

Overview of Nutritional Management of the Pre-op and Post-op Bariatric Patient

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Participants
completing
this
seminar will
be able to:

- Calculate and Discuss Realistic Target Weights
- Understand Nutrition Facts and Label Reading
- Describe the components of the bariatric pre-operative meal plan
- Describe the pre-op high protein liquid diet and the efficacy of the high protein liquid diet prior to surgery
- Describe the bariatric post-operative meal plan including life-long guidelines
- Discuss Post-op Bariatric Vitamin and Mineral Supplementation Guidelines

Key Role of Dietitian- Set and Discuss Realistic Target Weight



Fed up with how her diet is going, Charlene takes a more serious aim at her target weight.

Current weight – Ideal Body Weight= Excess Body Weight

Excess Body Weight x 50%= Expected Weight Loss

Current weight- Expected Weight Loss= Target Weight

Setting Target Weight with Patient

➤ Ex: Female patient, Ht 5'4" ,IBW 138 lbs, Current Wt: 338 lbs

- $338 \text{ lbs} - 138 \text{ lbs} = 200 \text{ lbs} = \text{EBW}$
- $200 \text{ lbs} \times 50\% = 100 \text{ lbs EWL}$
- $338 \text{ lbs} - 100 \text{ lbs} = 238 \text{ lbs Target Weight}$
- Patient's target weight: 160 lbs

➤ Weight history:

- Highest weight: 400 lbs in June 2020 Age at time: 40 y/o
- Lowest weight: 280 lbs in July 2005 Age at time: 25 y/o
- Pt weighed 160 lbs in middle school

Pre-op Bariatric Nutritional Guidelines

1200-1500 calories per day
80-120 grams of protein per day

- **Plan** to eat 4-6 small meals per day. Protein drinks should be used for 1-2 of the small meals.
- **Limit** eating out; make better choices when eating out (low fat/low carb)
- **Include** *fruits* and *vegetables* in the diet DAILY
- **Avoid/Limit** Desserts/candy
- **Low-fat** diet (Baked, broiled, grilled, and boiled instead of fried, sautéed, creamed)
- **Increase** activity (walking, swimming, exercise videos)
- **Limit** *sugary*, *caffeinated* and *carbonated* beverages
- Aim for 64 oz. sugar-free beverages per day
- Limit alcohol
- **Keep food logs and bring to each visit for review- Baritastic app**
- Quit Smoking at least 4 weeks prior to surgery

Nutrition Facts and Label Reading

Sample label for Macaroni & Cheese

① **Start Here** →

② **Check Calories**

③ **Limit these Nutrients**

④ **Get Enough of these Nutrients**

⑤ **Footnote**

Nutrition Facts	
Serving Size 1 cup (228g) Servings Per Container 2	
Amount Per Serving	
Calories 250	Calories from Fat 110
	% Daily Value*
Total Fat 12g	18%
Saturated Fat 3g	15%
<i>Trans</i> Fat 3g	
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%
* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values 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

⑥ **Quick Guide to % DV**

- 5% or less is Low
- 20% or more is High

Macronutrients

Protein and Carbs= 4 calories per gram
Fat= 9 calories per gram



Protein



Carbs



Fat

Alcohol

7 calories
per gram



Pre-Op High Protein Liquid Diet

Makes surgery safer

Reduces abdominal visceral adipose tissue

Shrinks the liver

Proves that patients can be successful after surgery????

Pre-op High Protein Liquid diet

- 1 week high protein liquid diet BMI = 35.0 to 39.9
- 2 week high protein liquid diet BMI ≥ 40

80-120 gms of protein from protein shakes/soups with 4 grams of sugar or less

Unlimited sugar-free, non-carbonated and decaffeinated beverages including sugar-free jello and sugar-free clear popsicles

Ochsner's Bariatric Post-op Meal Progression

DIETARY PHASE	Time frame POST-SURGERY	FOODS AND BEVERAGES
1 LIQUID	First 2 weeks	Sugar-free decaffeinated non-carbonated beverages Protein shakes with 4 grams of sugar or less Protein soups NO FRUIT, FRUIT JUICES, VEGETABLES OR YOGURT ADDED TO PROTEIN SHAKES
2 PUREE	2-4 weeks after surgery	All Phase 1 liquids & Pureed lean meats, seafood and beans Soft scrambled egg Low fat dairy
3 SOFT	1-2 months after surgery	All Phase 2 food and beverages & Cooked fork tender lean meats, fish and seafood Lean deli meats Eggs-scrambled, boiled and poached Fruits and cooked vegetables – no peel
4 SOLID	2-3 Months after surgery and continue lifelong	All Phase 3 food and beverages. & Raw vegetables and lettuce Fruit with peel Nuts and seeds Protein bars with 4 grams of sugar or less

Lack of Standardization

Days 1-2: Clear Liquids
Days 3-9 (1 Week): Full Liquids
Days 10-16 (1 Week): Puree
Days 17-30 (2 Weeks): Mechanical Soft
Days 31+: Regular

Week 1-2: Clear liquids plus protein shakes
Week 2-4: Semi-solid
Month 1-3: Soft foods
Month 3: Regular foods

Days 0-2: Bari Clear Liquid
Days 3 – 21: Bari Full Liquid
Days 21-49: Bari Soft
Days 50+: Bari Regular

Days 1-2: Clear Liquids
Days 3-14: Full Liquids
Weeks 3-4: Puree
Weeks 5-6: Soft
Week 7: Solids

Days 1-2: Clears
Days 2-14: Full Liquids
Weeks 3-4: Soft & moist protein
Weeks 5-7: soft protein / low-fiber
Week 8-9: Solids

Days 0-1: Clear Liquids
Days 1-14 (RNY): Full Liquids + Pureed solids
Days 1-28 (sleeve): Full Liquids + Pureed solids
Days 15-42 (RNY): Soft foods
Days 29-42 (sleeve): Soft foods
Days 43+: Normal diet

Caffeine

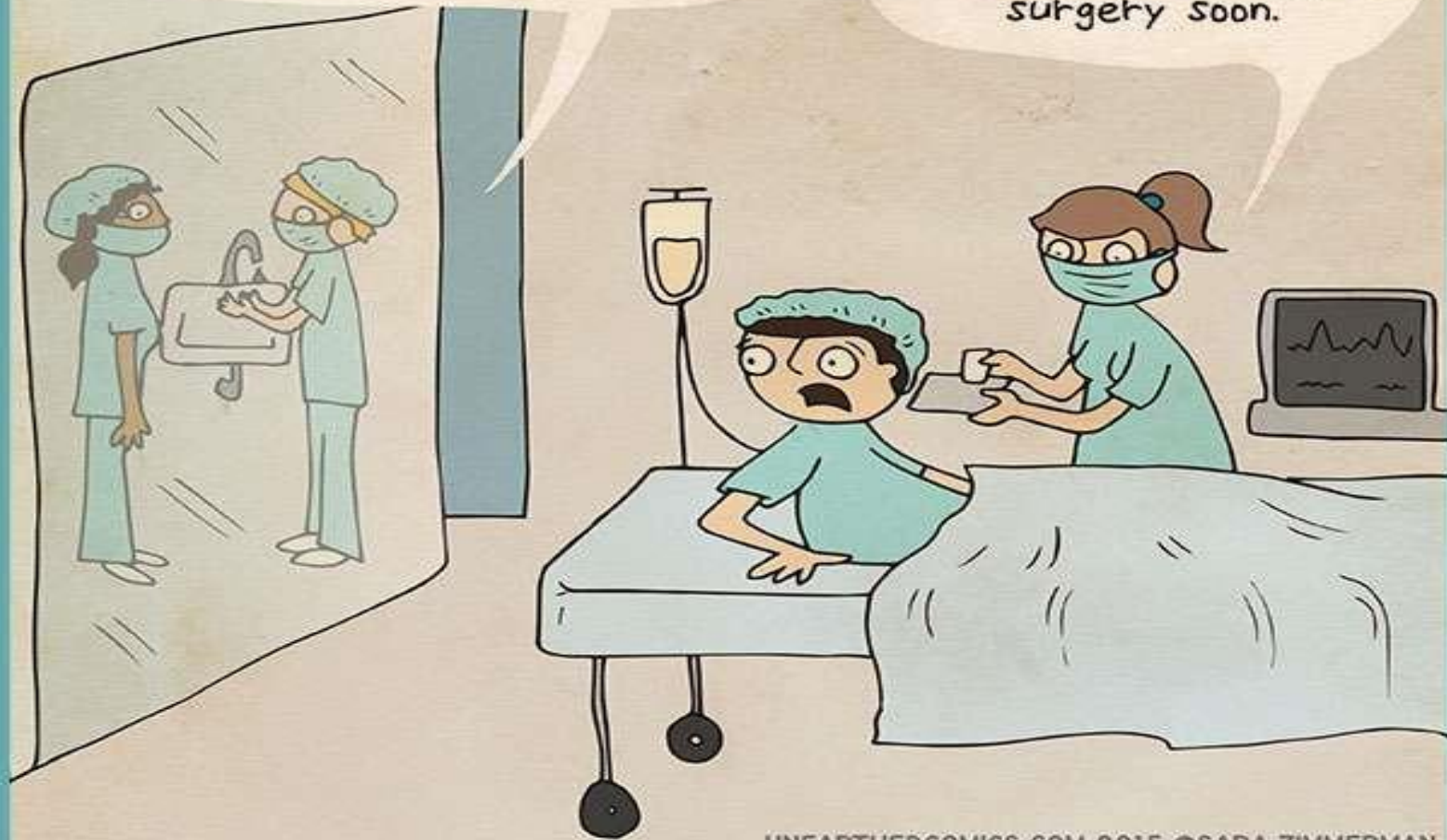
- Caffeine concerns:
 - Dehydration???
 - Gastrin and acid secretion stimulator
 - Can exacerbate GERD

- Caffeine benefits:
 - Colonic stimulant
 - Contributes to fluid volume



So I finally decided to stop drinking coffee this morning. I'm feeling shaky, but I think I'll be fine.

The doctor will begin surgery soon.



Carbonation



Limited research to support clinical practice of avoidance

No evidence that carbonation 'stretches out' gastric pouch and/or sleeve

Potential link between carbonation and GERD

Anecdotal evidence suggests carbonation causes abdominal discomfort and increased belching, passing gas



Straws

- No bariatric evidence re: air inhalation
- Medical websites list straws as potential source of gas and belching
- Anecdotal evidence suggests that most patients do not have problems drinking from straws

Life Long Bariatric Guidelines

- 80-120 gms of protein per day
- 800-1000 calories per day
- 64 ounces of fluids per day
- Limit fruit to 2 servings per day
- Limit nuts to $\frac{1}{4}$ cup per day
- Exercise goal of 150 minutes per week

Bariatric Supplementation	Ochsner Main Campus Recs		ASMBS Guidelines for Gastric Bypass
Thiamin	50 mg/d*		12 mg/d
Folic Acid	800 mcg/d		400-800 mcg/d from MVI 800-1000 mcg/d childbearing females
B-12	500 mcg/d sublin		Oral 350-500 mcg/d
Vitamin D	3000 IU/d		3000 IU/d
Vitamin A	6000 IU/d		5000-10,000 IU/d
Vitamin E	15 mg/d		15 mg/d
Vitamin K	90-120 mg/d		90-120 mcg/d
Copper	2 mg/d		2 mg/d from MVI
Zinc	8-22 mg/d		8-22 mg/d from MVI Zn/Cu ratio 8-15 mg of Zn for 1 mg Cu (divided doses min of 2/d)
Iron	36 mg/d		45-60 mg/d
Calcium with Vitamin D	500 mg three times per day separate 600 mg two times per day separate		1200-1500 mg/d Take in divided doses Calcium citrate with or without meals Calcium carbonate with meals

Bariatric Vitamin and Mineral Choices



Multivitamin with 18 mg of iron- take 1 chewable or tablet twice a day

Calcium Citrate with Vitamin D- Daily requirement 1200-1500 mg per day- take in 500 mg(three times per day) or 600 mg doses (take twice a day)



500 mg chew three times per day



1 tablespoon three times per day



3 tablets two times a day

Super B complex



Take 2 melts once daily (25 mg/tablet)



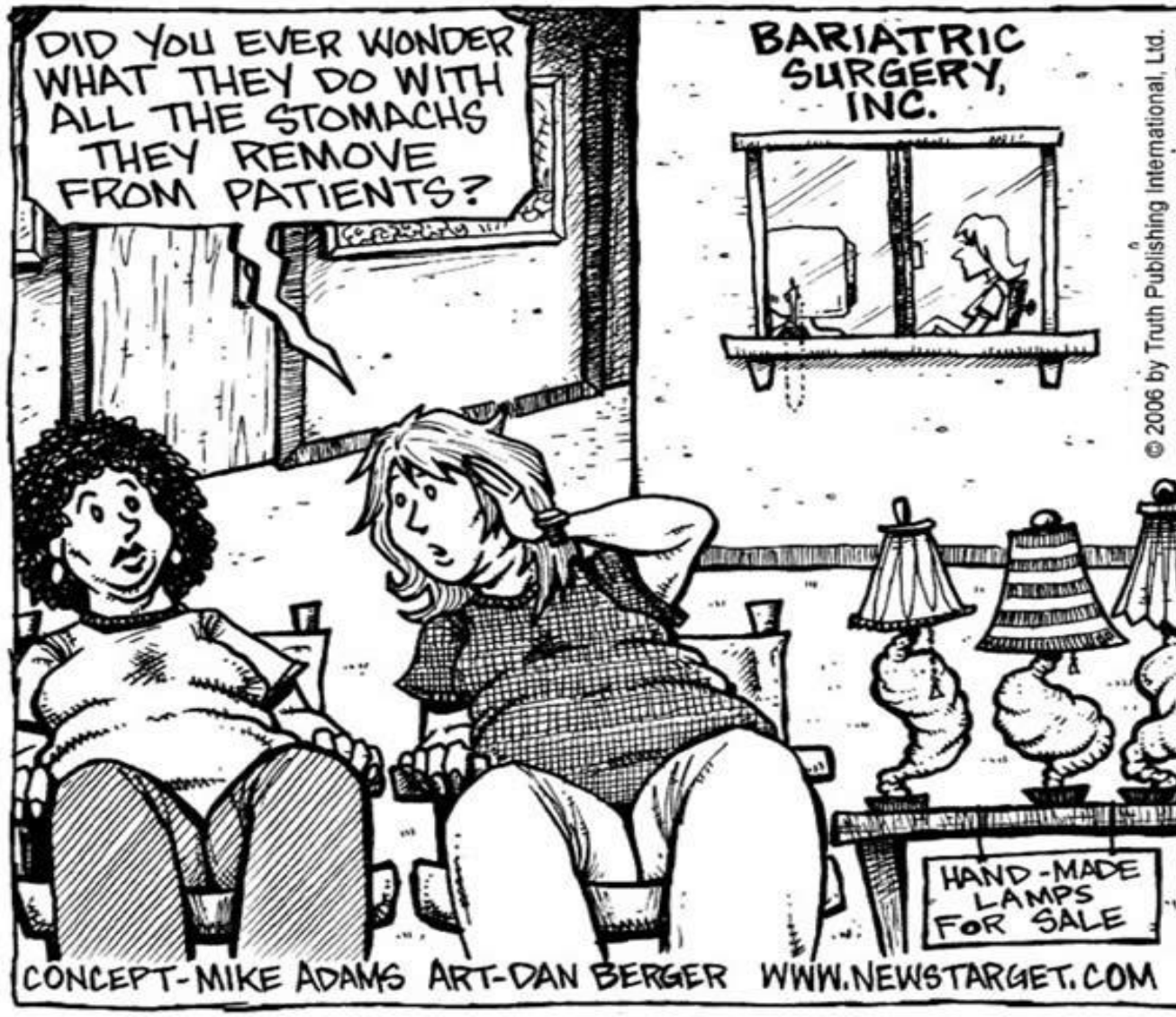
Take 1 tablet every other day (100 mg/tablet)

Sublingual (under the tongue) Vitamin B-12



500 mcg per day
1000 mcg every other day
2500 mcg per week
5000 mcg every 2 weeks

COUNTERTHINK



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