Guide to Weight Loss after Sleeve Gastrectomy Surgery

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What is Vertical Sleeve Gastrectomy?

The Vertical Sleeve Gastrectomy is a surgical weight loss procedure that reduces the size of the stomach. Your surgeon will create a narrow tube stomach between your esophagus and pylorus. The new stomach will be about 1/3 the size of a full stomach. The excess portion of your stomach will be removed. Because the surgery reduces the size of the stomach, it reduces the amount of food you are able to eat and causes weight loss



Following surgery, weight loss occurs because:

- 1. The new stomach holds a much smaller amount of food
- 2. You will feel satisfied more quickly
- 3. Hormone changes may alter your hunger and satiety

As you follow the guidelines set out in this book, remember that the guidelines are meant to help you achieve your goals. Your goals may include maximizing your weight loss, eliminating disease (diabetes, high blood pressure), and minimizing complications (such as malnutrition, poor healing and unnecessary discomfort). It is our hope that by meeting your goals you are able to create a new, healthy lifestyle.

Lifestyle Goals

Sleeve gastrectomy surgery is the beginning of a new life. Your eating habits, meal timing and food behaviors will likely change dramatically. In addition, your physical activity and exercise patterns will become more important than ever before. As you prepare for surgery, start preparing yourself for these major life changes in your food and activity.

The guidelines outlined in this book will provide the tools you need for:

- Healing immediately following surgery
- Safe and maximal weight loss during the months following surgery
- Weight maintenance for a lifetime as you create healthy food habits

With so many different surgical weight loss procedures being offered, you may become confused by the various nutrition advice you receive. Please know that the Sleeve Gastrectomy procedure has specific nutrition guidelines developed by your surgeon. Always follow your own surgeon's nutrition directions. This booklet will also serve as the main tool for your individual nutrition needs.

The following sections will address your lifestyle keys following surgery.

Lifestyle Goals:

- 1. Small Volumes
- 2. Adequate fluids
- 3. Proper nutrition
- 4. Vitamin & mineral supplementation
- 5. Physical activity

Lifestyle Goal #1 - Small Volumes

Following surgery your new stomach will hold a much smaller amount. Because the new stomach is smaller there are a few things to consider when you eat and drink:

Liquids

Following surgery you will only be able to drink small sips of liquid. This means you will be drinking all throughout the day in order to stay hydrated. Sipping your liquids slowly can help to prevent the discomfort of taking too much fluid too quickly and overfilling the stomach. Even swallowing excess air can be uncomfortable for the new stomach. Prior to surgery you may practice taking very small sips.

Solid food

As you transition toward eating solid food, chewing becomes very important. Make it your goal to chew all of your food until it is toothpaste texture before swallowing. As you take time to chew your food, slow down with you meals. It should take you at least 20 minutes to eat each meal. If you eat too quickly your stomach may become overly full and cause complications and discomfort. Sit down at mealtimes to focus on chewing thoroughly. Set a timer or make a plan to sit undistracted for 30 minutes at each meal. Prior to surgery, you may practice taking small bites and eating slowly to adjust to this new habit.

Consistency

As you progress through the phases of the diet, the consistency of your food will change from liquids to pureed food and on to solid food. This change will happen gradually. Your surgeon will guide you through this progression.

Volume

The portion size of your food will also gradually increase. You will start by eating small meals (about $\frac{1}{4}$ cup). Gradually you will be able to increase the amount you eat. Many people are able to consume about 1 $\frac{1}{2}$ cups of food at a meal when they are several months out from surgery. This volume is about the size of half of a sandwich. Remember that the amount you are able to eat might change from day to day. Each person is different in the amount of food s/he is able to eat at meals. Do not worry if you are not able to eat 1 $\frac{1}{2}$ cups of food at every meal. Including several mini-meals during the day may help you to obtain enough nutrition from food.

As you transition through the diet phases, you will eventually be eating normal food again. The portions that you eat will remain relatively small, but you will find that you are able to tolerate most healthy foods.

Lifestyle Goal #2 – Adequate Fluids

Fluids are an essential part of your recovery following Sleeve Gastrectomy surgery. Your ability to keep hydrated is one of the things your surgeon will monitor.

Following surgery fluids are important because they:

- Prevent dehydration
- Eliminate waste products that form during weight loss

Your goal is to drink at least 64 ounces of fluid each day. This is a standard amount of fluid for most healthy adults. Sixty-four ounces is equal to 8 cups or 2 liters of fluid. Using a measuring cup may be helpful to ensure that you are meeting your daily goal. Do not limit your fluid. You may drink more than 64 ounces as you feel thirsty. Fluid is considered any beverage that melts in your mouth. For example, sugar free popsicles will melt in your mouth so they count as part of your fluid for the day.

The fluid you drink may come from several sources:

- Pure protein supplement drinks
- 8 ounces of fruit or vegetable juice (during phases 2 and 3 only)
- Nonfat, 1% or soy milk (during phase 3 and beyond)
- o Water
- Very low calorie beverages look for beverages with 20 calories or less
- Sugar free jello and sugar free popsicles
- Clear broth

Fluid and beverages should serve as hydration only. Fluid should not contain significant calories. Most of your beverages should contain less than 20 calories per serving. The only beverages with calories that you may consume are pure protein supplement drinks and milk. For maximal weight loss, avoid all other high calorie beverages. The beverages to avoid include:

- Fruit juices
- Smoothies (Jamba Juice, Robeks)
- o Milkshakes
- o Ice cream, sorbet, regular popsicles and sherbet
- Frappuccinos
- Eggnog and flavored milk (chocolate, strawberry milk)
- Sports drinks (Gatorade, Powerade, Vitamin Water)
- Regular sodas
- Fruit punch, lemonade, Tang, Kool-Aid
- Sweet tea (Snapple, Nestea, Arizona)
- Meal replacements (e.g. Slimfast, Boost, Glucerna)

Lifestyle Goal #3 – Proper Nutrition

Sleeve gastrectomy surgery is a tool that allows you to restrict your calories and lose weight. This tool does not work all by itself. In order to make your tool work most effectively, you will need to make healthy food choices everyday. You may even choose to avoid less healthy foods completely to help yourself lose weight. You may also desire to spend some time before surgery preparing yourself for these food changes.

Hopefully you will use this surgical tool to the best of its ability by working to build a healthy lifestyle. This includes choosing healthy foods from all of the food groups each day. The phases of the diet have been developed to encourage eating a variety of healthy foods. Over a lifetime, healthy balanced eating helps to maintain weight loss and prevent chronic diseases.

Carbohydrate Foods

Carbohydrates provide energy for our bodies to function. We would not survive without carbohydrates because they are the nutrient that our brain uses for energy. Carbohydrates are also needed to burn fat.

Immediately after surgery you will eat very little of the carbohydrate foods. As you transition through the diet phases, you will be able to slowly increase the amount of carbohydrate that you eat at each meal. During this transition, practice building good lifestyle habits by choosing carbohydrate with important nutrition.

Carbohydrate foods include starches and grains, fruit and vegetables, and milk. In addition, most sweets and desserts contain carbohydrates. Carbohydrate foods may contain either important nutrition (fiber, vitamins and minerals) or little nutrition (refined sugar), depending on which ones you choose. Most of the carbohydrate foods in your diet should come from fruit, vegetables, starches and milk. The best carbohydrate choices are found by following the food groups:

Fruit and vegetables should be your primary source of carbohydrates after sleeve gastrectomy surgery. They are key sources of vitamins and minerals; they are also relatively low in calories. Aim to vary the color of fruit and vegetables that you eat. Different colored fruit and vegetables provide more antioxidant variety. Remember that frozen fruit and vegetables provide the same nutrition as fresh ones. Aim to include fruit and/or vegetables at nearly every meal. Fruit should only be consumed after a protein has been eaten.

Starches and grains provide important nutrition, such as fiber, vitamins and minerals. The foods in this group include cereals, bread, rice, noodles, and crackers. Aim to include as many whole grains as you are able to tolerate. You may find that you have difficulty tolerating some starches after surgery. It may take time and practice for you to be able to eat these foods again. Be cautious when you try these foods for the first time. Remember to take small bites and chew these foods well. You may transition slowly back to eating these foods.

Milk is an important nutrient because it provides carbohydrate, protein, vitamin D and calcium. Low-fat buttermilk or yogurt may be substituted for milk because they provide similar nutrition. It is recommended that you drink skim or 1% milk and choose light yogurt. If lactose intolerance is an issue, you may also consume almond milk with calcium (unsweetened) or lactose-free products.

Following sleeve gastrectomy surgery, you may notice changes in how your body digests carbohydrate. Some carbohydrate foods may be more difficult to tolerate than others. High fiber carbohydrate foods, such as whole grains and vegetables, may be harder to digest and cause stomach cramping. To avoid discomfort, slowly increase your fiber intake by slowly increasing the portion of whole grains and vegetables you eat. Be cautious when you try these foods for the first time- take small bites and chew very well.

The carbohydrates that provide little nutrition (refined sugars) are best avoided after sleeve gastrectomy surgery. These foods are high in calories and contain few important nutrients, such as vitamins, minerals or fiber. Strictly monitor your intake of cakes, cookies, candy, chocolate, doughnuts, pastries, pies and other desserts. These foods should be eaten rarely – perhaps only a few times each year – and the portion sizes eaten should be very small. The more sweets, desserts and refined carbohydrates you eat, the less weight you will lose. By eating these foods, you also run the risk of protein malnutrition because you will not be receiving enough of the more important nutrients. Rice should be limited and may cause difficulty in digestion.

Fat Containing Foods

Like carbohydrate, our bodies cannot run without fat. Most people eat more than 60 grams of fat each day but, we only need about 5 grams of fat per day to keep our brain and nerves working. Fat is higher in calories than carbohydrate or protein, so limiting the amount of fat you eat will help with weight loss.

Not all fats are created equal. Fats are classified into 2 categories- heart healthy fats and saturated fats. Choosing heart healthy fats most of the time can help to prevent chronic diseases. These good fats are called monounsaturated and polyunsaturated fats. They include olive and canola oils, soft margarine spreads, avocado and seeds. Use these good fats in place of saturated fats most of the time. The saturated fats include butter, cream, bacon and sour cream. Remember that, for whichever type of fat you choose, only a small portion is needed. Aim for not more than 1 teaspoon of fat at each meal.

Following sleeve gastrectomy, be cautious when adding fat to your food – only a small amount is needed to flavor your smaller portion of food. Also, notice how the preparation method may add fat to your food. Foods that are sautéed or fried will be higher in fat.

Most breaded meats are higher in fat. Foods that are made with cream, such as alfredo sauce, are also higher in fat. Make a habit of choosing lower fat foods, like light mayonnaise and reduced fat salad dressings.

It is important to choose lower fat foods options to help promote sustained weight loss. Because high fat foods pack more calories, it is easy to consume too many calories from a small portion of these foods. So use these foods sparingly and eat appropriate portions.

Protein foods

Protein is an essential nutrient. In the body, protein functions in vital organs, enzymes, hormones, antibodies and fluid balance. It plays an especially important role following sleeve gastrectomy surgery because it:

- Helps your body heal from surgery
- Spares muscle mass
- Ensures healthy weight loss
- Helps prevent malnutrition

After sleeve gastrectomy surgery, protein will become the main focus of the food you eat. This focus on protein will last a lifetime. As you begin eating solid food, you will be told to always eat your protein foods first. A list of high protein foods is provided on page 39.

High protein foods mainly come from animal products. Meat, poultry, fish, eggs and some dairy products are good sources of protein. Protein is also found in some plant foods, such as soy products, dried beans, lentils and nuts. Your body is able to use protein that comes from animal products more efficiently than protein from plant foods. Animal protein is made up of the right proportion of building blocks (amino acids) for your body to use.

Pure Protein Supplement

Following surgery, you will not be eating solid food for about 2 months. So, you will take a pure protein supplement drink to ensure that you are getting enough protein until you begin eating again. You will take the protein drink for at least 4-5 months. Some people continue to take smaller amounts of protein supplement for many years after surgery.

Your goal for protein intake is at least 70-80 grams of protein per day.

A pure protein supplement means that the product has minimal fat and minimal carbohydrate. When you check the Supplement Facts label, look for products where one serving contains:

- At least 15 grams of protein per 8 oz. serving
- Less than 5 grams of fat per 8 oz. serving
- Less than 20 grams of carbohydrate per 8 oz. serving
- o 200 calories or less per 8 oz. serving

By doing this, you help to ensure that you are receiving adequate protein from the product, while minimizing the calories from too much fat and carbohydrate.

Pure protein supplements will come in powder form or as ready to drink beverages. Protein that comes in powder form may be mixed with water, milk (skim, 1% or soy milk), and very low calorie beverages (such as crystal light) to provide flavor variety. You may also add very low calorie flavorings to pure protein drinks, such as vanilla extract, sugar-free flavored syrups or unsweetened cocoa powder. Ready to drink protein tends to be more expensive than powder protein, though many people prefer the convenience of ready to drink products.

The source of protein will vary by product. Most pure protein supplements are made from casein or whey (cow's milk protein), egg white protein, pre-digested collagen protein, or soy protein. Each source of protein may have slight flavor differences. While soy is an acceptable protein, avoid using other plant based proteins (hemp or rice protein) because these proteins are not made up of the right building blocks (amino acids) for your body to use effectively.

Pure protein supplements are widely available. They may be purchased at:

- o Nutrition stores- such as GNC, Vitamin Shoppe and Max Muscle
- Grocery stores
- Drug stores
- o Health food stores- such as Trader Joes and Whole Foods
- Internet website- exercise caution with internet purchases and please be sure to choose reputable websites

Because adequate protein is essential, it is important to find several products that you enjoy and can use for the next 4 to 5 months. Make it your goal to find at least three to five products that you enjoy. Go out and taste products at various stores. Aim to taste 15 products or more. Keep in mind which flavors you enjoy (for example, chocolate, vanilla or fruit flavors). Also notice which textures you prefer. Some products are thick and creamy like a milkshake, while others are clear and look more like sports drinks. The best type of protein for you is the type that you will be able to drink everyday and enjoy!

Each protein product will vary in how concentrated it is. Some products will provide 60 grams of protein in 12 ounces of liquid. Other products may have 60 grams of protein in 36 ounces of liquid. All of the fluid that your pure protein drink provides will count toward your fluid goal of 64 ounces per day (see lifestyle key #2).

Before surgery be sure to:

- Taste many products and find 3-5 that you enjoy (both flavor and texture)
- Purchase a 2-3 weeks supply of these different products
- Avoid purchasing too much of any one product because your taste preferences may change after surgery

• Learn how to calculate the amount of product you need to reach your daily protein goal

Calculate Your Protein

Prior to surgery, it is important to calculate the amount of pure protein product you need to meet your daily protein goal. Do the following calculations for every pure protein supplement you purchase to ensure you will receive adequate protein daily.

The following is a step-by-step guide to calculating your pure protein supplement intake. If you have difficulty with these calculations at any time, please contact the outpatient dietitian for support.

- 1. Find the Nutrition Facts or Supplement Facts label on the pure protein product.
- 2. Determine the Serving Size at the top of the label (e.g. 1 scoop, 2 tablespoons, 1 bottle, 24 fluid ounces).
- 3. Note how many grams of protein are found in one serving of the product.
- 4. Divide the total protein required for one day (70-80 grams) by the grams of protein in one serving of the product.

This tells you the amount of product you need to meet your protein goal for the entire day.

5. Determine the total ounces of fluid provided by this pure protein supplement (usually 12-36 fluid ounces per day).

*For powder protein products, follow the mixing instructions listed on the container. If no specific guidelines are provided for your powder product, mix your total daily protein in 16 ounces of fluid.

6. Remember to sip on your protein supplement throughout the day. Take two to four ounces servings of your protein supplement at a time.

See the sample calculations on the following 2 pages.

Designer Whey Protein Powder

Supplement Facts

Serving Size 1 level scoop (~24g) Servings Per Container ~15

	Amount Per Serving	% Daily Value
Calories	90	
Calories from Fat	15	
Total Fat	1.5 g	2%
Saturated Fat	0.5 g	3%
Cholesterol	30 mg	10%
Total Carbohydrates	2 g	1%
Dietary Fiber	0 g	0%
Sugars	2 g	-
Protein	18 g	36%



From the Supplement Facts label:

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Serving size: 1 scoop Protein in 1 scoop: 18 grams

To calculate amount of protein product needed for the day:

Divide the total daily protein needed:	<u>70 to 80 gm</u>
by the grams of protein in 1 serving:	18 gm
$\underline{70} = 4$ scoops per day	to $\underline{80} = 4.5$ scoops per day

To calculate fluid provided by the protein supplement:

Directions for Mixing: mix each scoop of protein powder with 4 ounces of water. Four scoops of protein powder should be mixed to make 16 fluid ounces.

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Total Daily Fluid Provided by this Protein Supplement: 16 oz

Sip protein supplement throughout the day in two to four ounce servings.

Isopure Zero Carb – Apple Melon

Supplement Facts Serving Size 1 bottle (20 Servings Per Container	,	
	Amount Per Serving	% Daily Value
Calories	160	
Calories from Fat	0	
Total Fat	0	0%
Saturated Fat	0	0%
Cholesterol	0	0%
Total Carbohydrates	0	0%
Dietary Fiber	0	0%
Sugars	0	0%
Protein	40 g	80%



From the Supplement Facts label:

Serving Size: 1 bottle or 20 oz Protein in 1 bottle: 40 gm

To calculate amount of protein product needed for the day:

Divide the total daily protein needed: <u>60 to 70 gm</u> by the grams of protein in 1 bottle or 1 serving: 40 gm

 $\frac{70}{40}$ = 1 and $\frac{3}{4}$ bottles per day to $\frac{80}{40}$ = 2 bottles per day

To calculate fluid provided by the protein supplement:

Total fluid provided (1 bottle = 20 oz)

 $36 \text{ oz} (1 \frac{3}{4} \text{ bottles})$ to 40 oz (2 bottles)

Sip protein supplement throughout the day in two to four ounce servings.

Product Name & Flavor Examples	Protein Type	Serving Size	Protein gm/ serving	Carb gm/ serving	Fat gm/ serving	Servings for 60 gm protein	Serving for 70 gm protein	Total fluid/day
<u> </u>		5120	giii/ sei viiig	gill/ set vilig	giii/ sei ving	oo gin protein	70 gin protein	iiuiu/uay
Isopure (GNC) Frosty Grape	Ion exchange whey protein	20 oz	40 grams	0 grams	0 grams	$1\frac{1}{2}$ bottles	1 ³ / ₄ bottles	30-36 oz
Alpine Punch	isolate	20.02	40 grains	0 grains	0 grains	1 /2 000005	1 74 000005	30-30 OZ
Premier Nutrition	Milk protein, whey							
Protein (Costco)	concentrate, calcium	11 oz	30 grams	5 gram	3 grams	2 containers	2 1/3 containers	22-26 oz
Chocolate Shake	caseinate							
ABB Pure Pro Shake	Milk protein, whey	11	25		1	1.27	-	14.00
(Vitamin Shoppe)	isolate,	11 oz	35 grams	5 grams	1 grams	1 ³ / ₄ cans	2 cans	14-22 oz
Cookies and Cream	calcium caseinate							
High 5 Blend Protein	Whey concentrate &	1	26	1 ~~~~~	1	2 1/2	2	14 19
(Max Muscle)	isolate, soy, egg	1 scoop	26 grams	1 grams	1 gram	2 1/3 scoops	3 scoops	14-18 oz
Cappuccino	white, caseinate							
Worldwide Pure Protein	Calcium caseinate,							
(GNC, Trader Joe's)	milk protein	11 oz	35 grams	4 grams	1 gram	$1\frac{3}{4}$ cans	2 cans	14-22 oz
Banana Cream	concentrate							
Soy Protein Powder		2 scoops	25 grams	1 grams	1.5 grams	2 1/3 scoops	3 scoops	16 oz
(Trader Joe's)	Soy protein isolate	2 30000	25 grams	i granis	1.5 grains	2 1/5 3000ps	5 3000ps	10.02
Vanilla								
MaxPro (Max Muscle)	Whey	1 scoop	30 grams	4 grams	1 grams	2 scoops	2 1/3 scoops	12-16 oz
Orange Blast	protein							
Designer Whey		1 scoop	18 grams	2 grams	1.5 grams	3 1/3 scoops	4 scoops	16 oz
(Rite Aid, Trader Joe's)	Whey protein	1 scoop	ro granis		1.5 grains	5 175 scoops	4 scoops	10.02
Strawberry								













Lifestyle Goal #4 – Vitamin & Mineral Supplementation

Taking a daily vitamin-mineral supplement will be an important part of your routine following sleeve gastrectomy surgery for healing and good health. After surgery, you will not be eating enough food to provide these nutrients. Your body may also need extra amounts of these nutrients while you are losing weight.

You will take one multivitamin-mineral supplement everyday for the rest of your life to ensure good health and avoid nutrient deficiency. During the first 6 weeks following surgery this vitamin-mineral supplement must be chewable. You may use one of the following chewable multivitamins:

- Flinstones Complete
- Centrum Multivitamin and Multimineral Chewable Tablets (orange flavor)
- Kirkland Signature Children's Chewable Complete Multivitamin
- o One A Day Kids Scooby Doo Complete Multivitamin/Multimineral

After the first six weeks, when you are eating solid food again, you may switch to a tablet or capsule multivitamin. Examples of the tablets or capsule multivitamins that you may use are:

- Centrum Multivitamin Multimineral Supplement (Original A-Zinc formula)
- Kirkland Signature Daily Multivitamins and Minerals
- Nature Made Multi Complete
- One A Day Maximum

Your daily vitamin-mineral supplement is best absorbed with meals. You may take your multivitamin with either breakfast, lunch, or dinner as long as it is taken on a daily basis.

In addition to the daily multivitamin, you will need to take vitamin B12. After the surgery, you will not be able to absorb vitamin B12 through your stomach. It must be taken by an alternative route. Vitamin B12 may be given by injection at the doctor's office or as a "sublingual" or "under-the-tongue" supplement. If you take the sublingual supplement, you may take:

- o 500 mcg vitamin B12 supplement everyday
- o 1000 mcg vitamin B12 supplement 2-3 days per week

Continue taking your vitamin and mineral supplements as directed by your surgeon. Do not stop taking your supplements, no matter how well you may feel.

Lifestyle Goal #5 – Physical Activity

Physical activity is essential after sleeve gastrectomy surgery. It helps with:

- Weight loss and weight maintenance
- Building endurance; Improving muscle mass
- Increasing energy level and strength
- Lowering cholesterol, blood pressure and blood sugar
- o Lowering risk of heart disease, stroke and diabetes
- Strengthening heart and bones
- Improving circulation
- Decreasing stress; Beating the blues
- Keeping your body and joints flexible
- Maintaining skin elasticity

Following surgery, you will start by doing 20 minutes of physical activity daily. This will begin even while you are in the hospital. Over time you will increase to 30 minutes of physical activity everyday. Your surgeon will direct you individually when to increase activity and which types of activity are safe for you. Start with activities that are comfortable for you. Most people choose to do walking for their physical activity, especially immediately following surgery.

Aim to incorporate a minimum of 150 minutes per week to a goal of 300 minutes per week including strength training 2-3 times a week. Below are sample activities that can be completed:

- Walking (15-20 minute miles or 3-4 miles per hour)
- Golf (without a cart)
- Swimming or cycling (leisurely)
- o Yoga
- Exercise equipment (rowing machine, elliptical, stair climber)

When you are well healed from surgery, you may begin light weight training. This usually happens 3 to 6 weeks after surgery. Your surgeon will direct you when it is safe to begin.

And remember that all activity is important- including everyday chores. Housecleaning, laundry, gardening, dog walking, and climbing stairs can help you achieve your physical activity goals. The best type of physical activity for you is the type you will do daily and enjoy.

Nutrition Concerns

Some people may experience the following nutrition concerns. If you experience any of these, you may use this list to help treat your symptoms. Call your doctor immediately if you have persistent nausea, vomiting, constipation or diarrhea.

Concern	How to deal with it
Nausea and Vomiting	 Avoid foods that are spicy, greasy and fried Avoid sweets, desserts and sweetened beverages Avoid eating or drinking too fast Chew slowly and thoroughly; sip beverages slowly Go back one phase in your diet- you may have advanced too quickly to the next diet stage before your body was ready
Dehydration	 Drink at least 64 oz of fluid daily Make a fluid schedule to help you count how much you are drinking
Diarrhea	 Avoid greasy and fatty foods; avoid high fiber foods Avoid eating tough skins on fruits and vegetables Try decreasing dairy products or use low-fat Lactaid milk Be sure to drink liquids between meals, not with them
Constipation	 Include foods with moderate amounts of fiber in your meals (fruits, cooked vegetables, cereals, whole grains) according to the foods allowed in your diet phase Drink at least 64 oz of fluid daily Exercise daily
Excessive Gas	 Avoid or limit dairy products, use low-fat Lactaid milk Limit legumes (dried beans and peas) Limit gas producing vegetables (broccoli, cauliflower, Brussels sprouts and onions) Avoid foods containing sugar alcohols (mannitol, sorbitol) Avoid carbonated beverages & do not use straws

Frequently Asked Questions

Will I experience weight loss plateaus?

Plateaus are normal during long term weight loss. They may result from:

- Eating too few calories, which causes the body to go into starvation mode
- Eating too many calories
- Not exercising enough or needing to increase your physical activity as weight loss progresses

To reduce the duration of a plateau, increase your time spent in physical activity. Remember that your body may be changing, even though the scale stays the same. So, take body measurements to note how your body is changing in other ways.

Is it normal to experience hair loss?

Hair loss is common with rapid weight loss and is related to hormonal changes in the body. Hair loss may also be caused by protein and iron deficiencies. Thinning of the hair may begin 3 months after surgery and could continue for 6 months or more. Increasing your protein intake may help decrease hair loss. Also, make sure you are taking your vitamin-mineral supplement as directed. Hair loss does tend to grow back.

What are sugar alcohols?

Sugar alcohols are low calorie sweeteners used in some diet products. Common types are maltitol, mannitol, sorbitol and xylitol. If a food product contains them, sugar alcohols are listed on the Nutrition Facts label right below sugar. Be cautious with your intake of sugar alcohols. They can tend to have a laxative effect similar to prunes, beans or other high fiber foods.

Can I use meal replacements for my protein supplement?

Meal replacements, such as Optifast, Slimfast and Glucerna contain too much fat and carbohydrate to be used for your protein supplements. When choosing a pure protein supplement, look for a product with adequate protein while having limited fat and limited carbohydrate. By limiting the fat and carbohydrate you will be limiting the overall calories to promote weight loss.

What beverages can I drink after surgery?

Very low-calorie beverages that count toward your daily fluid goal include:

- Sugar free flavored waters (crystal light & sugar free Kool-Aid)
- o Herbal teas
- Sugar free jello & sugar free popsicles
- Fat free broth
- Sugar free sports drinks (propel water)

Look for beverages with less than 20 calories per serving. Follow your diet phase for more beverage options.

What beverages should I avoid after surgery?

After surgery, avoid the following beverages for 2-3 months because they may irritate the lining of the new stomach:

- Caffeinated beverages (coffee, black tea, energy drinks)
- Carbonated beverages (soda, seltzer water)
- Acidic beverages (decaffeinated coffee, pineapple juice, orange juice)

How does alcohol fit in?

You will avoid alcohol for the 1 year after surgery. Even long term, it is recommended that you avoid beverages with alcohol for the following reasons:

- Alcohol is a diuretic and will dehydrate your body
- It is rich in calories, especially when added to mixers, juice and sodas. The calories from most alcohol beverages range from 100-250 per drink. Some mixed drinks contain more than 400 calories per serving.
- Alcohol may cause stomach irritation, resulting in abdominal pain and cramping
- Alcohol may be absorbed differently and may have a greater effect on your liver

Diet Phase Progression

Following surgery, your diet will progress along the following phases. Your surgeon will direct you when to advance to each new phase.

Phase 1 – Clear liquid

Days 1-2 Sip of water and diluted juice while you are in the hospital.



Phase 2 – Clear liquid and Protein Supplement

Weeks 1-2

Continue sipping water and diluted juice. Add pure protein supplement with a chewable vitamin-mineral supplement.

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Phase 3 – Full liquidWeeks 3-4Begin eating very small meals, using dairy products and cream of wheat.

Phase 4 – Pureed & Mashed

Weeks 5-6

Increase the consistency of your food to mashed potato texture. Focus on high protein foods. Avoid drinking liquids with meals.

Phase 5 - Regular

Weeks 7-16

Slowly transition from soft to regular foods. Slowly increase the amount of food you eat at each meal. Focus on high protein foods. As you eat more protein foods, you may decrease the amount of pure protein supplement you take.

Phase 1 – Clear Liquid

Days 1-2

You will follow phase 1 while in the hospital. The nursing staff will provide you with water and diluted juice. They will also provide 1 ounce medicine cups for you to drink from. Using the medicine cups may help you keep track of how much you are drinking. Over the day focus on taking adequate fluids. Your ability to keep hydrated is one of the things your surgeon will monitor to decide if you are ready to go home from the hospital. Your surgeon may instruct you to follow phase 1 for several days even after you go home from the hospital

Purpose:

- Tolerate sips of water
- o Drink enough fluids to keep yourself hydrated

Keys:

1. Fluids

Aim to drink 4 ounces of fluid per hour (1 ounce every 10-15 minutes) for a total of 64 oz. fluids daily. Sip your fluids slowly. Do not take any large gulps of fluid because this will cause discomfort. You may use water or diluted juice. Avoid using straws to prevent swallowing air.

Phase 2 – Clear Liquid and Protein Supplement

Weeks 1-2

Purpose:

- Drink enough fluid to maintain hydration
- Consume adequate protein from a pure protein supplement drink

Keys:

1. Fluids

Aim to drink 64 ounces of fluid per day. Sip your fluids slowly. In the beginning it may take you one hour to drink 4 ounces of fluid. Aim to drink 4 to 6 ounces of fluid for every hour that you are awake. This fluid will come from your pure protein supplement, juice and other beverages. The other beverages you drink may include:

- o Water
- Very low calorie flavored waters (crystal light or sugar free Kool-Aid)
- Sugar-free jello & Sugar-free popsicles
- o Herbal tea
- Very low calorie sports drinks (propel water)
- o Broth

2. Protein

Begin taking 70-80 grams of protein per day from your pure protein supplement drink. Take small amounts of your protein drink throughout the day.

3. Juice

You may drink a small amount of juice during phase 2. Limit your intake to only 8 ounces per day of a clear liquid juice to provide your body with carbohydrate. Look for apple, cranberry or grape juice. Sip your juice throughout the day.

4. Vitamins & Minerals

Begin taking your chewable vitamin-mineral supplement when directed by your surgeon.

Phase 2 – Sample Schedule

This sample schedule provides a structured framework for drinking adequate fluids. Avoid drinking from 2 ounce shot glasses during this phase. Aim to drink from measured 8 or 12 ounce glasses. This will help you transition back to drinking normally.

Very low calorie beverages listed on the previous page may be used in place of water on this schedule. These beverages will help to provide some variety.

Sample Home Schedule		S	ample Work Schedule
7:00 AM	2 ounces water	7:00 AM	2 ounces Protein Supplement
7:30 AM	2 ounces Protein Supplement	7:30 AM	2 ounces Protein Supplement
	with multivitamin		with multivitamin
8:00 AM	2 ounces water	8:00 AM	2 ounces juice
8:30 AM	2 ounces juice	8:30 AM	2 ounces water
9:00 AM	2 ounces water	9:00 AM	2 ounces water
9:30 AM	2 ounces Protein Supplement	9:30 AM	2 ounces water
10:00 AM	2 ounces water	10:00 AM	2 ounces juice
10:30 AM	2 ounces water	10:30 AM	2 ounces water
11:00 AM	2 ounces water	11:00 AM	2 ounces water
11:30 AM	2 ounces Protein Supplement	11:30 AM	2 ounces water
12:00 PM	2 ounces water	12:00 PM	2 ounces Protein Supplement
12:30 PM	2 ounces juice	12:30 PM	2 ounces Protein Supplement
1:00 PM	2 ounces water	1:00 PM	2 ounces water
1:30 PM	2 ounces Protein Supplement	1:30 PM	2 ounces water
2:00 PM	2 ounces water	2:00 PM	2 ounces water
2:30 PM	2 ounces water	2:30 PM	2 ounces water
3:00 PM	2 ounces water	3:00 PM	2 ounces juice
3:30 PM	2 ounces Protein Supplement	3:30 PM	2 ounces water
4:00 PM	2 ounces water	4:00 PM	2 ounces water
4:30 PM	2 ounces juice	4:30 PM	2 ounces water
5:00 PM	2 ounces water	5:00 PM	2 ounces water
5:30 PM	2 ounces Protein Supplement	5:30 PM	2 ounces Protein Supplement
6:00 PM	2 ounces water	6:00 PM	2 ounces Protein Supplement
6:30 PM	2 ounces water	6:30 PM	2 ounces water
7:00 PM	2 ounces water	7:00 PM	2 ounces juice
7:30 PM	2 ounces Protein Supplement	7:30 PM	2 ounces water
8:00 PM	2 ounces water	8:00 PM	2 ounces Protein Supplement
8:30 PM	2 ounces juice	8:30 PM	2 ounces Protein Supplement
9:00 PM	2 ounces water	9:00 PM	2 ounces water
9:30 PM	2 ounces Protein Supplement	9:30 PM	2 ounces water
10:00 PM	2 ounces water	10:00 PM	2 ounces water

Phase 3 – Full Liquid

Weeks 3-4

Purpose:

- Tolerate thicker liquids and semi-solid food items
- Begin eating small meals

Keys:

1. Fluids

Aim to drink 64 ounces of fluid per day. Sip your fluids slowly. As the days pass, you will be able to drink fluid more normally – taking liquid more quickly than during phase 2. Your fluid will come from your protein supplement, juice, water and other very low calorie beverages.

2. Protein

Continue taking 70-80 grams of protein per day from your pure protein supplement drink. Drink of your protein throughout the day.

3. Juice

You may drink a small amount of juice during phase 3. Limit your intake to only 8 ounces per day of any pulp-free fruit or vegetable juice to provide your body with carbohydrate. Sip your juice throughout the day. Be cautious of highly acidic juices, such as orange, pineapple or tomato juice.

4. Meals

You will begin to eat 3 meals per day. Aim to eat 2 fluid ounces or $\frac{1}{4}$ cup at each meal. You meals will be mostly liquids. You may use the following items to make up your meals:

- Skim or 1% milk
- Soy milk (plain or vanilla)
- Fat-free, no-sugar-added pudding
- Thin cream of wheat, rice cereal, or grits (plain)
- Fat-free, light yogurt (smooth texture, no chunks)
- Strained soup (cream or broth based)

5. Vitamins & Minerals

Continue taking your chewable multivitamin, as directed by your surgeon.

6. Physical activity

You may increase to 30 minutes of moderate activity daily, as directed by your surgeon.

Phase 3 – Sample Schedule

Please note the 2 ounce (1/4 cup) samples meals inserted in the schedule. You may take your chewable multivitamin with one of these meals. Very low calorie beverages may be used in place of water on this schedule.

Sa	ample Schedule Home	Sa	mple Schedule Work
7:00 AM	2 ounces water	7:00 AM	2 ounces water
7:30 AM	Full Liquid Meal	7:30 AM	Full Liquid Meal
,	2 oz vanilla soy milk		2 oz thin cream of wheat
	with multivitamin		with multivitamin
8:00 AM	4 ounces water	8:00 AM	4 oz Protein Supplement
9:00 AM	4 ounces water	9:00 AM	4 ounces water
10:00 AM	2 ounces juice	10:00 AM	2 ounces juice
	2 ounces water		2 ounces water
11:00 AM	4 ounces Protein Supplement	11:00 AM	4 ounces water
12:00 PM	2 ounces water	12:00 PM	2 ounces water
12:30 PM	Full Liquid Meal	12:30 PM	Full Liquid Meal
	2 oz strained broth soup		2 oz fat-free, light yogurt
1:00 PM	4 ounces water	1:00 PM	4 oz Protein Supplement
2:00 PM	4 ounces Protein Supplement	2:00 PM	4 ounces water
3:00 PM	4 ounces water	3:00 PM	4 ounces juice
4:00 PM	4 ounces juice	4:00 PM	4 ounces water
5:00 PM	4 ounces Protein Supplement	5:00 PM	4 ounces water
6:00 PM	2 ounces water	6:00 PM	2 ounces water
6:30 PM	Full Liquid Meal	6:30 PM	Full Liquid Meal
	2 oz no-sugar-added pudding		2 oz strained cream soup
7:00 PM	4 ounces water	7:00 PM	4 oz Protein Supplement
8:00 PM	2 ounces juice	8:00 PM	4 ounces water
9:00 PM	4 ounces water	9:00 PM	2 ounces juice
10:00 PM	4 ounces Protein Supplement	10:00 PM	4 oz Protein supplement

Phase 4 – Pureed & Mashed Foods

Weeks 5-6

Purpose:

- o Tolerate semi-solid and soft foods
- Increase the texture of the food you are able to eat

Keys:

1. Fluids

Aim to drink 64 ounces of fluid per day. Sip your fluids slowly. Your fluid will come from your protein supplement, water and other calorie-free beverages.

Avoid drinking fluids with your meals – do not drink for 30 to 60 minutes after you finish the meal. This will help prevent discomfort and help you to feel more satisfied by what you have eaten.

2. Protein

Continue taking 70-80 grams of protein per day from your pure protein supplement drink. Drink your protein throughout the day.

3. Meals

You will eat 3 meals per day. Aim to eat 2 fluid ounces or ¹/₄ cup at each meal. Within each meal, eat 1 fluid ounce or 2 tablespoons of high protein food. Eat this high protein food first. You meals should use mashed potato or applesauce texture foods.

At mealtimes, eat slowly and stop eating at the first sign of fullness. Do not worry if you are not able to eat your whole meal. Gradually you will be able to tolerate more food at each meal. Plan time for your meals and enjoy your food. Introduce new foods gradually. Try one new food at a time to ensure that you tolerate it.

4. Vitamins & Minerals

Continue taking your chewable multivitamin, as directed.

5. Physical activity

Continue 30 minutes of physical activity daily, as directed by your surgeon.

Phase 4 – Sample Meals

Aim to eat 2 fluid ounces (¹/₄ cup) per meal. The first 1 ounce (2 tablespoons) that you eat should be high protein food.

The following chart contains sample meals that you may use. Be creative, using herbs and seasoning to help flavor your small meals.

Breakfast			
High protein food (2 tablespoons)	Mashed, soft cooked egg	2% cottage cheese	Low-fat ricotta cheese
Other food (2 tablespoons)	Oatmeal	Canned, chopped pears	Cream of wheat
Lunch			
High protein food (2 tablespoons)	Mashed or pureed soft cooked lentils	Pureed turkey	Smooth vegetarian refried beans
Other food (2 tablespoons)	Mashed carrots	Mashed potato	Unsweetened applesauce
Dinner			
High protein food (2 tablespoons)	Pureed chicken	Mashed or pureed soft tofu	Finely mashed tuna with light mayonnaise
Other food (2 tablespoons)	Mashed peaches	Fat-free, light yogurt	Mashed banana

Phase 4 – List of Foods to Use

Food Group	Foods to use	Tips
Meat and high protein foods - Use 2 tablespoons of high protein food at each meal	 - 2% cottage cheese - Low-fat ricotta cheese - Mashed, soft cooked egg - Pureed lean meat, poultry, fish - Smooth vegetarian refried beans - Smooth pureed beans or lentils (use a food processor and puree to a smooth texture) - Mashed soft tofu - Stage 2 baby food meats 	 Always eat protein foods first Choose low-fat or lean protein foods Avoid adding fats (butter, oil, sour cream, etc) to your food. If you do use these, add them in very small amounts (1/8 teaspoon only) Be cautious with spicy or highly seasoned foods
Starches, grains and starchy vegetables	 Cream of wheat, rice cereal or grits Oatmeal Mashed potato Mashed sweet potato or yam Mashed winter squash (acorn or butternut squash, pumpkin) Mashed green peas 	 Choose plain, unflavored cereals Use cinnamon and/or Splenda to flavor your food Avoid using extra fats (butter, oil). If you use them, add small amounts (1/8 teaspoon only) Avoid adding sugar (white or brown) to your food
Fruit	 Unsweetened applesauce (no-sugar-added) Soft mashed banana Stage 2 baby food fruits Chopped soft fruit (canned is best) 	 Choose canned fruit packed in juice (not heavy syrup) Avoid eating the seeds and skins of fruit (e.g. apple peels) Do not use dried fruit
Vegetables	 Mashed carrots Mashed soft vegetables Stage 2 baby food vegetables Mashed crushed tomatoes without seeds 	 Avoid eating the seeds and tough skins of vegetables (e.g. tomato, corn, celery) Be cautious with gas-prone vegetables (broccoli, cabbage, Brussels sprouts)
Dairy	Fat-free, light yogurtFat-free, no-sugar-added pudding	- Avoid liquids with your meals. This means limiting milk and soymilk at meal times

Phase 5 – Soft and Regular Foods

Weeks 7-16

Purpose:

- Increase the texture of the food you are able to eat from soft foods onto regular consistency food
- Slowly increase the amount or quantity of food you are able to eat at each meal
- Learn to eat balanced, healthy meals. Eat from each of the food groups daily (protein, starch, fruit, vegetable, dairy)
- Develop good food habits and behaviors

Phase 5 is a long transition phase that is broken down into sections. Over the next 10 weeks you will be trying new foods and eating larger quantities to transition back to normal eating. This is a more independent phase. Your surgeon may allow you to increase your portions sizes on your own, as directed by this book. Your surgeon will likely not advance you to each new section as he may have done for the prior phases. Choose your foods wisely and start forming healthy habits.

To help you form good food habits and behaviors:

- Cut your food into small pieces and chew well before you swallow.
- Try one new food at a time. If it does not agree with you right off, stay away from that food for a few weeks. You may try that food again later. Sometimes healthy, high-fiber foods require some adjustment time.
- Enjoy your food and eat slowly. It should take you 20-30 minutes to eat each meal. Stop eating at the first sign of fullness. Do not worry if you cannot finish the whole meal. Gradually, you will be able to eat more at each meal.
- Develop the routine of planning and preparing meals ahead. Make time to eat and sit down to enjoy your meals. Pick a relaxing environment for eating.
- Avoid grazing throughout the day. This can lead to extra calorie intake. If you do have snacks, make them structured. Portion out your snacks in a bowl or on a plate, instead of eating out of the food container. Always include protein with snacks.
- Always eat your protein foods first because these are the most important part of the meal. Follow your protein foods with fruit, vegetables, and dairy products, and/or starches.

Phase 5 – Weeks 7-10

Keys:

1. Fluids

Aim to drink 64 ounces of fluid per day. Sip your fluids slowly. Your fluid will come from your protein supplement, water and other calorie-free beverages.

Avoid drinking fluids with your meals – do not drink for 30 to 60 minutes after you finish the meal. This helps to prevent discomfort and helps you feel more satisfied by what you have eaten.

2. Protein

Continue taking 70-80 grams of protein per day from your pure protein supplement drink. Drink your protein throughout the day.

3. Meals

You will eat 3 meals per day. Aim to include one ounce $(\frac{1}{4} \text{ cup})$ of meat or high protein food at each meal – eat this high protein food first. Beyond your protein foods, eat until you are just satisfied at each meal ($\frac{1}{4}$ to $\frac{1}{2}$ cup of other foods).

Start by choosing foods that are soft in texture- easy to eat, chew and digest. These foods are usually low in fiber. Introduce new foods to your diet gradually. Try one new food at a time to ensure that you tolerate it.

4. Vitamins & Minerals

You may switch to taking a tablet or capsule vitamin-mineral supplement, instead of a chewable. Continue taking your multivitamin everyday.

5. Physical activity

Continue 30 minutes of physical activity daily, as directed by your surgeon. Add light weight training when directed by your surgeon.

Phase 5 – Weeks 7-8 Sample Meals

The first $\frac{1}{4}$ cup that you eat should be a high protein food. One ounce of meat or high protein food equals $\frac{1}{4}$ cup. You may aim to eat a total of $\frac{1}{2}$ cup of food per meal.

The following chart contains sample meals that you may use. Be creative and use herbs and seasoning to help flavor your meals. Eat the foods that you like.

Breakfast			
High protein food (¼ cup or 1 oz)	Poached egg	2% cottage cheese	Thinly sliced deli ham
Other food		Crushed	
(¼ cup)	Oatmeal	pineapple	Cream of wheat
Lunch			
High protein food (¼ cup or 1 oz)	Tuna made with light mayonnaise	Thinly sliced deli turkey meat	Egg salad made with light mayonnaise
Other food			
(¼ cup)			
	2-3 Crackers	Diced peaches	Light yogurt
Dinner			
High protein food (¼ cup or 1 oz)	Thinly sliced deli chicken meat	Soft cooked tofu	Lean meatball(s)
Other food			
(¼ cup)		Cooked green	Mashed potatoes
	Peeled apple	beans	musiled politices

Phase 5 – Weeks 9-10 Sample Meals

The first $\frac{1}{4}$ cup that you eat should be a high protein food. One ounce of meat or high protein food equals $\frac{1}{4}$ cup. You may aim to eat a total of $\frac{3}{4}$ cup of food per meal.

The following chart contains sample meals that you may use. Be creative and use herbs and seasoning to help flavor your meals. Eat the foods that you like.

Breakfast			
High protein food (¼ cup or 1 oz)	Scrambled egg	Low-fat ricotta cheese	Canadian bacon
Other foods (½ cup)	Cornflakes cereal with nonfat milk	Cantaloupe & honeydew melon	Plain grits
Lunch			
High protein food (¼ cup or 1 oz)	Reduced-fat, smooth peanut butter (1 Tbsp only)	Thinly sliced deli turkey meat	Chicken salad made with light mayonnaise
Other foods (½ cup)	Peeled apple	Peeled cucumber	Light yogurt
Dinner High protein food (¼ cup or 1 oz)	Lean meatball(s)	Soft cooked tofu	Vegetarian refried beans
Other foods (½ cup)	Sweet potato & cooked zucchini	Cooked green beans & bell peppers	Baked tortilla chips and mild salsa

Phase 5 – Weeks 11-14

Keys:

1. Fluids

Aim to drink 64 ounces of fluid per day. Sip your fluids slowly. Your fluid will come from your protein supplement, water and other calorie-free beverages.

Avoid drinking fluids with your meals – do not drink for 30 to 60 minutes after you finish the meal. This helps to prevent discomfort and helps you feel more satisfied by what you have eaten.

2. Protein

When you are able to eat more protein from food (about 2 ounces or $\frac{1}{2}$ cup per meal) you may decrease your pure protein supplement drink to just 40 grams of protein per day.

3. Meals

You will eat 3 meals per day. You should include 2 ounces ($\frac{1}{2}$ cup) of meat or high protein food at each meal – eat this high protein food first. Beyond your protein foods, eat until you are just satisfied at each meal ($\frac{1}{4}$ to 1 cup of other foods).

Adding one new food at a time, you may slowly increase the amount of fresh and regular foods you eat. This includes whole grains, fresh fruit and raw vegetables. Keep food moist and tender; this will help you tolerate your food better.

You may want to break up your meals to include 3 meals and 2-3 snacks per day. This may help you to eat enough protein food. Always include a high protein food with each snack.

4. Vitamins & Minerals

Continue taking your vitamin-mineral supplement as directed.

5. Physical activity

Continue 30 minutes of physical activity daily, as directed by your surgeon. Include light weight training, as directed by your surgeon.

Phase 5 – Weeks 11-12 Sample Meals

Aim to eat 2 ounces or $\frac{1}{2}$ cup of high protein food at each meal. Each ounce of meat or high protein food equals $\frac{1}{4}$ cup. You may aim to eat a total of 1 cup of food per meal.

At this point you may want to have smaller meals with snacks in between. Make your snacks structured and always include a high protein food. Aim to eat at least 6 ounces (1 $\frac{1}{2}$ cups) of high protein food everyday- whether you eat snacks or not.

Breakfast			
High protein food (½ cup or 2 oz)	2 egg omelet	2% cottage cheese	Smoked salmon
Other foods (¹ / ₂ cup)	with sautéed vegetables	Toast with no-added-sugar jam	Light yogurt
Lunch			
High protein food (½ cup or 2 oz)	Tuna made with light mayonnaise	½ veggie burger patty	Tender, skinless chicken breast
Other foods (½ cup)	Small bread roll or crackers	Chopped strawberries	Noodles & marinara sauce
Dinner			
High protein food (½ cup or 2 oz)	Moist pork loin	Baked white fish	Edamame (soy beans)
Other foods (½ cup)	Baked potato & asparagus	Steamed green beans & carrots	Rice crackers and mandarin oranges
Snacks	¹ / ₄ cup low-fat	¹ / ₂ mozzarella	1 Tbsp reduced-fat
.	cottage cheese	string cheese	smooth peanut butter
Include a high protein food	¹ / ₄ cup peaches	¹ / ₄ cup sliced apple	2 crackers

Phase 5 – Weeks 13-14 Sample Meals

Aim for the first 2 ounces or $\frac{1}{2}$ cup that you eat to be high protein foods. Each ounce of meat or high protein food equals $\frac{1}{4}$ cup. You may aim to eat a total of 1 $\frac{1}{4}$ cup of food per meal.

At this point you may want to have smaller meals with snacks in between. Make your snacks structured and always include a high protein food. Aim to eat 6 ounces ($1 \frac{1}{2}$ cups) of high protein food daily- whether you eat snacks or not.

Breakfast				
High protein food (½ cup or 2 oz)	2 poached eggs	Canadian bacon	2 Tbsp reduced-fat smooth peanut butter	
Other foods (¾ cup)	Rice Krispies with 1% milk	Plain oatmeal with splenda & cinnamon	Eggo waffle	
Lunch				
High protein food (½ cup or 2 oz)	½ turkey burger patty	Chicken salad with light mayonnaise	Cooked tofu	
Other foods (¾ cup)	Baked chips & fruit	Salad greens with reduced-fat dressing	Stir fry vegetables	
Dinner				
High protein food (½ cup or 2 oz)	Baked salmon with dill	Tender roasted chicken	Lean meatballs	
Other foods (¾ cup)	Couscous & grilled vegetables	Baked yams & spinach salad	Egg noodles & mixed vegetables	
Snacks	¹ / ₂ protein bar –	6 oz Ralphs brand	8 oz skim milk	
Include a high	about 100 calories	Carb Master fruit		
Include a high protein food	(Luna, Designer Whey, Adkins)	yogurt		

Phase 5 – Weeks 15-16

Keys:

1. Fluids

Aim to drink 64 ounces of fluid per day. Sip your fluids slowly.

Avoid drinking fluids with your meals – do not drink for 30 to 60 minutes after you finish your meals. This helps to prevent discomfort and helps you feel more satisfied by what you have eaten.

2. Protein

You may decrease your pure protein supplement intake to 20-30 grams of protein per day. Continue taking this 20-30 grams of pure protein supplement until your weight loss is complete.

Make sure you are able to eat 3 ounces $(\frac{3}{4} \text{ cup})$ of high protein food at each meal or 9 ounces (2 $\frac{1}{4} \text{ cups}$) of high protein food total for the day in addition to your pure protein supplement shake.

3. Meals

You will eat 3 meals per day. Aim to include 3 ounces $(\frac{3}{4} \text{ cup})$ of meat or high protein food at each meal – eat this high protein food first. Beyond your protein foods, eat until you are just satisfied at each meal ($\frac{1}{4}$ to 1 cup of other foods).

You may want to break up your meals to include 3 meals and 2-3 snacks per day. This may help you eat enough protein from food sources. Continue adding new healthy foods to your routine, one at a time. Enjoy your food and eat slowly. Always stop eating at the first sign of fullness.

4. Vitamins & Minerals

Continue taking your vitamin-mineral supplement, as directed.

5. Physical activity

Continue 30 minutes of physical activity daily, as directed by your surgeon. Include light weight training, as directed by your surgeon.

Phase 5 – Weeks 15-16 Sample Meals

Aim for the first 3 ounces or $\frac{3}{4}$ cup of every meal to be high protein foods. Each ounce of meat or high protein food equals $\frac{1}{4}$ cup. You may aim to eat 1 $\frac{1}{2}$ cups of food per meal.

If you are not able to eat 1 ½ cups of food per meal, plan for smaller meals with snacks in between. Have structured snacks and always include a high protein food. Aim to eat 9 ounces (2 ¼ cups) of high protein food daily- whether you eat snacks or not.

Breakfast			
High protein food (¾ cup or 3 oz)	2 egg omelet with ¼ cup low-fat shredded cheese	2% cottage cheese	Chopped ham & low-fat cheese
Other foods (¾ cup)	Cantaloupe & honeydew melon	Cheerios & 1% milk	On a toasted English muffin
Lunch High protein food (¾ cup or 3 oz)	1 lean hamburger patty (3 oz)	Sliced turkey deli meat (for sandwich)	Vegetarian refried beans with low fat shredded cheese
Other foods (¾ cup)	Green salad with light dressing	On toasted bread with mustard	Baked tortilla chips & salsa
Dinner High protein food (¾ cup or 3 oz)	Grilled Halibut	Roasted chicken	Tender steak
Other foods (¾ cup)	Rice pilaf & snap peas	Peeled cucumber & tomato salad	Mashed potato & cooked carrots
Snacks Include a high protein food	¹ / ₂ cup pudding (low-fat, no-sugar- added) with small amount of protein powder mixed in	1 oz sliced turkey meat With 2-3 crackers	1-2 Tbsp reduced- fat, smooth peanut butter Sliced apple

Phase 5 – Transition from Softer to Regular Foods

As you transition back to normal eating, there are certain foods to be cautious of because these foods can be more difficult to tolerate. Each person is different in the foods that he or she tolerates. Food intolerance may cause general discomfort such as bloating, gas or nausea.

Listen to how your body responds as you try new foods. Try one new food at a time. If a food causes you discomfort, avoid that food for a short time. You may try that food again later. Be sure to take small bites and chew your food well to help you tolerate it.

Take caution when you try the following foods for the first time. These are foods may be the most difficult to tolerate, though many people are eventually able to eat these foods.

- Sticky foods (soft or doughy carbohydrates) Bread, rice and pasta Raisins, prunes and dried fruit
- High fiber foods

Orange and grapefruit membranes Dried beans, peas and lentils Whole grains

• Cruciferous vegetables

Cabbage, cauliflower, broccoli, squash and brussels sprouts may cause uncomfortable gas

Crunchy foods Granola and coarse bran cereal Raw vegetables like salad greens Nuts and poncorn, coconut, crunchy pear

Nuts and popcorn, coconut, crunchy peanut butter Chips and crackers

$\circ \quad \text{Tough foods} \quad$

Red meat; stringy or chewy meat Tortillas

- Seeds, peels and husks Berries, corn, celery, apple peels
- **Highly seasoned foods** Jalapenos, salsa, curry, cayenne pepper

Phase 5 -	– Softer	Foods	to	Use
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Food Group	Foods to use	Tips
Meat and high protein foods - Always eat protein foods first	 Low-fat ricotta or 2% cottage cheese Shredded reduced-fat cheese; mozzarella cheese Soft cooked eggs Tuna packed in water Tender fish Tender skinless chicken & turkey Lean pork, beef (very tender) Low-fat deli meats, thinly sliced Vegetarian refried beans Soft cooked tofu Smooth, reduced-fat peanut butter 	 Choose low-fat or lean protein foods Avoid adding extra fats (butter, oil, sour cream, etc) to your food. If you do use these, add them in very small amounts Be cautious with spicy or highly seasoned foods Stay away from tough or chewy meat
Starches, grains and starchy vegetables	 Plain, unflavored hot cereal Plain cold cereals (corn flakes, rice krispies, cheerios, special k) Potato, sweet potato or yam Lower fat crackers Well toast bread 	 Use cinnamon and splenda to flavor your food; avoid adding sugar to your food Be cautious with "sticky" foods (rice, bread, pasta) Be cautious with tortillas Be cautious with crunchy foods (granola, popcorn, chips)
Fruit	Soft fresh fruit, peeledCanned fruit packed in juice	 Avoid canned fruit packed in syrup Be cautious with the seeds and skins of fruit (apple peel, berry seeds) Be cautious with dried fruit
Vegetables	 Cooked vegetables- fresh, frozen or canned Vegetable juice (avoid drinking with meals) 	 Be cautious when eating the seeds and tough skins of vegetables (corn, celery) Be cautious with gas-prone vegetables (broccoli, cabbage, Brussels sprouts) - they may cause discomfort
Dairy	 Fat-free, light yogurt Fat-free, no-sugar-added pudding Nonfat and 1% milk, soymilk (avoid drinking with meals) 	- Avoid liquids with your meals. This includes limiting milk and soymilk at meal times

Food Group	Foods to use	Tips
Meat and high protein foods - Always eat protein foods first	 Low-fat ricotta or 2% cottage cheese Eggs Lean meat, poultry, fish Vegetarian refried beans Dried beans, peas or lentils Tofu or soy beans Smooth, reduced-fat peanut butter Reduced-fat cheese, mozzarella cheese 	 Choose low-fat and lean protein Avoid adding fats (butter, oil, sour cream, etc) to your food. If you do use these, add them in very small amounts Be cautious with spicy or highly seasoned foods Choose tender, moist protein foods
Starch, grains and starchy vegetables	 Unflavored hot cereal Unsweetened cold cereals Potato, sweet potato or yam Lower fat crackers, baked chips, pretzels Bread Rice, couscous and pasta/noodles 	 Be very cautious when trying new foods for the first time- they may be difficult to tolerate Avoid sweetened starches and desserts (sugared cereals, donuts, pastries, etc.) – these are the foods with little nutritional value that will limit your weight loss
Fruit	 Fresh fruit Canned fruit packed in juice Frozen fruit 	 Avoid canned fruit packed in syrup Limit/avoid fruit juices Be cautious with dried fruit Chew membranes of citrus fruit and skin of fresh fruit very well
Vegetables	 Cooked vegetables Raw vegetables Salad Vegetable juice (avoid drinking with meals) 	 Be cautious when eating seeds and skins of vegetables- chew very well Be cautious with gas prone vegetables (broccoli, cabbage, Brussels sprouts) because they may cause discomfort
Dairy	 Fat-free, light yogurt Fat-free, sugar free pudding Nonfat or 1% milk, soy milk (avoid drinking with meals) 	- Avoid liquids with your meals. This means limiting milk and soymilk at meal times

Phase 5 – High Quality Protein Sources

In general, 7 grams of protein is equivalent to 1 ounce. Aim for 70-80 grams of food protein daily (equals about 9 ounces or 2 ¹/₄ cups of food protein).

Food item	Portion	Protein (grams)	
Beans (canned):			
black, garbanzo, kidney, lima, pinto, vegetarian refried	¹ / ₂ cup	6-8	
Beans (canned): great northern, navy	¹ / ₂ cup	10	
Peas, split (cooked)	¹ / ₂ cup	8	
Lentils	¹ / ₂ cup	9	
Peanut butter (reduced fat, smooth)	2 Tbsp	8	
Cheese (reduced fat – less than 5 gm fat per ounce): mozzarella	1 ounce	7	
Cottage cheese (2% low fat)	¹ / ₂ cup	14	
Ricotta Cheese (low fat)	1/2 cup	14	
Egg (hard boiled or poached)	1 each	6	
Egg (egg beaters)	1/4 cup	6	
Egg (whites)	2 each	7	
Milk (nonfat)	8 ounces	8	
Pudding (no-sugar-added, nonfat)	¹ / ₂ cup	3	
Yogurt (light, nonfat)	6 ounces	5	
Soybeans (cooked): edamame	1/2 cup	11	
Soybeans (dry roasted)	1/2 cup	34	
Soy milk (vanilla)	8 ounces	6	
Tofu (firm)	1/2 cup	20	
Beef (cooked): filet, new york steak, sirloin, roast beef, tenderloin	3 ounces	24-26	
Beef (cooked): pot roast	3 ounces	28	
Chicken	3 ounces (1/2 breast)	24	
Chicken or Turkey (canned in broth)	3 ounces	19-20	
Chicken (deli meat, smoked breast)	2 ounces	11	
Fish/seafood (cooked): cod, flounder, halibut, herring, salmon, shrimp, sole, trout	3 ounces	18-23	
Fish/seafood (canned): crab, salmon, shrimp, tuna	3 ounces	15-20	
Pork (cooked): tenderloin	3 ounces	24	
Ham (deli sliced meat)	3 ounces	19	
Turkey breast	3 ounces	25	
Turkey ground	3 ounces	23	

Nutrition information for high protein foods obtained from www.calorieking.com

Beyond Phase 5

Habits for Long Term Success

Remember that the Sleeve Gastrectomy surgery is a tool that allows you to lose weight. You are the one who determines how successful the tool will be. For the long term weight loss, follow these best practices for success:

- Eat 3 meals with planned snacks as needed
- Choose protein foods first
- Drink adequate fluids
- Take your vitamin-mineral supplement daily
- Get at least 7 hours of sleep each night
- Engage in physical activity on a daily basis
- Practice personal responsibility

Red Flag Behaviors that Predict Failure

Over time poor food habits can creep back into daily life. These red flag behaviors cause weight gain and poor health. Monitor yourself on a regular basis to avoid these behaviors. If you find that you are engaging in these red flags, seek support from mentors, your surgeon or the outpatient dietitian.

- Starting to eat sweets
- Eating fast foods often
- Skipping meals
- Eating after your stomach is full
- Eating rapidly
- Grazing mindlessly
- Eating when you are bored, upset, angry or depressed
- Clinging to the couch and not being physically active
- Choosing favorite carbs first
- Snacking from vending machines

Give yourself the best gift by striving for success and avoiding these red flags. Remember that the choice to be successful is yours. All the best to you as you navigate along this journey!

Overview of Diet Phases

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Beyond Phase 5
Stage	Clear Liquid	Clear Liquid & Protein	Full Liquid	Pureed & Mashed	Soft to Regular	Regular
Time	Days 1-2	Week 1-2	Week3-4	Week 5-6	Week 7-16	Past week 16
Focus	Hydration	Hydration	Food Texture	Food Texture	Texture & Quantity	Healthy Eating
Fluids	64 oz daily	64 oz daily	64 oz daily	64 oz daily	64 oz daily	64 oz daily
Protein	-	70-80 gm pure protein	70-80 gm pure protein	70-80 gm pure protein	70-80 gm protein (weeks 7-10) 40 gm protein (weeks 11-14) 20-30 gm protein (week 15+)	20-30 gm pure protein until weight loss is complete
Vitamin & Minerals	-	Chewable Multivitamin and B12	Chewable Multivitamin and B12	Chewable Multivitamin and B12	Tab or Capsule Multivitamin and B12	Tab or Cap Multivitamin and B12
Physical Activity	-	20 minutes	20-30 minutes	30 minutes	30 minutes + weight training	30 minutes + weight training

Pre-surgery shopping list

- Very low calorie beverages
 - Crystal light or sugar-free Kool-Aid
 - Sugar free flavored water (propel)
 - Diet V8 Splash
 - Sugar free popsicles
 - Diet or sugar-free jello
 - Decaf herbal teas
- Clear liquid juice (for phase 2 only)
 - 100% apple juice
 - Cranberry cocktail
 - 100% grape juice
- Vegetable juice (for phase 3)
 - Carrot juice
 - Original or low sodium V8
- o Broth
 - Swanson broth (chicken, beef, vegetable)
 - Campbell's chicken or beef broth
 - Progresso chicken or beef broth
 - Other broth based soups (chicken noodle, vegetable, miso) strain out all food and drink liquid only
- o Milk
 - Skim or 1% milk
 - Soy milk plain or vanilla
- o Vitamin and Mineral Supplements
 - Chewable vitamin-mineral supplement (e.g. Flintstones Complete, Centrum Chewables)
 - Tablet or capsule vitamin-mineral supplement (e.g. Centrum Original, Nature Made Multi Complete)
- Pure Protein supplements (2-4 week supply to start with)
- Measuring tools
 - Measuring cups
 - Measuring spoons

Internet resources

General Health Information

These resources provide reliable information about diseases and disease prevention, health promotion, and general nutrition.

HealthierUS.gov Consumer.gov/ncpw/everyone/health MedlinePlus.gov MayoClinic.com www.nhlbi.nih.gov

Professional Associations

AmericanHeart.org (American Heart Association) ASMBS.org (American Society for Metabolic & Bariatric Surgery) www.Diabetes.org (American Diabetes Association) EatRight.org (American Dietetic Association) www.ACSM.org (American College of Sports Medicine) Obesity.org (American Obesity Association)

Nutrition Information

These resources provide guidance for food choices and nutrition information. Meal planning tools and nutrition articles are also included here. Please note that not all meals plans or nutrition advice provided by these sites is appropriate for you after Sleeve Gastrectomy surgery.

Nutrition.gov CalorieKing.com – includes nutrition facts for over 40,000 foods MyPlate.gov

Recipes

Not all recipes provided by these sites are appropriate following Sleeve Gastrectomy surgery. Look for recipes that are high in protein, while being low in fat and carbohydrate. Use these sites for basic recipe ideas – but modify them to meet your nutrition goals.

CookingLight.com AllRecipes.com BettyCrocker.com KraftFoods.com

Obesity Specific Resources

ObesityHelp.com win.niddk.nih.gov/publications www.nwcr.ws (National Weight Control Registry)

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