COMMUNITY



Empower Weight Management Class 1

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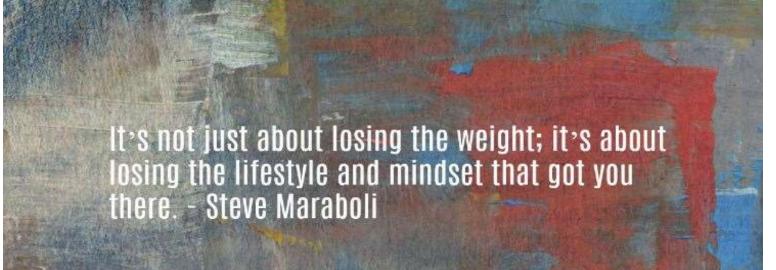
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Presentation Overview

- Introduction
- Digestion before and after surgery
- Nutrition Basics
- Dehydration Risk
- Food Journaling



Food For Thought



Introduction

- Metabolic & Bariatric surgery is an amazing TOOL that has been developed to help you lose weight.
- By using your surgically reduced stomach effectively, you can have a positive impact on your overall health goals.
- However, healthy lifestyle, food choices, and routine physical activity are also essential to long term success.



Preparing For Your Classes

Our Role:

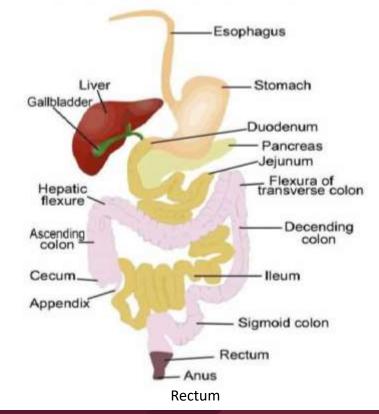


 Prepare you for metabolic & bariatric surgery by sharing the recommended behavioral, nutritional, and physical activity goals

Your Role:

- Come to class prepared by checking in 15 minutes early providing your full name and a current weight
- Down load class slides from *fresnobariatric.org* (Patient Resources)
- Find a quiet place to take notes and interact with the group
- Begin evaluating your food/fluid choices
- Start practicing recommended lifestyle changes discussed each month

Digestive System

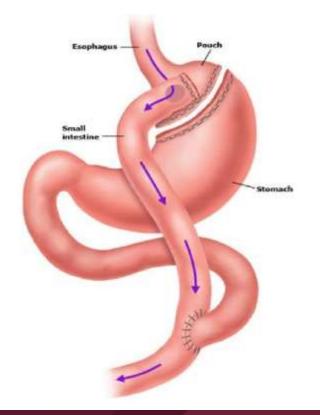


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Digestion – Before Surgery

- Begins in the mouth with chewing and mixing of food with digestive enzymes in our saliva, which moistens the food as it moves from esophagus into our stomach.
- Stomach holds food for up to ~4 hours and semidigested food is converted into chyme by gastric juices
- The small intestine absorbs the nutrients from our food and fluids to be used by the body.
- The large intestine absorbs water, electrolytes, and removes waste to complete the digestion process

Digestion After RYGB

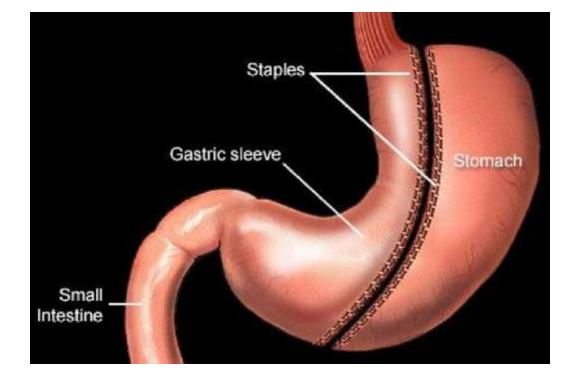


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Digestion – After Gastric Bypass

- Stomach size is reduced to ~1 ounce (or 30 mL)
- Food bypasses most of the stomach and duodenum and empties into the jejunum
- Produces positive change in gut hormone (Ghrelin) that reduces appetite and increases satiety
- Can lead to long term vitamin-mineral deficiencies
- Potential food intolerances: dairy/lactose, solid dry meats, fibrous fruits and vegetables, & possible altered taste changes

Digestion After Sleeve Gastrectomy



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Digestion - After Sleeve Gastrectomy

- Removes approximately 80% of the stomach (fundus)
- Pylorus remains intact and no change to the GI tract
- Produces positive changes in gut hormone (Ghrelin) that reduces appetite and increases satiety
- Non-reversible procedure
- Can lead to long term vitamin-mineral deficiencies
- May experience similar food intolerances/taste changes as RYGB

Nutrition Basics

- **Protein**: helps build, maintain, and repair body tissue.
- <u>Carbohydrate</u>: provides energy (consume more complex carbohydrates / limit ADDED sugars)
- <u>Fat</u>: provides concentrated source of energy, essential fatty acids & fat-soluble vitamins A, D, E, K
- <u>Water</u>: supports all body functions, carries nutrients throughout body and removes waste.

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Macronutrients: Protein

- Can be used as an energy source (4 calories/gm)
- Helps with immune function
- Provides satiety
- Functions: builds, maintains and repairs tissue and lean muscle mass
- Protein malnutrition is uncommon in bariatric surgery patients since the body can adapt to short-term periods of low protein intake



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Protein Needs

- Protein intake is based on a person's height and gender
 - Women generally need 60 grams daily
 - Men need 80 grams daily
- Incorporating protein beverages for the first few weeks, and then focusing on protein-based meals will help you to meet your protein goal
- Early post-op hair shedding is common as a result of emotional or physical stress and is unrelated to protein or vitamin-mineral deficiencies



Good Protein Sources (5+ gm per serving)

Food	Portion size	Grams of protein
Lean beef, fish, poultry, lean pork	1 ounce	7 grams
Beans, lentils, and legumes	½ cup	7 grams
Eggs	1 large	6 grams
Milk (low fat or fat free) or Soy Milk	8 ounces	8-10 grams
Cheese	1 ounce	7 grams
Greek Yogurt	6 ounces	15 grams
Cottage cheese	½ cup	12 grams
Tofu	½ cup	10 grams
Nuts & Seeds	1 ounce	7 grams
Nut butter	2 Tbsp.	7 grams

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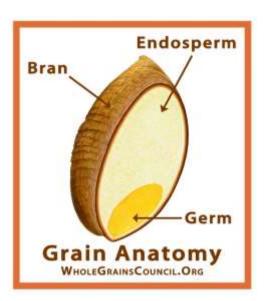
Macronutrients: CHO

- Carbohydrates are the body's **main** energy source and include sugars, starches and fiber
- Sugars and most starches are converted to glucose and used as energy (4 calories/gm)
- Fiber consists of 2 types:
 - Soluble-helps lower LDL cholesterol (bad) and can improve blood glucose control by slowing absorption of sugars
 - Insoluble-adds bulk to your stools to help keep you regular
 - Both help with keeping you full longer



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Complex Carbohydrates



- Higher in fiber and nutrients so digest more slowly and provide a lasting energy source
- Sources:
 - Whole grains-a grain that contains the endosperm, germ, and bran (e.g. brown rice, quinoa, oats/cereals, whole wheat, whole grain pasta or whole grain breads, etc.)
 - Dried beans, lentils, some vegetables

Simple Carbohydrates

- Sugars that digest more quickly and may cause blood sugar spikes
- Naturally Occurring Sources:
 - Fruits and dairy



- Refined and Processed Sources to Limit:
 - Soda, baked goods, candy/sweets, corn syrup, high-fructose corn syrup, fruit juice concentrate, etc.



Carbohydrates

- Choose **MORE** whole grains, fruits & vegetables, legumes, & low fat dairy foods & fluids
- Choose LESS refined foods & fluids with added sugars



Macronutrients: Fats

- Functions:
 - Forms a major part of cell membranes
 - Insulates and protects vital organs
 - Provides fat-soluble vitamins (A,D,E,K) & essential fatty acids: Linoleic (omega-6) & Linolenic (omega-3)
 - Concentrated energy source (9 calories/gm)



Heart Healthy Fats





Monounsaturated Fats:

Help lower levels of unhealthy fats in the blood
Sources include: plant oils, avocados, nuts/seeds

Polyunsaturated Fats:

- Beneficial for heart health
- Sources include: fish (salmon, mackerel, herring, tuna, & trout), canola and soybean oils, ground flaxseed, walnuts



Saturated Fats:

- Increase the risk of heart disease by increasing LDL "bad" cholesterol
- Sources include: animal fats found in meat, full-fat dairy, baked goods, processed or fried foods, and coconut oil
- 2020-2025 Dietary Guidelines recommend limiting to < 10% of total calories per day



Fats To Limit



Trans Fats:

- Increase the risk of heart disease, stroke, and T2DM by increasing LDL "bad" cholesterol and lowing HDL "good" cholesterol
- Created when liquid oils are heated (hydrogenation), which turns them into solid fats
- Sources include: baked goods/pastries, fast food, snack foods, meat and dairy foods
- FDA- no longer Generally Recognized as Safe (GRAS)

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Healthy Cooking

Instead of	Cook the healthy way!	
Frying or deep-frying in unhealthy fat	 Grill, roast, or stir-fry, with a small amount of fat Simmer in water or stock Air fry 	
Topping foods with fatty sauces	 Try lemon juice, vinegar, salsa, herbs, spices, non-fat yogurt, tomato sauce, or dressings made with healthy oils 	
Baking with butter, oil, or lard	Substitute with:puree fruit or vegetablesNon fat Greek yogurt	
Eating animal fat and skin	Choose chicken, turkey, or fishRemove the skin and trim the fat before cooking	

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Macronutrients: Water

- Supports all body functions.
- Carries nutrients throughout the body.
- Removes waste.





Why are patients at risk for dehydration following bariatric surgery?

Dehydration Risk

- After bariatric surgery you are at risk for dehydration because you cannot consume large quantities of fluid quickly. Instead, you will have to sip on fluids throughout the day. This may be a challenge for some and a new habit to create.
- Your fluid goal is **48-64 oz.** per day.



• Symptoms of dehydration include: fatigue, increased thirst, dry mouth, dizziness, confusion, headache, decreased urine output, or dark urine.

Food Journaling

- May help identify patterns and habits that are not aligned with your health goals
- If food tracking is not for you, consider focusing on building a nutritious plate



Food Tracking Apps include:

- Fresno Bariatrics-Baritastic App (free)
 - Code 38558
- Myfitnesspal.com (free for basic, fee for upgrade)
- Loseit.com (free for basic, fee for upgrade)
- MyPlate calorie counter(free for basic, fee for upgrade)
- MyNetDiary (fee)
- Fooducate (grocery shopping tool-free, fee for upgrade)





Goals for the Month

- Practice mindful eating habits
 - Slowing down and chewing well improves digestion, increases satiety, and prepares you for your smaller stomach
- Include MORE healthy proteins, whole grains, fruit, vegetables, healthy fats, and LESS refined/processed foods, fast food, and sugary beverages.
- Drink at least 48-64oz of zero to low calorie fluids/day
- Practice sipping fluids