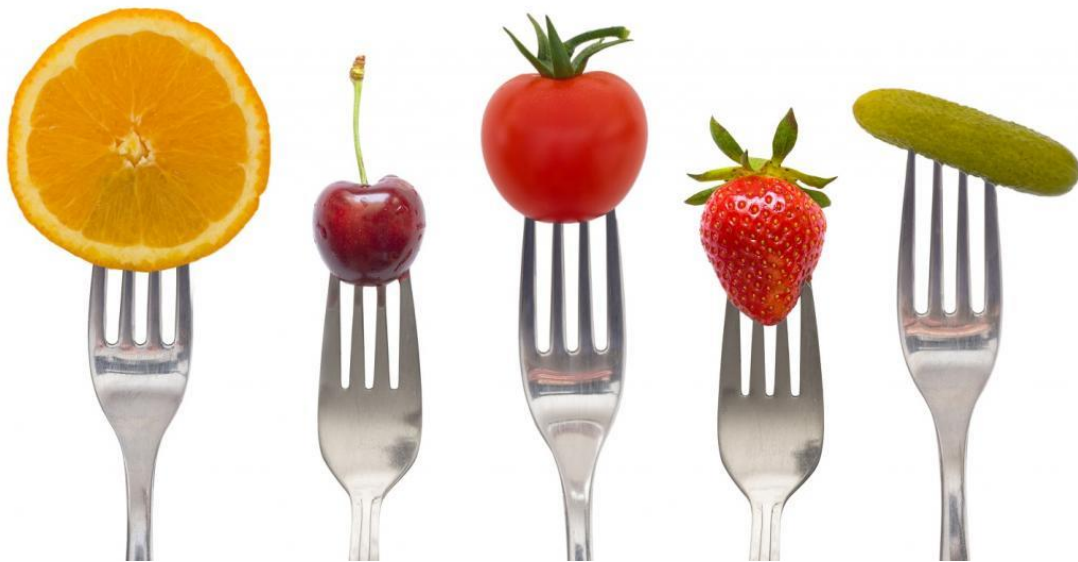


# **Nutritional Guidelines After Bariatric Surgery: Gastric Sleeve**



**Keyur Chavda, MD**

**Surgical Associates of Tampa Bay**

**Weight Loss Center**

**205 S. Moon Ave., Suite #102**

**Brandon, FL 33511**

**Phone: (813) 681-4644 Fax: (813) 654-4486**

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## **Stages of Meal Planning**

As you know, this surgical procedure is to help you lose weight and change your eating habits at the same time. Meal planning, along with a regular physical activity program, is the cornerstone to your success.

After surgery, it is very important to follow the diet stages below for the following reasons:

1. To help prevent nutritional deficiencies.
2. To help you achieve the maximum amount of weight loss.
3. To help prevent side effects such as nausea, vomiting, and dumping syndrome.

Everyone is different, so transitioning from one stage to the next will depend on how your body tolerates each stage. The following chart shows the diet stages and approximate duration of each stage.

<b>Diet Stage</b>	<b>Duration After Surgery</b>
Clear liquids	Weeks 1, 2, & 3
Full liquids	Weeks 4, 5, & 6
Pureed foods	Week 7
Soft foods	Week 8
Regular foods	Week 9+

**Be careful not to progress too quickly!**



## **Stage 1: Clear liquids**

### **Weeks 1, 2, & 3**

Recommended Serving: slowly sip 1-2 oz ( 1/8 – 1/4 cup ) every 15 minutes.

Daily fluid goal: 64 ounces (8 cups)

Fluids/Foods allowed: clear liquids should be **non-carbonated**, **caffeine-free**, and **sugar-free**.

- Water
- Sugar-free popsicles
- Sugar-free Jello
- Sugar-free Kool-Aid
- Crystal Light
- Propel
- Vitamin Water Zero
- Gatorade G2 (Lower sugar)
- Powerade Zero
- Decaffeinated coffee and decaffeinated tea

Guidelines for clear liquids:

- Remember to record your fluid intake daily in your **food journal** and bring journal to each follow up appointment!
- **Do NOT use a straw** when drinking beverages. Straws introduce increase amounts of air into the stomach and can cause gas which can be uncomfortable and painful.
- **Avoid fruit juices** as they contain a large amount of concentrated sugars. A better choice would be “light” or “diet” juices.
- **Avoid regular Gatorade**. If possible, choose Gatorade G2 (contains 5g of sugar vs. 14g in regular Gatorade)

**Keep in mind, your stomach has been reduced to the size of a golf ball; it can only hold 1-2 oz of food or liquid at a time.**

## Stage 2: Full Liquids

Weeks 4, 5, & 6

**Recommended Serving: Slowly sip 2-4 oz (1/4 -1/2 cup) per hour**

**Daily fluid goal: 64 ounces (8 cups)**

**Begin protein supplement. See pages 15-16 for details.**

**Fluids/Foods allowed: Full liquids should be:**

- ✓ Low sugar- no more than **15 grams of sugar** (natural and added sugars) per serving of food/beverage at one sitting.
- ✓ Low fat- no more than **3 grams of fat** per serving
- ✓ Good source of protein- daily protein goal of **60-80 grams**
  
- Light yogurt/Greek yogurt
- Skim (non-fat) milk, 1% milk, or soy milk (Almond?????)
- Sugar-free pudding
- Carnation Breakfast Essentials (No sugar added)
- Cream of chicken soup
- Cream of mushroom soup
- Cream of potato soup
- Cream of wheat
- Cream of rice
- Grits (thin consistency and plain)

**Guidelines for Full Liquids:**

- **Yogurt is a good choice for your first full liquid food** because it contains healthy bacteria and probiotics.
- **Remember-** Record your fluid intake daily in your **food journal** and bring journal to each follow up appointment!
- Make sure to include your **protein supplements** throughout the day to ensure you meet your protein requirements of 60-80 grams of protein per day.
- It is important to be on **liquids** to keep the stomach from working too hard right after surgery.
- Do not drink with a straw!

## Stage 2: Full Liquids

### Sample Meal Plan

Time	Foods	Protein (in grams)
8:00am	2 tablespoons cream of wheat made with low-fat milk (thin consistency)	1
9:00am	2 tablespoons sugar-free pudding	1
10:00am	6 ounces (3/4 cup) protein supplement	20
12:00pm	2 tablespoons protein foods (ex. Yogurt)	2
2:00pm	6 ounces (3/4 cup) protein supplement	20
6:00pm	2 tablespoons cream of chicken soup	1
8:00pm	6 ounces (3/4 cup) protein supplement	20
		<b>Total: 65 grams</b>

- Plus 48 ounces (6 cups) of clear liquids from page \*\*

#### Tips for sipping fluids slowly:

- Drink from a kids sippy cup
- Drink from a sports top water bottle
- Carry a water bottle with you everywhere- around the house, at work, in the car, at doctor's appointments, etc.

#### Useful conversions:

- 2 tablespoons = 1/8 cup = 1 ounce = 30mL
- 4 tablespoons = 1/4 cup = 2 ounces = 60mL
- 8 tablespoons = 1/2 cup = 4 ounces = 120 mL
- 12 tablespoons = 3/4 cup = 6 ounces = 180 mL
- 16 tablespoons = 1 cup = 8 ounces = 240mL

## Stage 3: Pureed Foods

### Week 7

**Recommended Serving: 4-6 tablespoons of pureed food per meal**

**Daily fluid goal: 64 ounces (8 cups)**

#### **Guidelines for pureed foods:**

- All foods should be blended or mashed to baby food consistency. A blender/food processor is an essential part of this stage.
- Remember to record your fluid intake daily in your food journal and bring journal to each follow up appointment!

#### **Fluids/foods allowed:**

<b>Food Group</b>	<b>Recommended Foods</b>	<b>Foods To Avoid</b>
<b>Protein</b>  <b>Always eat protein foods first!!</b>	<b>Must Be Blended!</b>  -Blended beef, pork, chicken, turkey, fish, tuna in water -Eggs (scrambled) and egg substitute -Cottage cheese (fat-free or 1%) -Light or Greek-style yogurt -Baby food meat -Tofu, extra firm, mashed -Cheese (fat-free or low-fat)	<b>Peanut butter</b> <b>Nut butters</b> <b>Potted meats</b> <b>Tuna in oil</b>
<b>Vegetables</b>	-Soft, tender varieties without seeds of skins -Cooked, blended, or mashed	<b>Raw vegetables</b> <b>Fibrous stalks</b> <b>Seeds, skins</b>
<b>Fruits</b>	-Mashed banana -Unsweetened applesauce Soft, tender varieties without seeds or skins -Cooked, blended, or mashed	<b>Raw</b> <b>Tough varieties</b> <b>Seeds, skins</b>
<b>Grains and starches</b>	-Hot cereal (oatmeal, grits, cream of wheat)	<b>Pasta and noodles</b> <b>Rice</b> <b>Bread</b> <b>Bread products</b>
<b>Soups</b>	-Broth, bouillon cube -Cream soups, blended	<b>All others</b>

## Stage 3: Pureed Foods

### Sample Meal Plan

Recommended Serving: 4-6 tablespoons of pureed food per meal

Time	Foods	Protein (grams)
8:00am	-4 Tbsp (1/4 cup) protein food such as Greek-style yogurt -1/4 medium banana, mashed	2
10:00am	-6 oz (3/4 cup) protein supplement	20
12:00pm	-2 Tbsp protein food such as fat-free cottage cheese -2 Tbsp protein food such as blended chicken -2 Tbsp blended, cooked green beans	5
2:00pm	-6 oz (3/4 cup) protein supplement	20
6:00pm	-2 Tbsp protein food such as tuna fish (packed in water) -2 Tbsp mashed, cooked carrots -2 Tbsp sweet potato	3
8:00pm	-6 oz (3/4 cup) protein supplement	20
		Total: 70 grams

- Plus 48 ounces (6 cups) of clear liquids from page \*\*





## Stage 4: Soft Foods

### Week 8

**Recommended Serving: 6-8 tablespoons of soft food per meal**

**Daily fluid goal: 64 ounces (8 cups)**

#### **Guidelines for pureed foods:**

- Foods should be cooked, tender, and easily chewed
- Eat protein foods first and try only one new food per meal
- Remember to record your fluid intake daily in your **food journal** and bring journal to each follow up appointment!

#### **Fluids/ Foods Allowed:**

**\*Indicates high protein food group**

<b>Food Group</b>	<b>Recommended Food</b>	<b>Foods To Avoid</b>
<b>Eggs*</b>	<b>-Scrambled, soft-cooked, hard-cooked, egg salad (with low-fat mayo)</b>	<b>Fried eggs</b>
<b>Seafood*</b>	<b>-Canned tuna in water -Canned salmon in water -Baked/poached fish -Imitation crab</b>	<b>Seafood that has been fried, shrimp</b>
<b>Vegetarian*</b>	<b>-Soy-based patties, tofu, textured vegetable protein</b>	
<b>Ground Meats*</b>	<b>-Lean, ground turkey</b>	<b>Beef (All types)</b>
<b>Chicken*</b>	<b>-Canned chicken, moist baked or broiled chicken, shaved deli-style chicken</b>	<b>Dry, white chicken meat Fried chicken</b>
<b>Turkey*</b>	<b>-Baked turkey and shaved deli-style turkey meat</b>	<b>Dry, white turkey meat</b>
<b>Ham*</b>	<b>-Canned ham and deli-style shaved ham</b>	
<b>Pork*</b>	<b>-Pork loin and tenderloin</b>	<b>Dry and non-tender cuts</b>
<b>Soups</b>	<b>-Lentil, pea, homemade soups, broth, and consommé type</b>	

<b>Dairy*</b>	-Lactaid (lactose-free) milk if needed, evaporated skim-milk, low-fat cottage cheese, low-fat ricotta cheese, low-fat cheeses, string cheese, light yogurt, Greek yogurt, sugar-free puddings and custards	Whole milk, regular (full sugar) yogurt, pudding or custard, ice cream
<b>Fruits</b>	-Applesauce, canned peaches, pears, apricots (in natural juice), soft fresh fruit (ripe banana, ripe peeled peach, and seedless melon)	Avoid skins and seeds
<b>Vegetables</b>	-Cooked vegetables (green beans, beets, carrots, peas, pumpkin, eggplant, mushrooms, cooked greens, spinach, tomato), V-8 juice	Avoid vegetable skins  Avoid gas-producing veggies (broccoli, beans, cabbage, or raw and whole veggies)
<b>Starches</b>	-Hot cereals: cream of wheat, grits, oatmeal -Mashed potatoes	Cold cereals, breads, rice, pasta, potatoes
<b>Sweeteners</b>	-Equal, Sweet-N-Low, Stevia, Splenda	Sugar, honey, corn syrup, molasses, maple syrup, Agave nectar
<b>Fats (in moderate amounts)</b>	- May have low-fat salad dressings, cream cheese, mayonnaise olive oil, canola oil, butter, margarine, cooking spray	
<b>Spices</b>	-Cinnamon, allspice, nutmeg, salt, lemon juice, vinegar, paprika, black pepper, other mild herbs and spices	Limit and be careful with sugar in foods such as barbeque sauces, chili, steak sauce, ketchup, and horseradish
<b>Beverages</b>	-May have caffeine-free, carbonation-free, and sugar-free beverages -Water -Crystal light -Low-fat milk -Propel, Gatorade, G2	Beverages with sugar, diet and regular sodas, alcohol, whole milk

## Stage 4: Soft Foods

### Sample Meal Plan

Recommended Serving: 6-8 tablespoons of soft food per meal

Time	Foods	Protein (grams)
8:00am	4 Tbsp (1/4 cup) scrambled eggs 2 Tbsp grits 2 Tbsp watermelon	5
10:00am	6 oz (3/4 cup) protein supplement	20
12:00pm	4 Tbsp (1/4 cup) protein food such as tuna with low-fat mayo 2 Tbsp canned fruit (packed in juice, NOT in syrup) 2 Tbsp cottage cheese (non-fat or 1%)	5
2:00pm	6 oz (3/4 cup) protein supplement	20
6:00pm	4 Tbsp (1/4 cup) protein food such as moist chicken breast 2 Tbsp green beans 2 Tbsp mashed potatoes	5
8:00pm	6 oz (3/4 cup) protein supplement	20
		<b>Total: 75 grams</b>

Plus 48 ounces (6 cups) of clear liquids from page \*\*

**Remember, chew foods  
thoroughly and slowly!!**

## Stage 5: Regular Foods

Week 9+

**Recommended Serving: 3/4 – 1 cup of food per meal**

**Daily fluid goal: 64 ounces (8 cups)**

### **Guidelines for regular foods:**

- You may begin regular foods only if you can tolerate foods in previous stages
- Chew each bite of food 20-30 times
- Wait 30 minutes before and after eating to drink your fluids

### **Fluids/ Foods Allowed:**

- Raw vegetables and fruits as tolerated
- Tender, lean cuts of red meat (avoid steak unless chewed thoroughly)

### **Fluids/Foods NOT allowed:**

- AVOID foods such as breads, pasta, rice, crackers, and other starchy foods until you are closer to your goal weight. Adding these back into your diet too soon can affect your weight loss.
- Some foods have a large amount of calories with little nutritional value and should be avoided as much as possible.
- Syrups/ honey
- Cakes/pastries
- Gum
- Biscuits
- Jam
- Pies
- Chips
- Soda
- Candy



## **Common Problem Foods:**

Some foods have difficulty passing through the opening of the stoma and may cause blockage making food feel like it is “stuck.”

### **These foods include:**

- Dry meat
- Shrimp
- untoasted or dry bread
- Pasta
- Rice
- Peanut butter
- Dried fruit
- Fibrous vegetables (corn, asparagus, celery)
- Nuts
- Coconut
- Popcorn
- Greasy or fried foods
- Seeds or skins of fruits and vegetables
- Membrane of citrus fruit

### **Remember...**

- All individuals have different foods they can tolerate. There may be foods that can cause problems indefinitely after surgery. These foods should be avoided to decrease the risk of complications.
- Attend support groups as much as possible and contact your dietician if you have questions or concerns about your meal planning.
- Remember to record your fluid intake daily in your **food journal** and bring journal to each follow up appointment!

## **Stage 5: Regular Foods**

### **Sample Meal Plan**

**Recommended Serving: 3/4 – 1 cup (6-8 oz) of food per meal**

Time	Foods	Protein (grams)
8:00am	1 scrambled egg or 1/4 cup of egg whites	7
	1/2 cup oatmeal made with low-fat milk	4
	1/4 cup of blueberries	0
10:00am	1 low-fat string cheese	8
12:00pm	2 oz turkey deli meat	9
	1 oz low fat cheese slice	5
	1 small (6-inch) whole wheat tortilla	4
	1/2 cup Greek yogurt	10
2:00pm	1/2 cup low-fat cottage cheese	14
	1/4 cup pineapple chunks	0
6:00pm	3 oz salmon broiled with lemon	21
	1/2 cup salad greens	0
	1 Tbsp low fat salad dressing	0
8:00pm	1/2 cup sugar-free pudding	20
	1 Tbsp Light Cool Whip	
		<b>Total: 84 grams</b>

## Protein Supplements

- Why do I

need a protein supplement? Protein prevents the body from utilizing lean muscle tissue as an energy source while losing body fat on a calorie restricted diet. You will need the

protein supplements until you can consume 60-80 grams of protein through foods alone.

- **60-80 grams of protein per day.**
- **protein supplements:**
  - ✓ carbohydrates – less than 10 grams per serving
  - ✓ less than 4 grams of sugar per serving
  - ✓ protein – more than 15 grams of protein per serving

**Protein goals:**

**Look for**

Low in

Low in sugar –

High in

Product	Serving Size	Calories	Protein (grams)	Carbs (grams)	Sugar (grams)
Muscle Milk Ready-to-drink	1 shake – 11 oz	170	20	7	3
Muscle Milk Light Ready-to-drink	1 shake – 11 oz	100	20	9	3
EAB AdvanEDGE Carb Control Shake	1 shake – 11 oz	110	17	2	0
Atkins Advantage	1 shake – 11 oz	100	15	5	1

Product	Serving Size	Calories	Protein (grams)	Carbs (grams)	Sugar (grams)
Jillian Michaels Natural Whey Protein	1 scoop (27 grams)	100	15	7	3
Six Star Professional Whey Protein	1 scoop (30 grams)	100	26	8	3
Pure Protein 100% Whey Protein	1 scoop (37 grams)	140	25	4	2
Body Fortress Whey Protein	1 scoop (34 grams)	140	26	4	1
Muscle Milk Ready-To-Drink	1 shake – 11oz	170	20	7	3
Muscle Milk Light Ready-To-Drink	1 shake – 11oz	100	20	6	0
EAS AdvantEDGE Carb Control Shake	1 shake – 11oz	110	17	4	0
Atkins Advantage	1 shake – 11oz	160	15	5	1

CVS

Product	Serving Size	Calories	Protein (grams)	Carbs (grams)	Sugar (grams)
CVS Pharmacy Whey Protein Powder	1 scoop (34 grams)	140	25	4	2
EAS AdvantEDGE Carb Control Shake	1 shake- 11oz	110	17	2	0
Atkins Advantage	1 shake- 11oz	160	15	5	1

Winn Dixie

Product	Serving Size	Calories	Protein (grams)	Carbs (grams)	Sugar (grams)
Carb Solutions High Protein Shake Mix	2 scoops (31 grams)	110	21	4	1
Designer Whey Protein Powder	1 scoop (26 grams)	100	18	3	0
Jillian Michaels Natural Whey Protein	1 scoop (27 grams)	100	15	7	3
Top Care Whey & Soy Protein	2 scoops (30 grams)	115	25	2	1
EAS AdvantEDGE Carb Control Shake	1 shake – 11oz	110	17	2	0
Atkins Advantage	1 shake – 11oz	160	15	5	1

Publix

Product	Serving Size	Calories	Protein (grams)	Carbs (grams)	Sugar (grams)
Genisoy Soy Protein Powder	3 scoops (30 grams)	150	25	0	0
Designer Whey Protein Shake	1 shake-10.5oz	100	18	5	3
Muscle Milk Ready-To-Drink	1 shake – 11oz	170	20	7	3
Muscle Milk Light Ready-To-Drink	1 shake – 11oz	100	20	6	0
EAS AdvantEDGE Carb Control Shake	1 shake – 11oz	110	17	4	0
Atkins Advantage	1 shake – 11oz	160	15	5	1
Zoic Shake	1 shake – 11oz	90	15	6	1
Lean Body On-The-Go	1 shake – 14oz	180	25	5	0



## Vitamin and Mineral Supplements

### Why do I need to take vitamin and mineral supplements?

- Your reduced calorie intake after surgery will make it difficult for you to get complete nutrition from your diet alone. Therefore, it is required that you take vitamins and mineral supplements every day for the rest of your life to avoid serious nutrient deficiencies.

### When should I start taking my vitamin and mineral supplements?

- Begin supplements 1 week post-op after your follow up with your surgeon.

### What specific vitamins and minerals do I need to take?

- Multivitamin with iron
- Calcium Citrate with Vitamin D
- Vitamin B12

### Things to keep in mind when choosing supplements:

- Chewable or liquid vitamins may be better absorbed after surgery and are recommended

Websites for supplements made specifically for bariatric patients:

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

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

- Time-release supplements are not recommended for weight loss surgery patients

## Multivitamin With Iron (Chewable or Liquid)

### Look for:

**Multivitamin Supplement that includes, at minimum, the Dietary Reference Intake (DRI) for the following nutrients:**

Iron: DRI=8mg/day for men, 18mg per day for women

Thiamine (B1): DRI=1.2mg/day for men, 1.1mg/day for women

Vitamin B12: DRI=2.4mcg/day

Folic Acid: DRI=400mcg/day

Zinc: DRI=11mg/day for men, 8mg/day for women

Biotin: DRI=30mcg/day

Vitamin K: DRI=120mcg for men, 90mcg/day for women

**Recommended Amount: Take 1 adult chewable multivitamin per day.**

### Places to purchase multivitamin:

Product	Store
Centrum Chewable	Wal Mart
Centrum Silver Chewable (age 50+)	Wal Mart
Centrum Liquid Multivitamin	Wal Mart
Walgreens Complete Multivitamin Liquid	Walgreens
Finest Natural Liquid Multivitamin	Walgreens
OptiSource Post Bariatric Surgery Formula	Walgreens
Centrum Chewable	Winn Dixie
Centrum Silver Chewable (age 50+)	Winn Dixie
Centrum Chewable	CVS
Centrum Silver Chewable (age 50+)	CVS

### Keep in mind:

- Children's multivitamins are not the best choice because they may not supply you with the appropriate levels of vitamins and you will have to take several to meet your requirements.

**Calcium Citrate with Vitamin D**

**Look for:**

**Calcium Citrate is the recommended form of calcium because it is best absorbed by the body after surgery.**

- **Carbonate (found in Tums and Viactiv)** **NOT Calcium**
- **tricalcium phosphate (found in Citracel Gummies)** **NOT**
- **lactate** **NOT Calcium**
- **gluconate** **NOT Calcium**

**Recommended amount:**

**Calcium: 1200mg/day for men and premenopausal women**

**Vitamin D: 400-600IU/day**

**Places to purchase calcium citrate:**

<b>Product</b>	<b>Store</b>
<b>Citracel Petites</b>	<b>Walmart</b>
<b>Citracel Petites</b>	<b>Walgreens</b>
<b>Citracel Petites</b>	<b>Publix</b>
<b>Citracel Petites</b>	<b>Winn Dixie</b>
<b>Citracel Petites</b>	<b>CVS</b>
<b>CVS Pharmacy Calcium Citrate + D3 Miniatures</b>	<b>CVS</b>

**Why is calcium citrate required after surgery?**

After a gastric bypass surgery, you will not be able to absorb calcium as well as you used to. Therefore, you need to take a calcium supplement every day to prevent risk of osteoporosis and prevent deficiencies.

**Keep in mind:**

- **Even if your multivitamin contains calcium, you need to take 1200-1500 mg extra calcium per day.**
- **Take calcium in divided doses for best absorption.**
- **If you take iron supplements, do not take your calcium with your iron as the two interfere with one another. Calcium and iron should be taken at least 2 hours apart.**

**Vitamin B12**

**Recommended amount:**

**600 mcg sublingual (under-the-tongue) daily OR  
 1000 mcg Intramuscular injection every month OR  
 3000 mcg Intramuscular injection every 6 months**

**Places to purchase VitaminB12**

<b>Product</b>	<b>Store</b>
<b>Spring Valley Sublingual B12 (2500mcg)</b>	<b>Walmart</b>
<b>Spring Valley Sublingual B12 Dots (500mcg)</b>	<b>Walmart</b>
<b>Natrol Vitamin B12 Fast Dissolve (5000mcg)</b>	<b>Walmart</b>
<b>Finest Natural B12 (5000mcg)</b>	<b>Walgreens</b>
<b>Nature’s Bounty Sublingual B12 (2500mcg)</b>	<b>Walgreens</b>
<b>Sundown Naturals Sublingual B12 (500mcg)</b>	<b>Publix</b>
<b>CVS Pharmacy Sublingual B12 (500mcg)</b>	<b>CVS</b>
<b>Nature’s Bounty Sublingual B12 (500mcg)</b>	<b>CVS</b>

**Why do I need to take Vitamin B12 after surgery?**

Vitamin B12 is not absorbed as well after weight loss surgery. An inadequate intake can result in anemia, dementia, decreased ability to think clearly, numbness in hands and feet, and dizziness.



**Don't forget to take  
your supplements  
EVERYDAY!!!**

Possible Side Effects and Solutions

<b>Nausea and Vomiting</b>	<ul style="list-style-type: none"> <li>• <span style="float: right;">M</span> ay occur as a result of not chewing food thoroughly or eating too much too fast.</li> <li>• <span style="float: right;">A</span> void high-sugar, high-fat foods and liquids.</li> <li>• <span style="float: right;">If</span> nausea occurs after consuming dairy, try switching to lactose-free products.</li> <li>• <span style="float: right;">If</span> nausea occurs most upon waking, try drinking 4-6oz sugar-free clear liquids before breakfast.</li> <li>• <span style="float: right;">N</span> ausea can also occur due to changing hormone levels after surgery.</li> </ul>
<b>Constipation</b>	<ul style="list-style-type: none"> <li>• <span style="float: right;">M</span> ay be due to dehydration.</li> <li>• <span style="float: right;">A</span> fter gastric bypass surgery, it is normal to have smaller and fewer bowel movements.</li> <li>• <span style="float: right;">M</span> ay be due to iron supplement.</li> <li>• <span style="float: right;">A</span> sk your bariatric team if a fiber supplement or stool softener might be needed.</li> </ul>
<b>Diarrhea</b>	<ul style="list-style-type: none"> <li>• <span style="float: right;">M</span></li> </ul>

	<p>ay be caused by undigested food passing to quickly through the gastrointestinal (GI) tract.</p> <ul style="list-style-type: none"> <li>actose-intolerance may develop after surgery even if you never had problems with dairy products before.</li> </ul>	L
Lactose Intolerance	<ul style="list-style-type: none"> <li>ymptoms include gas, abdominal cramping, and diarrhea.</li> <li>ilk sugar is called lactose. If you are lactose-intolerant, your body doesn't make enough of the enzyme, lactase, to break down the milk sugar.</li> <li>y lactose-free milk.</li> <li>actaid pills (which contain the lactase enzyme) can be taken before dairy is consumed.</li> </ul>	S M Tr L
Hair Thinning	<ul style="list-style-type: none"> <li>hinning may be minimized by maintaining adequate protein intake, taking daily multivitamins, and possibly by addition of zinc and biotin supplements (ask your surgeon/dietician for exact amounts).</li> <li>hair thinning does occur, it will be between 2 and 10 months after surgery and is TEMPORARY.</li> </ul>	T If

**If your symptoms become worse or do not subside after trying recommendations, contact your physician or dietician.**

### **Dumping Syndrome**

For gastric bypass patients, a portion of the stomach or small intestines is bypassed and many people are not able to tolerate foods high in fat or sugar afterwards. If you do eat high fat and high sugar foods, dumping syndrome could possibly occur.

1. **Early dumping syndrome:** occurs less than an hour after eating. Foods high in fat and sugar move quickly into the small intestine, causing blood to rush to the intestine and lower blood pressure throughout the body. Symptoms include:

- fainting Weakness and
- changes Heart rate
- flushed Skin becomes
- breath Shortness of
- Diarrhea
- Sweating
- Low blood pressure
- Dizziness
- Vomiting
- cramps Abdominal

2. Late dumping

syndrome: Occurs 2 to 3 hours after eating. This is caused by low blood sugar after a high sugar/high carbohydrate/fatty meal. A large amount of insulin is released to the small intestine for digestion and absorption. Excessive insulin leads to low blood sugar.

Symptoms include:

- Sweating, anxiety, tremors
- Lowered blood pressure
- Feelings of exhaustion or faintness
- Headache

Prevention consists of following the meal planning guidelines carefully. "Dumping" should be minimized with these practices. If ignored, the long-term problems could be increased anxiety levels (nervousness, etc) and poor nutritional status.

- Avoid foods with concentrated carbohydrates and refined sugar (Limit to 15-20 grams of carbohydrates per meal)

- protein/low fat foods Consume high
- evenly spaced meals daily Include small,
- beverages with meals (wait 30 minutes after meal) Do not include

Treatment for early dumping syndrome in general is to lie down for 45 minutes or until the feeling passes. In late dumping syndrome, you should try to eat a small amount of sugar, candy, or diluted fruit juice (2-3oz of juice + water) to raise blood sugars up to normal.

When to call your doctor:

- Dumping syndrome symptoms are occurring even though you are following the guidelines.
- You have signs of bleeding from the stomach or bowel such as vomiting blood or black, tarry stools.
- Any concerning symptoms.



### Medications After Surgery

**Medication size and form:** Medications in capsules may need to be opened and the contents mixed with food and water. Due to the small stomach size, medication size is also an issue. Medications should be small enough to pass through the stomach, approximately the size of an M&M. This may exclude medications that are unable to be crushed or broken; therefore, the form of these medications may need to be changed.

**Medication Doses:** Due to the rapid weight loss and dietary changes, the medications taken for some conditions associated with obesity may need to be evaluated and altered frequently in the first several months of recovery. If you are diabetic, for example, your insulin dose and/or oral medications might need to be adjusted frequently to match your caloric intake and weight loss. Speak with your primary care provider or pharmacist if you have further questions.

**Medications to avoid:** Due to changes in structure of the stomach or absorption changes in the small intestines, some medications may not be appropriate after surgery. Some examples of these medications are listed below:

Advil	Aspirin	Dolobid	Florinol	Nalfon
Alka Seltzer	Bufferin	Empirin	Ibuprofen	Norgesic
Anacin	Coricidin	Excedrin	Meclomen	Tolectin
Ascriptin	Cortisone	Feldene	Mictrin	Vanquish



### Protein Content of Foods

<b>Meats/Poultry</b>	<b>Protein Amount</b>
<b>1oz tender cooked meat such as fish, chicken, beef, pork, or ground beef</b>	<b>7 grams</b>
<b>1oz diced or chopped meat or fish</b>	<b>7 grams</b>
<b>1 oz del meat</b>	<b>3-5 grams</b>

<b>Dairy/Protein</b>	<b>Protein Amount</b>
<b>1 cup milk (skim or 1%)</b>	<b>8 grams</b>
<b>1oz (1 slice) low fat cheese, string cheese</b>	<b>7 grams</b>
<b>6oz light yogurt</b>	<b>8 grams</b>
<b>6oz Greek yogurt</b>	<b>15 grams</b>
<b>½ cup low fat cottage cheese</b>	<b>13 grams</b>
<b>1 whole egg</b>	<b>7 grams</b>
<b>1 egg white</b>	<b>4 grams</b>

<b>Legumes (beans, peas, etc.)</b>	<b>Protein Amount</b>
<b>½ cup beans such as pinto, black, kidney, lentils, lima beans**</b>	<b>5-7 grams</b>
<b>½ cup chili</b>	<b>10 grams</b>
<b>½ cup bean soup</b>	<b>3-5 grams</b>
<b>1 tablespoon peanut butter*</b>	<b>4 grams</b>
<b>2 tablespoons nuts</b>	<b>2 grams</b>

½ cup refried beans ** (vegetarian or fat-free)	3 grams
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\*High fat content. Use only once per day. \*\*High gas food. Try Bean-O or Gas-X for relief.

Soy Products	Protein Amount
1 cup soymilk	7 grams
¼ cup of tofu	5 grams
1 veggie burger	10-13 grams

### Physical Activity After Surgery

Exercise can help you reach and maintain your weight loss goals, as well as help to:

- **energy** **Increase your**
- **metabolism** **Boost your**
- **skin caused by rapid weight loss** **Tighten loose**
- **better and improve self-image** **Make you feel**
- **while building muscle** **Reduces fat**
- **immune system and strengthens bones** **Enhances the**

**General guidelines: (may vary from person to person)**

- **Right after surgery:** You should get out of bed and start walking as soon as possible after surgery.
- **First few weeks after surgery:** You may feel tired or fatigued. It is important to still get up and move around. Walk around the house, use the stairs as tolerated, or walk around at an

inside mall where it is air conditioned and there are many places to sit and rest. You are just beginning to heal after surgery so light activity is recommended.



**Months 1-2**

**after surgery:** Once medically cleared for increased physical activity, start slowly with low impact exercise such as stationary bike riding, treadmill, and/or swimming (once wounds heal completely).



**Long term**

**goals:** Include at least 30 minutes (or 3 10-minute sessions) of moderate activity daily including: walking, swimming, stationary bike riding, treadmill, strength training, or anything to get your body **moving!!**

**Keep in mind:**



**Avoid**

**abdominal exercises until 3 months post-op.**



**Avoid lifting**

**more than 10 pounds for the first 2 weeks after surgery.**



**If your job**

**requires strenuous, heavy lifting, talk to the bariatric team for additional guidelines.**



**Stay hydrated**

**during any kind of exercise.**



**For additional**

**information on physical activity after surgery, check out:**

**[www.bariatricchoice.com/exercise-for-bariatric-gastric-bypass-surgery-patients.aspx](http://www.bariatricchoice.com/exercise-for-bariatric-gastric-bypass-surgery-patients.aspx)**

**Keep in mind, these are general recommendations. Before you begin exercising, always check with your physician or surgeon first.**