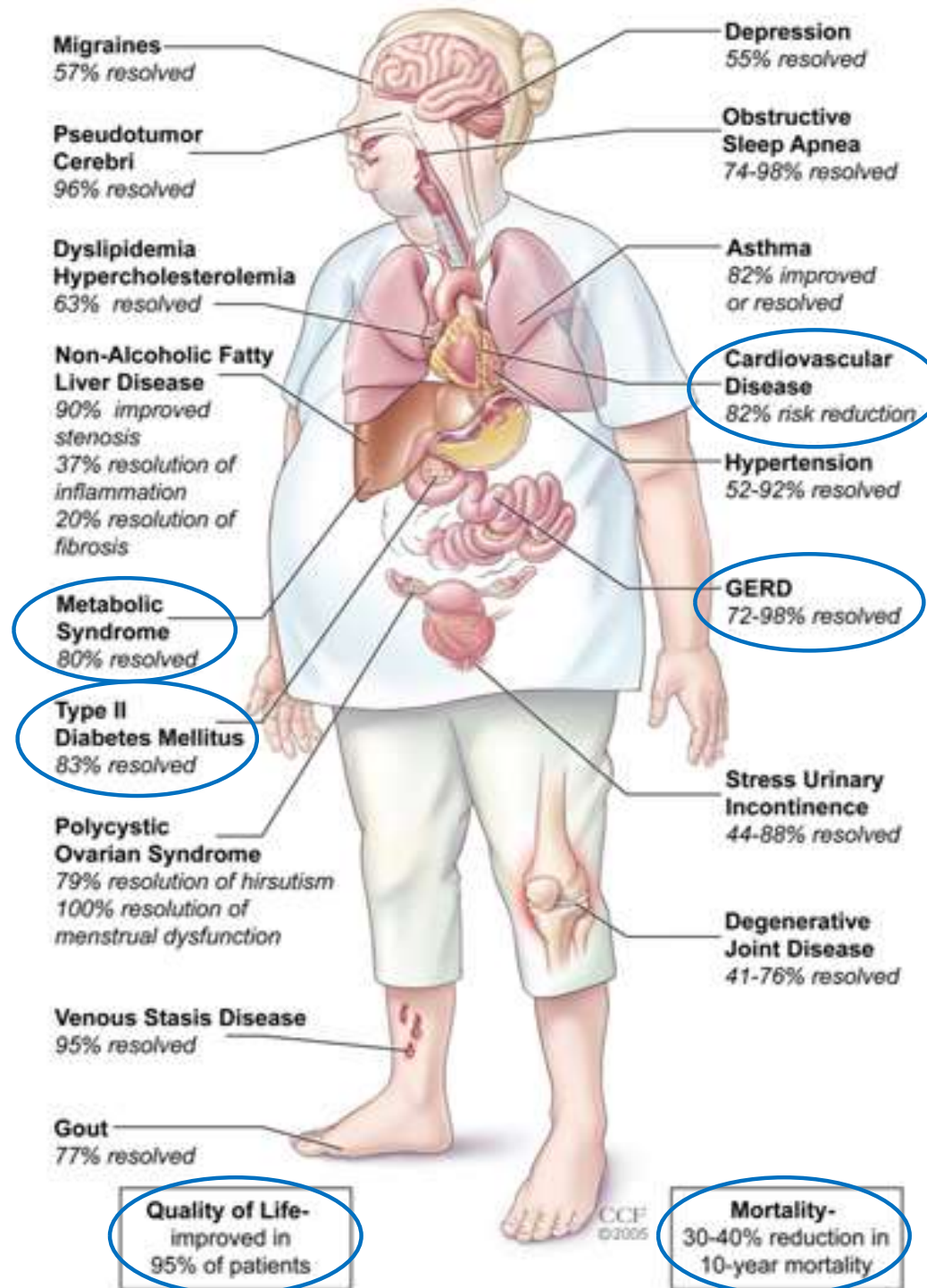
# PRE-OPERATIVE NUTRITION CLASS



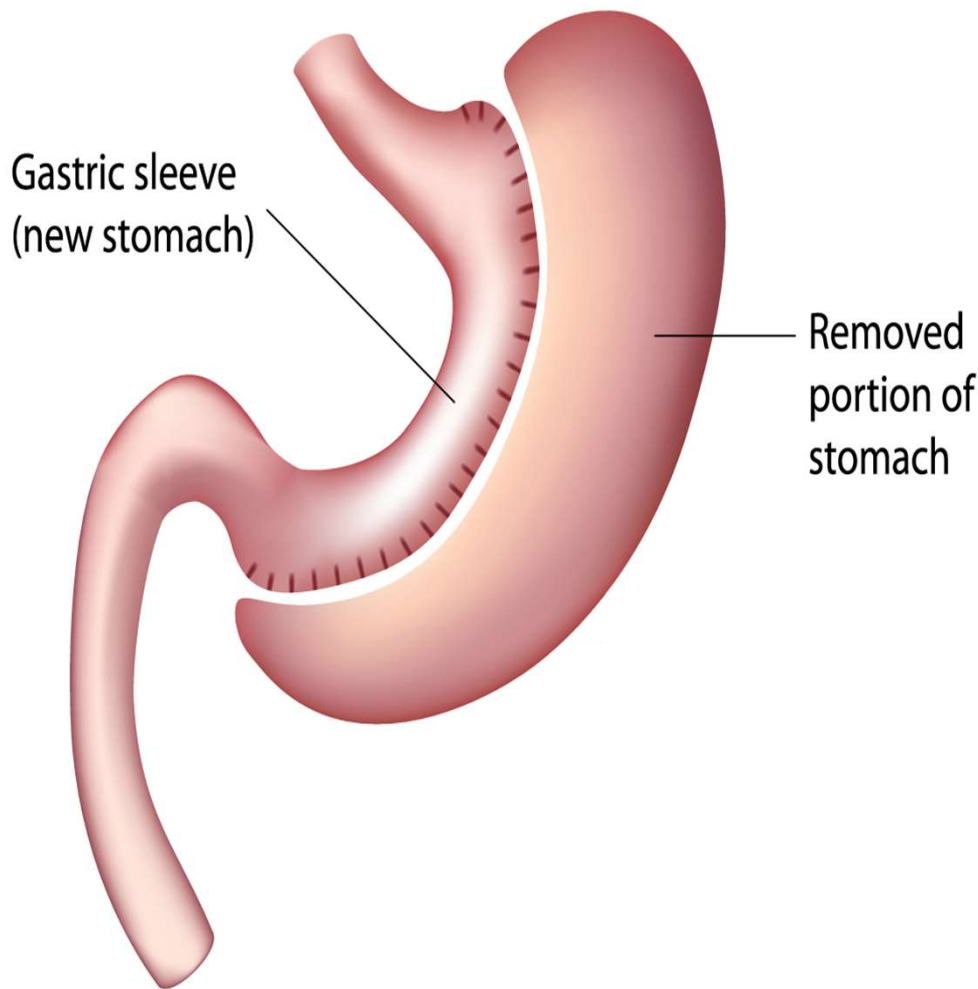
# OVERVIEW

- **Surgery Types**
- **Post-Operative Nutrition & Diet Guidelines**
- **Guidelines to Eating Healthy Before Surgery**
- **Bariatric Nutrition Golden Rules**
- **Common Questions**
- **Required Forms**

# WHAT ARE THE POSSIBLE BENEFITS OF WEIGHT LOSS SURGERY?



# Vertical Sleeve Gastrectomy



- Stomach is divided vertically and a portion of the stomach is removed
- New stomach resembles a banana that restricts food volume
- May decrease hormones that affect hunger
- Expected weight loss is about 50 – 60% of *excess body weight*

## PROS

- No foreign objects implanted
- No intestinal rerouting
- Favorable changes in the gut hormones

## CONS

- Non-reversible procedure
- Acid reflux may develop later

# Gastric Bypass

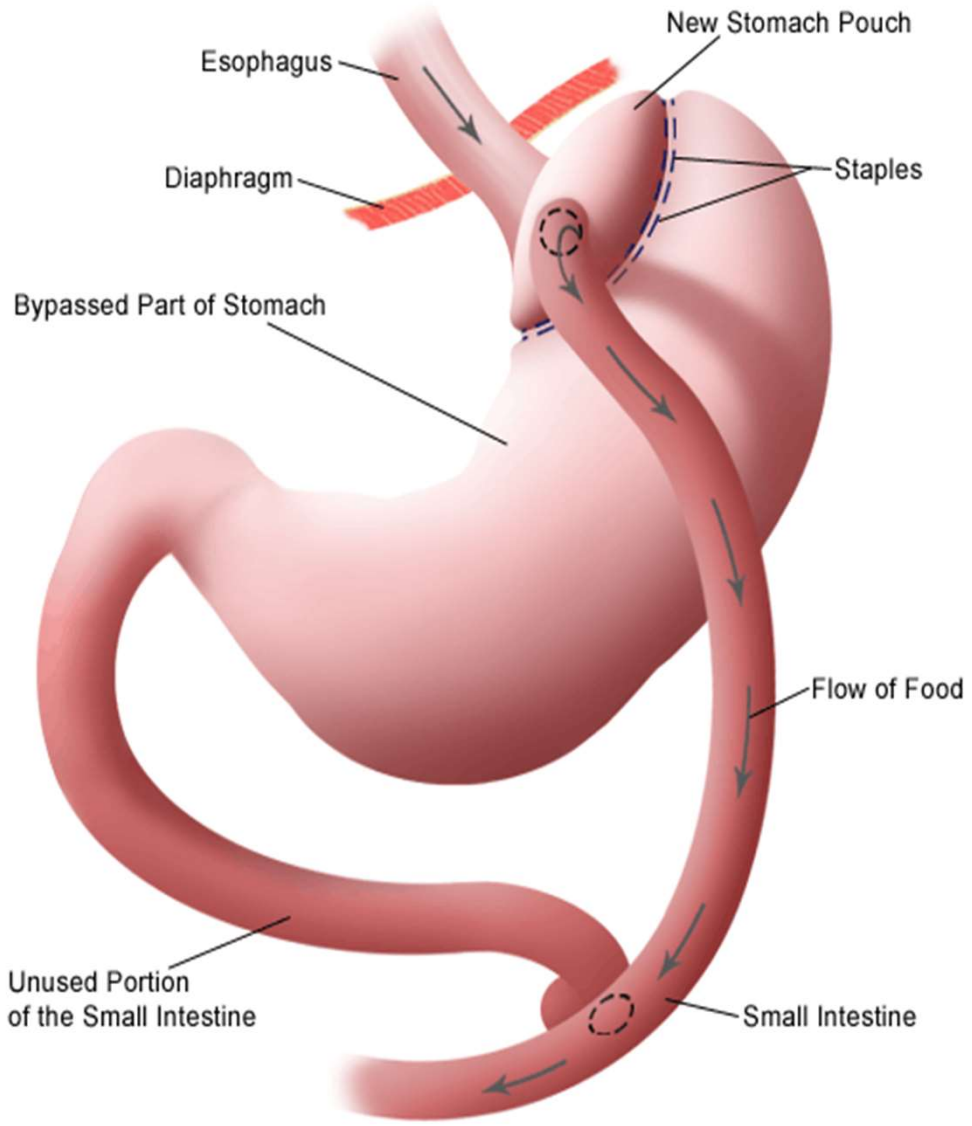
- Considered the ‘gold standard’
- The two main components of the procedure results in food volume restriction and alters absorption of nutrients
- Produces changes in gut hormones
- Expected weight loss is about 60 – 80% of *excess body weight*

## PROS

- Most studied procedure
- Rapid initial weight loss
- Favorable changes in the gut hormones
- Rapid improvement of weight-related co-morbidities

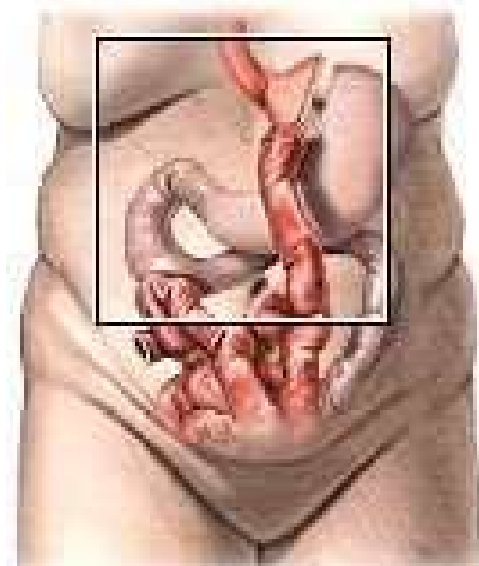
## CONS

- More complex than the sleeve
- Potential for long-term vitamin/mineral deficiencies
- “Dumping Syndrome”



# Dumping Syndrome

Post gastric bypass surgery



## How to prevent dumping syndrome:

- 1. Avoid concentrated sweets**
  - Limit sugar intake to less than 10 grams per meal
- 2. Do not drink liquids with solid meals**
  - Stop drinking 30 minutes before & resume drinking 30 minutes after

Other symptoms include:

- fast heart rate
- sweating
- nausea
- diarrhea or vomiting

Critical Pathway

Post-Op Bariatric Surgery Diet Progression for Patients

Phase I (until advanced by MD)	Phase II (until advanced by MD)	Phase III (until advanced by MD)	Phase IV (until advanced by MD)	Phase V (until advanced by MD)
<i>Thin Liquid</i>	<i>Thick Liquid</i>	<i>Puree</i>	<i>"Soft" Diet (food can easily be mashed with a fork)</i>	<i>Regular Texture Diet</i>
Water	Low-Fat Soup* (Blenderized & Strained)	Store-bought baby foods	Scrambled/poached eggs	<p>Goal is to ultimately have 3 meals, +/- 1-2 snacks a day. Ok to start with 5-6 small meals per day in the first few months.</p> <p>Each meal ultimately should be 4-6 oz. (the size of your fist). Always start your meals with your protein portion.</p> <p>Diet should be high protein, low carb, low fat. Avoid simple carbs (concentrated sugars) for life.</p> <p>Add one new food at a time and record any intolerance in a journal.</p>
Broth*	Non-Fat Milk (or lactose-free alternative)	Sugar-free, fat-free pudding	Steamed or poached fish	
Hi-protein, thin liquid drink (See list of supplements)  (example: Premier Protein Shake)	Runny protein shakes (≥15g protein; ≤10g carb/serv)	Cooked meats pureed with broth	Tender, skinless meats, chopped or ground	
	Runny Cream of Wheat* (add water or fat free milk)	Pureed cooked beans	Low fat cheese (e.g. string cheese)	
	Sugar-free, fat-free ice cream	Small curd, low fat cottage cheese	Canned chicken or fish (canned in water)	
<u>Initial protein goal:</u> ~60 grams, gradually increase to 80-120 gm/day		Nonfat, plain Greek yogurt or regular yogurt	Tofu	
		Unsweetened pureed fruit (e.g. applesauce)*	Soft or canned fruit (choose <i>light</i> or <i>in water</i> )	
<u>Initial fluid goal:</u> ~48 oz, gradually increasing to 64 oz./day		Pureed cooked vegetables*	Well cooked vegetables	
*Drink at least 1 oz. every 5-15 min. (or as tolerated)				
Anything from Phase I		Anything from Phase I or II	Anything from Phase I, II, or III	Anything from Phase I to IV
Fluid Goal: at least 64 oz. per day. DO NOT DRINK WITH MEALS!				
Protein Goal: at least 80 grams/day (up to 120 grams, depending on body size) or per MD recommendation.				
REMEMBER: No alcohol, caffeine, gum, straws, or carbonated beverages! Be sure to crush all vitamin/mineral supplements or use liquid forms.				

\*NOTE: Add *unflavored* protein powder (either whey, soy, or egg white) to foods that are not naturally good sources of protein

Revised (6/2019) Not a permanent part of the medical record

# Post-op Day 1 Goals

*Start Phase I (Thin Liquids)*



Initial minimum protein intake of **60 grams/day** with the objective to gradually increase to goal (**80-120 grams/day**) based on your individualized needs (established by your surgeon)

- You will be provided with protein supplements by the hospital
- Consider protein quantity to overall volume
  - Ex. Isopure (20 oz, 40 g protein) vs Premier Clear (17 oz, 20 g protein)



Fluid goal is at least **48 ounces/day** and then to increase to a minimum goal of **64 ounces/day** after discharge

- **Goal is to drink at least 1 ½ pitcher of water before discharge**  
Slowly sip 1 oz every 10 -15 minutes or as tolerated





# Protein Supplements

## Quick Checklist

- Calories: < 200 calories
- Protein: > 20 grams
- Sugar: < 3 grams
- Carbohydrates: < 10 grams
- Protein Quality: **Whey protein isolate, egg white, soy based**



# PHASE II/III: THICK LIQUIDS - PUREE

~14 days, advanced by MD



- **Consistency:** Blended, smooth consistency, and no chunks
- **Examples:**
  - Low fat soups
  - Non-fat milk (or lactose-free alternative)
  - Runny cream of wheat \*
  - Pureed meats with broth
  - Pureed cooked beans
  - Non-fat, plain Greek yogurt or regular yogurt
  - Unsweetened pureed fruit \*
  - Pureed cooked vegetables \*

\* **TIP:** Add unflavored protein powder to further enhance foods or foods low in protein



**PROTEIN GOAL:** 80 – 120 grams per day  
**FLUID GOAL:** 64 oz or more per day



**Separate your fluids from your meals**  
Stop drinking all fluids 30 minutes before a meal and resume drinking fluids 30 minutes after a meal

# PHASE IV: SOFT

~14-21 days, advanced by MD

- **Consistency:** Easily mashed with a fork
- **Examples:**
  - Scrambled/poached eggs
  - Steamed or poached fish
  - Low fat cottage cheese, ricotta cheese
  - Tender, skinless meats (chopped or ground)
  - Well cooked/soft vegetables \*
  - Soft or canned fruit \*
  - Homemade egg/chicken/tuna salad (made with low fat plain Greek yogurt)
  - Tofu



Choose  
*light* or  
*in water*



**PROTEIN GOAL:** 80 – 120 grams per day  
**FLUID GOAL:** 64 oz or more per day

**Track 3 Things:**  
Food intolerances, protein intake, and fluid intake

# PHASE V: REGULAR

*Advanced by MD*

- **Goal:** 3 meals with 1 to 2 snacks
  - Ok to start with 5 to 6 small meals per day in the first few months
- **Diet:** High protein, low carbohydrate and low fat
  - Avoid simple carbohydrates
- **Portion:** ~4-6 oz per meal (about the size of your fist)
- **Some key things to keep in mind:**
  - Add one new food at a time and record any intolerance in a journal
  - Start with the protein portion
  - Take small bites
  - Chew food thoroughly
  - Do not drink with your meals
  - Vitamins/mineral supplementation everyday



**PROTEIN GOAL:** 80 – 120 grams per day  
**FLUID GOAL:** 64 oz or more per day

# Restrictions After Surgery



**No caffeine for 30 days**

Includes: decaf coffee, black tea, and green tea



**Avoid using straws**



**No alcohol for at least 6 months**

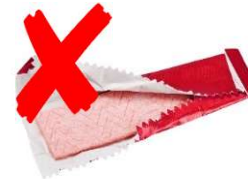


**Avoid using bottles with suction nozzles**

Regular bottles should be used to help maintain hydration throughout the day



**No carbonated beverages**

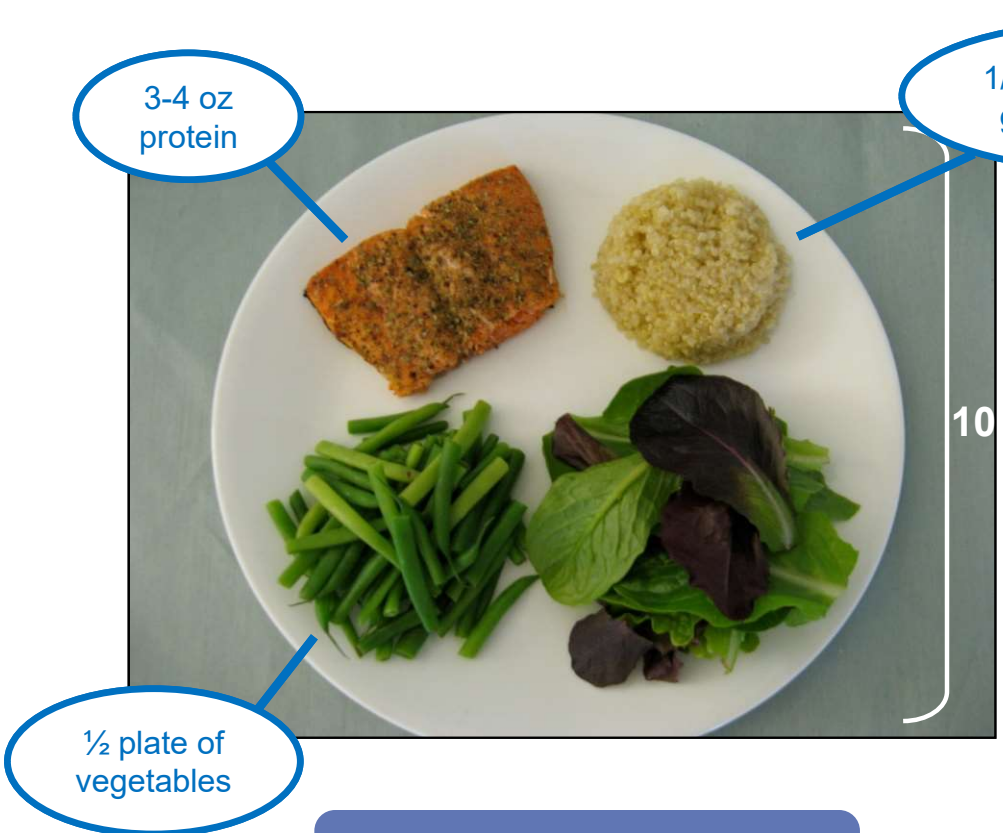


**No chewing gum**

# Creating a **Healthy** Foundation **Before** Surgery

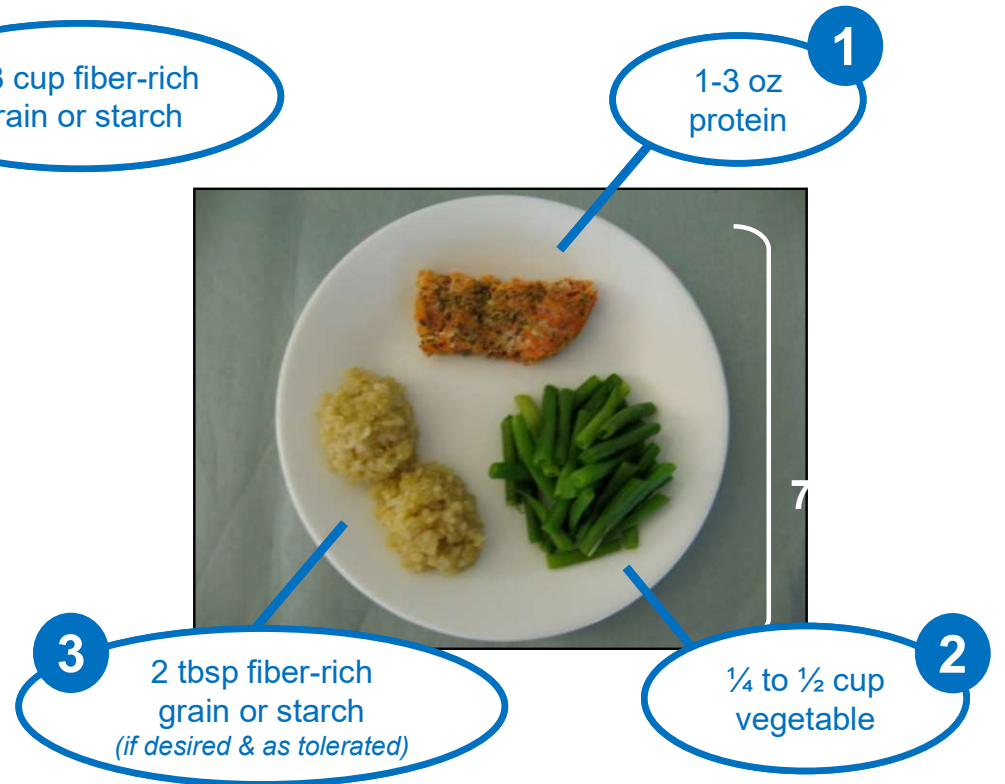


# Healthy Eating Before & After Bariatric Surgery



**Before**

Choose the right balance of lean protein, fiber-rich grains, and a variety of colorful fruits and vegetables.



**After**

The same as before, but now with more focus on high-quality protein, then add vegetables, some fruit, and a small amount of starch or grain.

# Post-Op Vitamins & Mineral Recommendations

Sleeve	Gastric Bypass
1 multivitamin with iron <i>(chewable or liquid)</i>	2 multivitamins with iron <i>(chewable or liquid)</i>
1000 – 1500 mg/day calcium citrate <i>(chewable or liquid)</i>	1000 – 1500 mg/day calcium citrate <i>(chewable or liquid)</i>
	350 – 1000 mcg/day Vitamin B-12 <i>(sublingual)</i>

- **Consistently take your vitamin/mineral supplements everyday for the rest of your life**
- Your lab work will indicate if additional vitamin/minerals supplementation will be necessary
- Gummy supplements are not recommended





# Post-Op Vitamins & Mineral Recommendations



# Post-Op Vitamins & Mineral Recommendations

*American Society for Metabolic and Bariatric Surgery  
 ASMBS Guidelines*

Nutrients	ASMBS Guidelines
Vitamin A	5,000- 10,000 IU/day
Vitamin D3	3,000 IU/ day
Folic Acid	400- 800 mcg/ day (Women of childbearing age 800-1000 mcg/ day)
Vitamin B12 (Cobalamin)	350- 500 mcg/ day
Vitamin C	120 mg/ day
Thiamin B1	12 mg/ day
Biotin	600 mcg/ day
Calcium	1,200- 1,500 mg/ day
Iron	45- 60 mg/day
Zinc	16- 22 mg/day
Copper	2 mg/day
Vitamin K	90-120 mcg/ day
Vitamin E	15 mg/ day



# Fiber

- First ensure that you're getting at least 64 oz of water and regular exercise
- Fiber helps promote regularity and prevent constipation
- Dosage will vary per person, take as directed or as recommended by your surgeon
- **Metamucil, Benefiber, Psyllium Husks**



# BARIATRIC NUTRITION

## GOLDEN RULES

***E.A.T. S.M.A.R.T.L.Y.***

FOLLOW  
THE GOLDEN RULES



# Bariatric Nutrition Golden Rules

*E.A.T. S.M.A.R.T.L.Y*

## **E**at at planned times

- Avoid skipping meals
- Plan for 3 meals and 1-2 *planned* snacks



## **A**llow 20 – 30 minutes per meal

## **T**ake your vitamins everyday **FOREVER**

- Chewable or liquid form for the first year post-op
- No gummies!



# Bariatric Nutrition Golden Rules

*E.A.T. S.M.A.R.T.L.Y*

## Sip wisely

- **GOAL: 64 oz fluid minimum daily**
  - At least 32 oz is coming from plain water
  - Other fluid sources: soup/broth, low-calorie/calorie free beverages, herbal/decaf tea
  - Avoid drinking out of sports bottles and straws
- Sip water throughout the day (except with meals)
  - Recommend tracking your intake
- Avoid carbonated beverages
- **Avoid caffeine/coffee for at least 30 days after your surgery**
- **Avoid alcohol for at least 6 months after your surgery**
  - Can result in stomach ulcers, liver damage, dumping syndrome
  - High in empty calories
  - Will affect you differently after surgery



# Bariatric Nutrition Golden Rules

*E.A.T. S.M.A.R.T.L.Y*

## **M**ove your body

- **GOAL: 30 minutes of moderate-intensity activity, 5 days/week**
  - Start slowly and increase as tolerated – set realistic goals
- Aim for cardio on most days
  - Walking, swimming, cycling/stationary bike, elliptical, Zumba, etc.
  - If mobility is limited, search for modified low-impact chair exercises (ex: Sit and Be Fit on PBS)
- With MD's approval after surgery, incorporate strength training 2-3 days per week
  - Hand weights, elastic bands, Pilates, yoga, etc.
- As you heal, change up your routine's...
  - Duration
  - Distance
  - Type
  - Intensity
- **Maintenance goal: 4 hours/week (break it up!)**

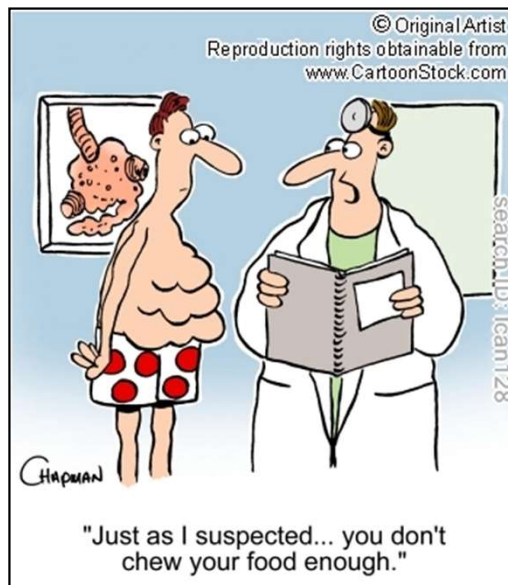
# Bariatric Nutrition Golden Rules

*E.A.T. S.M.A.R.T.L.Y*

## **A**void concentrated sweets & refined carbs

- Empty calories
  - Prevents you from obtaining important nutrients, such as protein, vitamins, and minerals
- Dumping syndrome
- Minimize artificial sweeteners

1 tsp of sugar = 16 calories



## **R**emember to chew

- Take pencil eraser-sized bites
- Chew to applesauce or toothpaste consistency
- Swallow a little bit at a time



# Bariatric Nutrition Golden Rules

*E.A.T. S.M.A.R.T.L.Y*

**T**ry to eat foods closet to their natural form

Have plenty of  
vegetables and fruits

Eat protein foods

*Fresh or frozen fruits  
(no added sugar)*



Make water  
your drink  
of choice

*Lean meats, fish,  
eggs, beams, legumes,  
soy products, nuts*

*Fresh or frozen vegetables  
(no added fats)*

Choose  
whole grain  
foods



# Bariatric Nutrition Golden Rules

*E.A.T. S.M.A.R.T.L.Y*

## **L**isten to your body

- Practice mindful eating
- Eliminate mealtime distractions
- Stop eating at the first sign of fullness or satisfaction



# Bariatric Nutrition Golden Rules

*E.A.T. S.M.A.R.T.L.Y*

## **Y**ou need 80 to 120 grams of protein daily

- Eat protein with every meal/snack
- Protein rich sources:
  - Eggs, cheese, cottage cheese, Greek yogurt, milk (fat free or 1%)
  - Fish, chicken, turkey, pork and other lean meats
  - Soy products
- **1 ounce of a protein food = 7 grams of protein**
  - Ex: 1 large egg, 1 string cheese, 1 slice deli meat, thumb-size piece of meat, ¼ cup cottage cheese



# The Purpose Of The Post-Operative Diet Guidelines

- Provide enough fluid, protein, vitamins, and minerals to keep you healthy
- Decrease side effects of surgery
  - Adhering to guidelines will optimize healing and minimize unnecessary complications
- Support wound healing – designed to allow your body time to heal
  - Must take in liquids and mushy foods until the stomach heals and swelling reduces after surgery, otherwise food will get stuck
- Promote weight loss

# COMMON QUESTIONS



## Q: Why was I asked to lose weight before surgery?

- Weight loss helps shrink the liver
- Pre-op weight loss has been correlated with decreased complications
  - Shorter operating time
  - Reduce the risk of anesthesia
  - Improve circulation
  - Improve mobility
  - Reduced bleeding
  - Overall easier recovery
- **Demonstrate commitment and understanding of lifestyle changes and eating habits necessary for long term weight loss success**

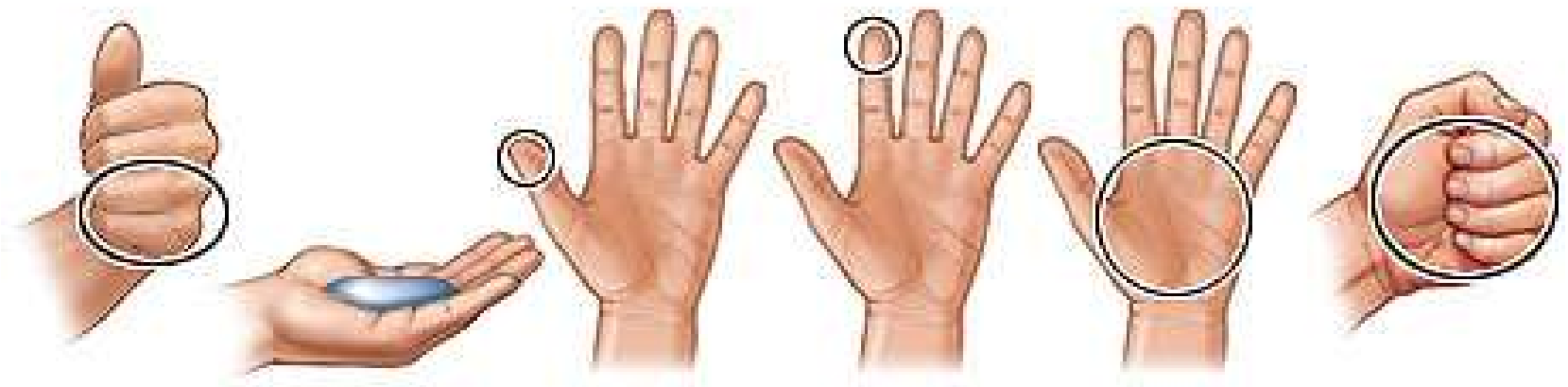
# Quick Tips For Weight Loss

- Cut current portions in half
  - Box up half your meal before you begin eating
- Avoid trigger situations and trigger foods
  - Out of side, out of mind
- Use nutrition guides at restaurants
  - **Limit meals to 500 calories or less**
- Practice eating mindfully – slow down at mealtime
- Engage the whole household in healthy changes
- Keep a food journal – track food, amount, time, place, **feelings**
  - Apps: MyFitness Pal, Lost It, Baritastic
  - Websites: [Livestrong.com/theDailyPlate](http://Livestrong.com/theDailyPlate), [www.myFoodDiary.com](http://www.myFoodDiary.com)
- Limit a snack to 100 – 150 calories and always include protein
- **Read the nutrition food labels**

<b>Nutrition Facts</b>	
8 servings per container	
<b>Serving size</b>	<b>2/3 cup (55g)</b>
<b>Amount per serving</b>	
<b>Calories</b>	<b>230</b>
<small>% Daily Value*</small>	
<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	
Includes 10g Added Sugars	<b>20%</b>
<b>Protein</b> 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%
<small>* 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.</small>	

# Quick Tips For Weight Loss

## Use Your Hand As A Reference



1/2 cup	1 oz	1 Tbsp	1 tsp	3 oz	1 cup
Use for cut fruit, dry oatmeal, cooked rice	Use for nuts	Use for salad dressing or nut butter	Use for butter, margarine, oil, sugar, honey, condiments	Use for cooked chicken, beef, pork, fish, and seafood	Use for cereal, pasta, fruit, and vegetables



## Q: Why is protein so important?

- Aids in proper healing after surgery
  - Tissue repair
- Supports proper immune function
  - Helps form hormones, enzymes, and immune system antibodies
- Boosts resistance to stress, anxiety, and depression
- Promotes weight loss
- Supports metabolism

## What happens if you don't get enough protein?



## Q: What are the signs of dehydration?

- Increased thirst
- Dry mouth and swollen tongue
- Decreased urine output
- Dark yellow, concentrated urine
- Feeling sluggish and confused
- Dizziness
- Nausea
- Muscle cramps



**IMMEDIATELY CONTACT YOUR SURGEON** → If you are severely dehydration (i.e. symptoms do not improve with increased fluid intake or you are fainting)

Dehydration is the #1 reason for being readmitted into the hospital

## Q: Will I become lactose intolerant?

- Lactose intolerance may develop in gastric bypass patients
  - Unmask previously unidentified lactose intolerance
- **Symptoms: diarrhea, cramping, bloating, gas, and nausea**
- The easy fix: avoid consuming cow's milk
  - Products made with dairy typically can still be consumed and tolerated (*regular and Greek yogurt, cottage cheese, and hard cheeses*)
  - Try calcium-enriched soy milk or lactose-reduced milk



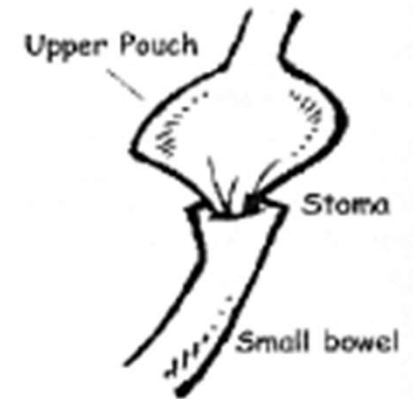
## Q: What should I do to avoid foods getting stuck?

- Make sure you eat slowly by taking small bites, chewing well, and swallowing a little bit at a time
- Avoid foods that are too dry → may cause nausea and vomiting
  - Do not fry and avoid overcooking your foods
  - Try low fat sauces to moisten foods
    - Salsa, non-fat yogurt sauces
- Avoid meats that are difficult to tolerate
  - Chicken thigh meat is easier to eat rather than chicken breast meat
  - Red meat is usually not tolerated for at least the first 3– 4 months
- **Resist the urge to drink!** Liquids usually do not help to clear the stuck food

## Q: What foods should I be cautious of?

Some foods have difficult passing through the opening of the stoma and may cause blockage, some of these foods include:

- Red meat (beef and pork)
- Shrimp
- untoasted or doughy bread
- Pasta
- Rice
- Dried fruit
- Corn
- Fibrous vegetables like asparagus and celery\*
- Nuts
- Coconut
- Popcorn
- Peanut butter
- Greasy food or fried foods
- Seeds and skins of fruits and vegetables
- Membrane of citrus fruits



*\* If you would like to eat asparagus or other fibrous foods once in a while, then you must be sure to cook them well, cut them into very small pieces and chew thoroughly.*

## Q: Will I lose my hair?

- Hair loss is a **normal** and **common** side effect of rapid weight loss
  - Excess hair shedding occurs 1 – 6 months post-op (average 3 – 4 months)
- Grows back once weight and intake has stabilized
- Ensure there are no nutrient deficiencies and you are consuming adequate protein



## Q: How much will I be able to eat after surgery?

- 1 month → 2 – 4 tablespoons per meal
- 3 months → ½ - ¾ cup per meal
- 6 months → 1 cup per meal
  - Longer for gastric bypass
- 18 – 24 months → 1 – 1 ½ cup per meal
  - Recommended to maintain at this portion



**\* Remember your initial pouch is only about 1 fluid ounce!  
(About the size of a golf ball)**

# Final Tips to Remember

- **Prioritize protein at mealtimes**
- Drink fluids within one hour after waking up
- **Do not drink with solid food/meals**
  - Wait 30 minutes before & 30 minutes after
- Follow a consistent meal pattern
- Practice mindful eating
- **Take your vitamins for the rest of your life**
- Make sure the goals you set for yourself are within your control
  - Focus on behavior changes
- Maintain annual check-ins with your bariatric team
- **Have a strong support system!**



# Post-op Nutrition Support Group

Nutrition Guidance and Support after Weight Loss

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**When: 2<sup>nd</sup> Tuesday of every month from 6 – 7 PM**

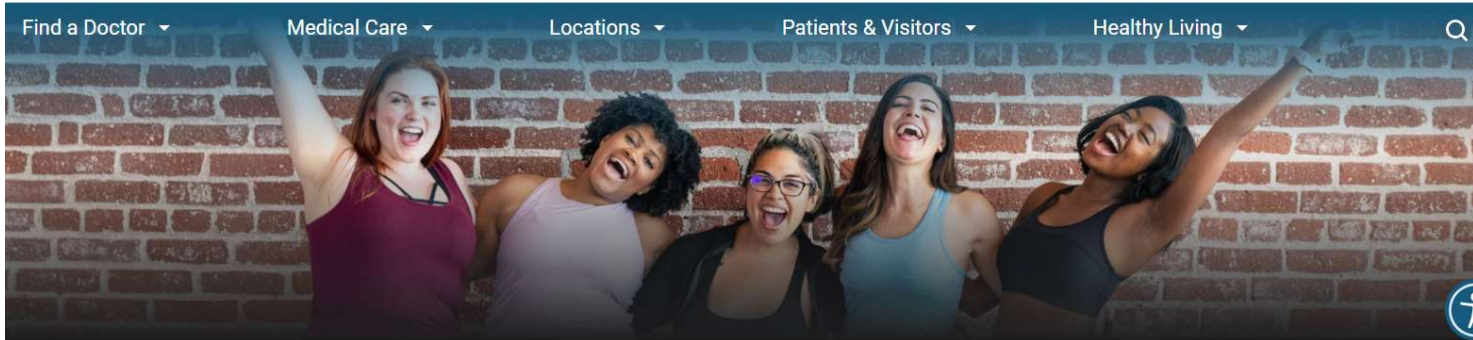
**Where: Virtual/online (until further notice)**

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- Support group is led by a **Registered Dietitian Nutritionist (RDN)**
- New topics every month to provide *inspiration*, *encouragement*, and helpful tips to *keep you on track!*
- Topics with open discussion can range from navigating day-to-day eating challenges, cooking tips, patient spotlights, guest speakers, and more!



To register for support group, e-mail [dle1@tmmc.com](mailto:dle1@tmmc.com)



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**Bariatric Surgery**

Education & Support Groups

Is Surgery Right for Me?

Types of Surgery

Meet the Team

Preparing for Surgery

Life After Surgery

## Nutrition Support for Bariatric Patients

At Torrance Memorial, we understand that the success of weight loss surgery is closely tied to following nutrition recommendations designed to optimize healing, minimize complications, and promote weight loss in the most nutritionally sound manner. These recommendations are based on evidenced-based practices and guidelines from the American Society of Metabolic and Bariatric Surgery (ASMBS).

To support individuals in their weight loss journey, we offer a range of preoperative and postoperative resources, including classes and individual counseling with registered dietitian nutritionists (RDNs) specializing in weight management and weight loss surgery. We recognize that adopting lifestyle changes, including good eating habits, is a key term weight loss success. Research has shown that individuals who r

**Contact the Nutrition Team**

Our dedicated team is available Monday through Friday from 8:30am – 5pm.

**310-891-6707**

### Nutrition Guidelines After Weight Loss Surgery Overview

This video introduces nutrition recommendations and guidelines after weight loss surgery. However, please note that completion of the Pre-Operative Bariatric Nutrition Class is mandatory to be eligible for weight loss surgery at Torrance Memorial Medical Center.

[To register for this class, please click here](#)

[www.torrancememorial.com/bariatricnutrition](http://www.torrancememorial.com/bariatricnutrition)

