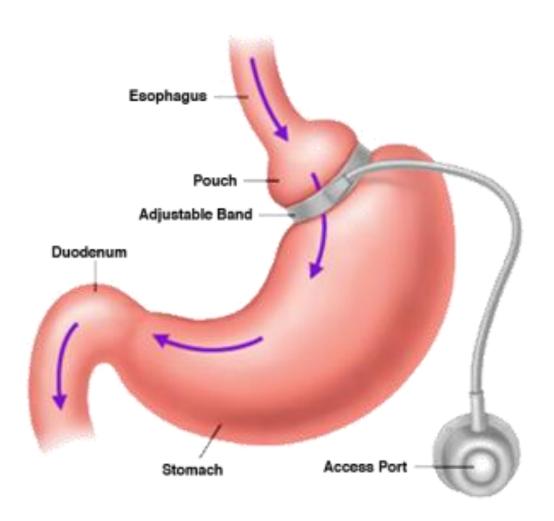
# Dietary Guidelines For LAP-Band Surgery



<sup>\*</sup>The images contained in this handout are sample images for instructional purposes only with the expectation that patients are better able to understand and follow the given guidelines.

# **Eating Guidelines after Surgery**

After your weight loss surgery, it is important to change what foods you eat and how you eat them. Below are some important guidelines for you to follow. These guidelines will allow you to adopt a healthful diet that contains all the nutrients you need while also maximizing weight loss.

Follow the diet progression included in this handout after your surgery. You will go through several diet phases including:

> Phase I: Clear, Sugar-Free Liquid Diet

> Phase II: Full Liquid Diet

➢ Phase III: Soft Diet

> Phase IV: Modified Regular Diet

- The foods allowed during each phase will be discussed later on in this handout. It is important to consume only the foods included on your diet phase because your "new" stomach is not ready for other foods yet.
- 2. Consume a diet that is nutritionally balanced and protein rich. **Protein is the most important nutrient to consume after surgery.**
- 3. At meals always eat protein rich foods first. It is best to get protein from food sources but liquid protein supplements may be used approximately 3-7 days after surgery. Preferred supplements will be discussed. **Minimum protein requirement is 64 grams per day.** 
  - A dietitian will work with you to develop an individualized eating plan that will provide the right amount of protein, carbohydrates, and fat for your body.
- 4. Eat meals and snacks at regularly scheduled times. You should eat no more than 3 meals and 2 protein rich snacks in between your meals per day. As the diet progresses, you will no longer be consuming snacks in between meals (this will be discussed later).
- 5. Eat meals slowly. Try to take no more than 30 minutes to finish a meal. Stop eating as soon as you feel full, taking small bites and chewing thoroughly. You should chew each bite of food at least 30 times before swallowing.
- 6. **Keep yourself hydrated by sipping 1-2 ounces of calorie-free, non-carbonated liquids in between meals**. Drinking at least 6 to 8 cups (48 to 64 ounces) of fluids a day prevents dehydration.
- 7. **Important Rule to Remember: 64/64** (at least 64 ounces of fluids and 64 grams of protein should be consumed each day)
- 8. Stop drinking fluids 30 minutes before a meal. After meals, wait 1 hour to start drinking fluids again. Drinking fluids immediately before, during, or after meal times may cause

bloating, low food intake, or vomiting. It is possible to flush food through too quickly which allows you to eat more than needed.

- 9. Do not gulp or use a straw! This can overfill your pouch with liquid and air.
- 10. **Take vitamins daily.** After weight loss surgery your meal size is significantly decreased. Since you are eating less food overall, you are also consuming less nutrients and vitamins/minerals. Taking a vitamin daily will ensure that you are getting enough nutrients every day. In addition, daily supplementation is required for the rest of your life.
  - a) Complete Multivitamin Chewable, liquid, and tablet forms are all acceptable.





- b) Vitamin B<sub>12</sub> Sublingual Supplement 500µg per day
  - > Sublingual means that it should melt under your tongue.
  - Also acceptable Vitamin B<sub>12</sub> Nasal Spray (taken once a week), see your doctor for a prescription if interested (Nascobal)
  - ➤ Also Acceptable Vitamin B<sub>12</sub> injection once a month







# c) Calcium Supplement – 1200mg per day

- Choose a calcium supplement that contains calcium citrate not calcium carbonate. Calcium citrate is the form of calcium that can be best absorbed by your digestive system.
- Always take your calcium and iron supplements at separate meals.





#### d) Vitamin D Supplement

- > 2,000 IU per day for maintenance
- ➤ 50,000 IU per week for a patient deficient in Vitamin D (only if prescribed by a doctor)

## e) Iron Supplement

- ➤ The recommended dose of iron is 40-56mg per day, particularly for menstruating women, but it should be taken as directed by your surgeon.
- The iron supplement should contain **ferrous fumerate** not ferrous sulfate, since ferrous fumerate can be best absorbed by your digestive system.
- > Always take your iron and calcium supplements at separate meals.
- It is recommended to take your iron supplement with foods rich in Vitamin C (like broccoli, red peppers, strawberries, etc.) since it will be better absorbed.





There are many different brands of supplements which meet the required dosages such as:

- Bariatric Advantage
- > BariActiv Bariatric Supplements (comes with prescription for Nascobal)
- > CELEBRATE Bariatric Supplements
- 9. Avoid foods that are high in fat and/or sugar. They may cause dumping syndrome, which can result in nausea, vomiting, and discomfort. In many cases, these foods will prevent weight loss and actually cause a gain in weight. See the possible side effects handout for more information.
- 10. Do not drink alcoholic beverages, including beer, wine, and liquor. Alcohol causes serious liver damage after surgery. It will lead to weight gain and result in poor nutrition since alcoholic beverages are high in calories and low in nutrients. You will also get drunk very easily since your tolerance is very low, so a single glass of wine can out you above the legal blood alcohol limit.

# **Diet Progression**

# Phase I: Clear Liquid Diet

- Follow 1-6 days after leaving the hospital or as directed by your surgeon.
- ➤ Sip 1-2 ounces of clear, sugar-free, non-carbonated liquids every 15 minutes. Avoid any liquids that are too hot or too cold. **Do not use straws** as this may cause excess gas.
- Your ultimate goal is to consume 64 ounces of fluid per day, but it may take several days before you achieve this goal. You can use Isopure protein supplement (the clear kind only) as part of both your fluid and protein needs.
- You can begin taking your vitamins, as listed on the previous page.

#### Liquids allowed include:

- Water/ice chips (not too cold)
- Isopure (clear kind only)



Fat-free, low sodium broth (chicken, beef, vegetable)



> Crystal Light or sugar free Kool Aid type products



Fruit 2O & Propel Fitness Water



> Vitamin water – zero calorie or low calorie only



> Sugar-free jello



Decaffeinated tea with sugar substitute (not too hot)



Sugar-free popsicles



<u>Warning</u>: NOT all clear liquids are low in sugar. For example: Apple or Grape juice boxes usually say "No Added Sugar" but they are naturally very high in sugar

Even though Gatorade and Apple Juice are clear liquids, they are very high in sugar





# Phase II: Full Liquid Diet

- Follow 7-13 days after leaving the hospital or as directed by your surgeon.
- Consume liquid meals 3 times per day. Drink a protein supplement in between meals for a snack as well. The protein supplements consumed should be high in protein but low in carbohydrates. Look for one that contains at least:
  - 25-35 of protein
  - less than 5g of carbohydrates
  - o less than 5g of sugar
- > Some recommended protein supplements include:
  - 1. Isopure



2. Designer Whey



3. Pure Protein



Serving Size	1 Can		
Amount Per S	Serving		
Calories 160			from Fat
		%D	ally Value
Total Fat 1g			2
Saturated Fat 0	9		0
Trans Fat 0g			
<b>Cholesterol</b> 15m	g		5
Sodium 150mg			6
Potassium 280n	ng		8
Total Carbohydr	ate 2g		1
Dietary Fiber Og			0
Sugars 1g			
Protein 35g			70
Vitamin A 0%		Vit	amin C 0
Calcium 90%			Iron 4
Phosphorus 50%		Mag	nesium 6
*Percent Daily Values	are based on a	2.000 calorie d	iet. Your da
values may be higher			ie needs:
	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat Cholesterol	Less than	20g	25g
Sodium	Less than	300mg 2,400mg	300mg 2,400n
Potassium	Less man	2,400mg	3,500n
Total Carbohydrate		3,500mg 300a	3,50011 375a
Dietary Fiber		25a	30a
Protein		50g	65a

4. E.A.S. 100% Whey Protein



## **Nutrition Facts**

Serving Size: 1 scoop (	30g)
Amount Per Serving	
Calories 120	Calories from Fat 20
	% Daily Value*
Total Fat 2g	3%
Saturated Fat 1 g	5%
Trans Fat 0 g	
Cholesterol 65 mg	22%
Sodium 55 mg	2%
Potassium 210 mg	6%
Total Carbohydrate	3 g <b>1%</b>
Dietary Fiber 1 g	4%
Sugars 1 g	
Sugar Alcohols	
Protein 23 g	
Vitamin A	
Vitamin C	
Calcium 1390 mg	139%
Iron 0.18 mg	1%

- ➤ Start with 1-2 ounce portions and slowly increase to 3-4 ounce portions as tolerated. Go slowly, as it may take time to get up to 4 ounce portions.
- Remember to sip on clear, non-carbonated, calorie-free, and sugar-free liquids in between meals and snacks. You can now use additional protein supplements as part of daily protein requirement, such as protein shakes and Pure Protein.
- > Continue to take all of your vitamins.

# **Liquids allowed include:**

> Skim, non-fat, or skim plus milk

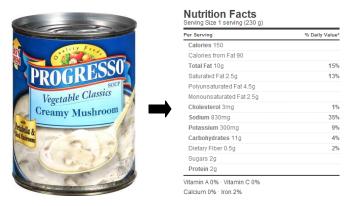


Greek style yogurt that does not contain pieces of fruit (non-fat, no sugar added) – Chobani, Fage, Oikos, etc. Yasso Frozen Yogurt Bars are also acceptable.





Low-fat/Low sodium soups that are thick and smooth (strain as needed) Examples: Tomato soup, low-fat cream soups such as cream of mushroom and cream of asparagus, butternut squash soup, and split pea soup.



Sugar-free, fat-free pudding (thin with skim or skim plus milk)



- > Farina/Cream of wheat (thin with skim or skim plus milk)
- > Low sodium vegetable juice such as V8.



\*The schedule below is just an example. Timing of meals may differ depending on your own individual needs.

# Sample Menu: Phase II (Full Liquid Diet)

Vitamins may be taken before or after a meal, and remember your goal is to consume **64 ounces of fluids** each day.

Wake up: 7:00 A.M.

Time	Food
8:00 A.M.	Have 2 ounces of Farina/Cream of Wheat, mixed with 2 Tbsp of skim milk to thin cereal along with 2 ounces of Greek style yogurt.
	Wait at least <b>1 hour</b> before sipping on clear, non-carbonated, calorie-free, and sugar-free liquids. You can also sip on Isopure liquid protein (only the clear kind) for added protein. Make sure you <b>stop</b> drinking <b>30 minutes</b> before your next meal.
10:30 A.M.	Have a 2-4 ounce protein supplement.
	Follow the <b>same guidelines</b> concerning beverage consumption as stated above.
12:30 P.M.	Have 2 ounces of tomato soup and 2 ounces of Greek style yogurt.
	Follow the <b>same guidelines</b> concerning beverage consumption as stated above.
3:30 P.M.	Have a 2-4 ounce protein supplement.
	Follow the <b>same guidelines</b> concerning beverage consumption as stated above.
6:30 P.M.	Have 2 ounces of low-fat cream of broccoli soup along with 2 ounces of sugar-free, fat-free pudding.
	Wait <b>1 hour</b> before sipping on clear, non-carbonated, calorie-free, and sugar-free liquids. You can drink hot tea with a sugar substitute if you want to as well.

#### Phase III: Soft Diet

- Approximately 14-20 days following surgery or as directed by your surgeon you will begin to introduce soft foods to your diet. This includes eating 3 meals a day and 1-2 protein supplements in between meals. Meals should be 3-4 ounces and should consist of foods that are soft (see the examples below).
- Always eat protein-rich foods first and only add 1 NEW FOOD AT A TIME. Take at least 30 minutes to eat a meal and chew foods thoroughly, but do not have your meals last longer than 30 minutes at a time.
- Remember that between meals and snacks, you should sip on clear, non-carbonates, calorie-free, and sugar-free liquids. Protein shakes or Pure Protein can also be sipped on to meet your daily protein requirements.
- > NEVER EAT AND DRINK AT THE SAME TIME!
- ➤ The 64 rule still applies, so continue to have **64 ounces of fluids** per **64 grams of food** each day.
- > Continue to take ALL of your vitamins!

## Foods allowed include:

Low-fat cottage cheese



- Greek style yogurt that does not contain pieces of fruit (non-fat, no sugar added) –
  Chobani, Fage, Oikos, etc. Yasso Frozen Yogurt Bars are also acceptable.
- Canned tuna packed in water (moisten it with low-fat mayo only no celery or onion!)



Soft-cooked egg whites or EggBeaters



Poached or baked fish (tilapia, cat fish, red snapper, salmon, etc.)



➤ Tofu – it is a healthy, low fat, and protein-rich alternative to various meat products that takes on the flavor of whatever you cook it with.



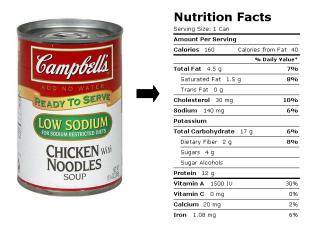
Soft, low-fat or part-skim cheeses (mozzarella, laughing cow, light babybel, etc.)



Cooked lentils, kidney beans, peas, and other legumes.



➤ Higher protein, reduced-sodium soups



#### Fruits & Vegetables:

> Soft-cooked carrots, squash, green beans, broccoli, or cauliflower (all other vegetables should be pureed)



Various Fruits, but DO NOT EAT THE SKIN OR STRINGY/FIBROUS MATERIALS



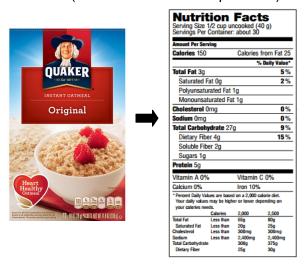
## Unsweetened applesauce



\*Fruits can be very high in calories and sugars. Please avoid excess fruit or fruit juice intake and check www.sugarstacks.com/fruits for nutritional information

#### Whole Grains & Carbohydrates:

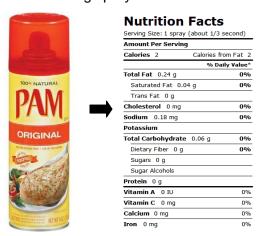
Oatmeal (thin with skim or skim plus milk)



Farina/Cream of wheat (thin with skim or skim plus milk)

#### Fats:

Pam cooking spray



#### **Condiments:**

- Vinegar
- Mustard
- Other condiments that are low in fat and sugar

# Sample Menu: Phase III (Soft Diet)

Vitamins may be taken before or after a meal, and remember your goal is to consume **64 ounces of fluids** each day.

Wake Up: 7:00 A.M.

Time	Food
8:00 A.M.	Have 2 ounces of soft-cooked Egg Beaters or egg whites with a quarter of a mashed banana.
	Wait at least <b>1 hour</b> before sipping on clear, non-carbonated, calorie-free, and sugar-free liquids. You can also sip on Isopure liquid protein (only the clear kind) for added protein. Make sure you <b>stop</b> drinking <b>30 minutes</b> before your next meal.
10.20 A M	Have a 2-4 ounce protein supplement.
10:30 A.M.	Follow the <b>same guidelines</b> concerning beverage consumption as stated above.
12:30 P.M.	Have 3 ounces of tune salad made with low-fat mayo along with 1-2 ounces of apple sauce.
	Follow the <b>same guidelines</b> concerning beverage consumption as stated above.
3:30 P.M.	Have a 2-4 ounce protein supplement.
	Follow the <b>same guidelines</b> concerning beverage consumption as stated above.
6:30 P.M.	Have 2 ounces of poached fish along with 2 ounces of soft-cooked broccoli
	Wait <b>1 hour</b> before sipping on clear, non-carbonated, calorie-free, and sugar-free liquids. You can drink hot tea with a sugar substitute if you want to as well.

<sup>\*</sup>The schedule below is just an example. Timing of meals may differ depending on your won individual needs.

# Phase IV: Modified-Regular Diet

- Approximately 21-28 days after your surgery you will begin to introduce more solid foods to your diet as directed by your surgeon. This is a modified diet which emphasizes lean protein, fruits, vegetables, and whole grains.
- Consume only 3 meals a day and do not eat in between meals. Continues to eat protein-rich foods first at meals and only add 1 new food at a time. Take no more than 30 minutes to eat a meal and chew foods thoroughly.
- Remember that between meals and snacks, you should sip on clear, non-carbonated, calorie-free, and sugar-free liquids. Protein shakes or Pure Protein can also be sipped on to meet your daily protein requirements.

#### DO NOT EAT AND DRINK AT THE SAME MEAL!

- ➤ The 64 rule still applies, so continue to have **64 ounces of fluids** per **64 grams of food** each day.
- > You are allowed 1 optional evening snack of 100-150 calories each day if necessary.
- ➤ Warning: Do not go too far too fast. Advancement of your diet too quickly can lead to disruption of the attachment of the stomach to the intestine. No regular food should be consumed until approximately 4 weeks after your surgery. This is for your own safety.
- Continue to take ALL of your vitamins!

#### Foods allowed include:

#### **High Protein Foods:**

- Low-fat cottage cheese
- Greek style yogurt that does not contain pieces of fruit (non-fat, no sugar added) Chobani, Fage, Oikos, etc. Yasso Frozen Yogurt Bars are also acceptable.
- Soft-cooked egg whites or EggBeaters
- Canned tuna packed in water (moisten it with low-fat mayo only no celery or onion!)
- Poached or baked fish (tilapia, cat fish, red snapper, salmon, etc.)
- ➤ Tofu it is a healthy, low fat, and protein-rich alternative to various meat products that takes on the flavor of whatever you cook it with.
- Soft, low-fat or part-skim cheeses (mozzarella, laughing cow, light babybel, etc.)
- Cooked lentils, kidney beans, peas, and other legumes.

Lean ground beef or turkey – Try making chili, meatballs, meatloaf, or hamburgers.



➤ Boiled, stewed, or soft-baked chicken – Try making chicken salad (moisten with low-fat mayo only) or chicken stew (use a slow cooker if possible)



- Soft-cooked pork or beef Try using a slow cooker or other moist-methods of cooking
- Nuts or nut butters (note: they are very high in calories so limit intake)



Higher protein, reduced-sodium soups

#### Fruits & Vegetables:

- Soft-cooked vegetables (do not eat skin)
- Raw vegetables (no skin) Chew thoroughly and do not fill up on vegetables (eat any proteins first)

> Do not eat celery or corn (stringy and fibrous vegetables) - Your stomach cannot handle the digestion of these fibrous foods.



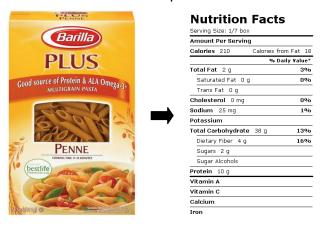
- Fresh Fruit Do not eat skin at this point (later on skin will be ok to consume), Examples: melons, berries, apples, pears, bananas, etc.
- Unsweetened applesauce

## Whole Grains & Carbohydrates:

- Oatmeal (thin with skim or skim plus milk)
- Farina/Cream of wheat (thin with skim or skim plus milk)
- High protein dry cereal (such as Kashi Go Lean Crunch)



Soft-cooked whole wheat pasta or brown rice



Whole grain crackers (such as Kashi TLC Crackers)



- Toasted whole grain bread
- Baked white or sweet potato (no skin)

Some of the previously listed foods may not be tolerated. Introduce one at a time to ensure that you can tolerate the food before consuming it further.

#### Fats:

- Pam cooking spray
- > Fatty foods do not meet many of your nutritional needs after surgery, and so they are not recommended.

#### **Condiments:**

- Various herbs
- Vinegar
- Mustard

Other condiments that are **low in fat and sugar**\*The schedule below is just an example. Timing of meals may differ depending on your won individual needs.

#### Sample Menu: Phase IV (Modified-Regular Diet)

Vitamins may be taken before or after a meal, and remember your goal is to consume **64 ounces of fluids** each day.

Wake Up: 7:00 A.M.

Time	Food
8:00 A.M.	Have 2 ounces of soft-cooked Egg Beaters or egg whites along with a quarter of a mashed banana.
	Wait at least <b>1 hour</b> before sipping on clear, non-carbonated, calorie-free, and sugar-free liquids. You can also sip on Isopure liquid protein (only the clear kind) for added protein. Make sure you <b>stop</b> drinking <b>30 minutes</b> before your next meal.
12:30 P.M.	Have 3 ounces of chicken salad made with low-fat mayo along with 2-4 whole grain crackers.
	Follow the <b>same guidelines</b> concerning beverage consumption as stated above.
6:30 P.M.	Have 2-3 ounces of turkey chili along with 2 ounces of soft cooked carrots.
	Wait <b>1 hour</b> before sipping on clear, non-carbonated, calorie-free, and sugar-free liquids. You can drink hot tea with a sugar substitute if you want to as well.
Evening Snack (optional)	Have 4 whole grain crackers along with 1 Laughing cow cheese (must be 150 calories or less!)

As you see, you are only consuming 3 meals per day and an optional evening snack when you advance to the regular diet. The daytime snacks are no longer necessary, for you should not be consuming any foods in between meals.

# Foods to Avoid during All Phases

- Tough/hard to chew meats (though this may be possible at a later time), Examples: dry chicken, turkey, pork, or beef
- ➤ High fat meats which contain unnecessary calories, Examples: meat with visible gristle/fat, bacon, and sausage
- Other high fat foods which contain unnecessary calories, Examples: shredded coconut, fried food, butter, margarine, ice cream, cakes, cookies, pies, regular mayonnaise, sour cream, cream cheese, salad dressing, gravy, fast food, chips, and foods cooked in Crisco, lard, or butter
- Foods that are difficult to digest, Example: untoasted bread
- Fibrous foods, Examples: segments of citrus fruit, celery, and corn
- Soda and carbonated beverages
- Alcohol of any kind
- Calorie-dense foods, Examples: granola and dried fruit
- All sugary foods



# **Common Protein Sources**

Food	Portion	Calories	Protein (g)
Beans, Canned, Baked	½ cup	62	4
Beans, Canned, Kidney	½ cup	56	4
Beef Eye of Round	1 ounce	47	7
Beef Top Loin	1 ounce	59	7
Cheese, American Fat-free	1 ounce	40	6
Cheese, Cottage. 1% Fat	½ cup	82	14
Cheese, Mozzarella, Part-skim	1 ounce	78	8
Cheese, Ricotta, Part-skim	½ cup	90	8
Chicken, white breast meat, no skin	1 ounce	46	7
Chicken, leg, no skin	1 ounce	54	7
Cod, white, baked	1 ounce	30	7
Crab, steamed	1 ounce	27	5
Egg, hard cooked	One	78	6
Flounder	1 ounce	21	7
Halibut	1 ounce	40	7
Ham. Lean, 5% fat	1 ounce	44	7
Hamburger. 90% lean	1 ounce	56	7
Lobster	1 ounce	26	5
Milk, skim	¼ cup	21	2

Milk, skim plus	½ cup	30	3
Peas, canned, chick	1/4 cup	67	4
Pork Tenderloin	1 ounce	47	7
Pork Loin Chop	1 ounce	57	7
Protein Powder	1 scoop	110	16-23
Salmon	1 ounce	52	7
Shrimp	1 ounce	28	6
Soybeans (edamame)	¼ cup	75	7
Soy Milk, plain	¼ cup	20	2
Soy Nuts	½ cup	202	15
Steak, sirloin, trimmed	1 ounce	55	9
Swordfish	1 ounce	44	7
Tempeh	1/4 cup	82	8
Texturized Soy Protein (TVP)	1/4 cup	30	5
Tofu	1/4 cup	47	5
Tuna, canned, in water	1 ounce	37	8
Turkey, white meat	1 ounce	35	7
Veal loin	1 ounce	50	7
Veal, top round	1 ounce	43	7
Yogurt, sugar-free, fat-free, frozen. vanilla	1/4 cup	40	4
Yogurt, Greek, no fruit, fat-free	¼ cup	34	5