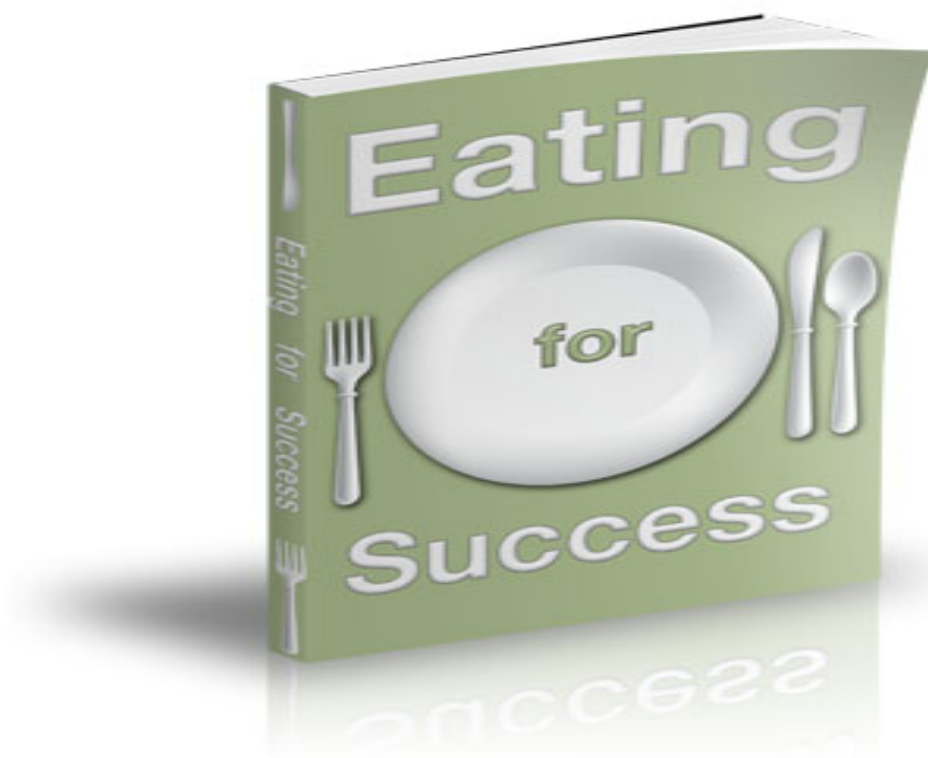


Bariatric Dietitian Services

Eating to Succeed with Weight Loss Surgery Patient Education Handbook



Contact:

Kyle Rose, RD LD
903-816-3657

kylroseRD@gmail.com
kylrose@bariatricrd.com

Bariatric Surgery Nutrition Guide

Table of Contents

About Us.....	3
Pre-operative Nutrition Guidelines.....	4
A Special Note for Type 2 Diabetics and Patients with Kidney Disease.....	5
Unflavored Protein.....	6
Post-op Diet Advancement Guidelines.....	7-10
10 Nutrition Tips for Optimal Results.....	11
Tip #1: Consume Adequate Protein.....	12-16
Tip #2: Eat & Don't Drink Your Calories.....	17-22
Tip #3: Stay Hydrated.....	23
Tip #4: Eat Your Fruits and Veggies & Take Juice Plus™.....	24-29
Tip #5: Consume Small Amount of Good Fats Frequently.....	30-31
Tip #6: Choose the Right Carbohydrates and Always Eat Them Last.....	32-33
Tip #7: Eat 3 Small High Protein Meals & 2 High Protein Snacks Daily.....	34
Tip #8: Eat Slowly, Chew Food Thoroughly, & Stop Eating When 80% Full.....	35-36
Tip #9: Take All of Your Required Vitamins & Minerals Daily.....	37-41
Tip #10: Use the Plate Method, Tip Sheet, & Supplement with Protein Shakes/Bars for Long-Term Success.....	42-44
Diet Guidelines and Sample Meal Plan.....	45-48
A Note About Accountability, Support, & Mentorship.....	49
Resources & Protein Shake Mixing Instructions/Recipes.....	50-51

ABOUT BARIATRIC DIETITIAN SERVICES

Hello,

Thank you for choosing Bariatric Dietitian Services for your pre- and post-weight loss surgery nutrition care needs! We sincerely appreciate your business, and we promise to do everything we can to meet and exceed your expectations. Our goal is to help you achieve the best results possible from your surgery.

Bariatric Dietitian Services was founded with the goal of helping patients obtain the necessary nutrition education, accountability, and support they need to succeed. Further, its establishment was based on the following core beliefs of our company:

1. Weight loss surgery will take a patient halfway to their goal, and the addition of a sound nutrition and exercise program will take the patient the rest of the way to help them keep the weight off for life.
2. Too many weight loss surgery patients are not being provided with clear, consistent, and proven nutrition recommendations. Instead, many weight loss surgery patients see numerous “nutrition professionals” along their journey, and they are often confused and overwhelmed by conflicting opinions, theories, and systems.
3. Even if a patient knows what and how to eat, the fact of the matter is that most will not consistently comply with what they know unless they are provided with continued mentorship, accountability, and support that is provided by dedicated coaches who take their clients’ results personally.

It is our goal to provide you with clear, consistent, and proven nutrition recommendations that you can trust. Further, we are here to provide you with any support, accountability, and mentorship that you feel would be of benefit to you. We are proud to offer numerous service options that are designed to meet your nutrition care needs.

Bariatric Dietitian Services only employs Registered Dietitians (RDs) who have an extensive and proven track record of helping weight loss surgery patients achieve their goals. You can feel confident knowing that the Dietitian who will be helping care for you knows where you are coming from and has a deep understanding of how to help you succeed with your goals.

Our philosophy is that an educated patient equals a successful patient. We have written this Nutrition Care Guide to assist in the educational process. This guide outlines in a straightforward manner how to eat to succeed with weight loss surgery. We highly recommend that you review this handbook multiple times in preparation for your surgery and that you revisit this book frequently after surgery so the success tips are constantly reinforced. We promise that if you consistently adhere to the recommendations outlined in this book you will do great!

Again, thank you for allowing us the opportunity to work with you and know that we take your results personally!

In Good Health,

The Staff at Bariatric Dietitian Services

Pre-Op Diet: The Liver Prep Diet (This is REQUIRED by your surgeon)

Dr. Bagshahi will advise you on how many days/weeks you will be on your pre-op diet. You MUST adhere to this pre-op diet as instructed by Dr. Bagshahi, your surgery may be rescheduled if you do not follow this diet.

You should use **a protein supplement** to meet your goal of **at least 75 grams of protein daily**. Protein supplements made of whey, egg white, or soy, have less than 200 calories and 5 grams of sugar, and have greater than 25 grams of protein are recommended. **We recommend the use of an unflavored protein supplement during the clear liquid pre-op diet phase to add to the approved clear liquids.**

It is important that you follow these instructions completely. A clear liquid diet helps to shrink the liver and fat deposits around the stomach, making surgery safer. Studies have shown that 80-90% of people having weight loss surgery have non-alcoholic fatty liver disease, which usually results in an enlarged/fatty liver. This can interfere with the surgical procedure by impairing visibility of the stomach, increasing your surgery time, increasing the risk of complications, and may result in your surgeon cancelling your procedure.

What to Have:

- 100% apple/grape/cranberry juice
- Sugar free drink mixes (like Crystal Light)
- Decaffeinated tea/coffee
- Sugar free drinks
- Very low calorie sports drinks/waters (Powerade Zero, Vitamin Water Zero, Propel, Sobe Life water Zero)
- Broth, bouillon, or strained broth-based soups
- Sugar free jello
- Sugar free popsicles
- **Protein drinks containing:**
 - o Whey, soy, or egg white protein
 - o Less than 200 calories
 - o Less than 5 grams of sugar
 - o More than 25 grams of protein (**goal of 75 grams of protein daily**)

A Special Note for Type 2 Diabetics & Patients with Kidney Disease

While most weight loss surgery patients will be able to tolerate the above nutrition guidelines without issue, there are two groups of patients that may need slight adjustments to this plan. These groups consist of those with diabetes and patients with kidney disease or kidney failure. Let's discuss each now.

Precautions for Diabetics:

As should be obvious, each of the pre-op diet phases is low in calories and carbohydrates. While protein can raise blood sugar levels, it usually does not, but, as you know, carbohydrates do. Considering that these diet phases are low in carbohydrates, it should be evident that they can lead to decreased blood sugar levels. This is generally not an issue unless you are taking insulin or taking medications that increase your body's production of insulin (such as Glimepiride, Glipizide, and Glyburide). Therefore, if you have diabetes and take insulin or one of the above-listed medications, then we highly recommend talking to the physician that prescribed these medications for you prior to implementing these diets. Failure to do so may lead to dangerously low blood sugar levels.

Kidney Disease/Kidney Failure:

For the most part, all pre- and post-op diet guidelines call for moderate, but not excessive, amounts of protein in order to help you heal and maintain muscle mass after surgery. That being said, if you have a history of reduced kidney function, then it is possible that the amount of protein recommended in this education handbook may be difficult for your body to process. Therefore, if you have ever been told that you have reduced kidney function and that you need to limit your intake of protein, then it is important to speak with your physician before implementing our recommendations. Once you have obtained your physician's recommendations for protein intake, then make sure and communicate this information to your dietitian so that they can make adjustments to your plan as needed.

Unflavored Protein

- **Doc Hale Unflavored Protein powder is a fabulous new virtually flavorless and odorless protein powder that can be mixed in almost any liquid without changing the taste or consistency. One scoop provides 20 grams of protein, 90 calories, and 1 gram of sugar, and can be mixed in as little as 3 ounces of fluid! Doc Hale Unflavored Protein powder can be purchased at www.dochalenutrition.com or by calling 1-844-DOC-HALE (1-844-362-4253). *Free samples are now available on the above website!***
- Note: If you do not already have Nectar fruit flavored protein powder, then we encourage you to purchase a variety pack well in advance of surgery to determine what flavor you like and then purchase a large tub in time to receive it at least 2 days in advance of your surgery as this counts as a clear protein supplement. One place to purchase a Nectar variety pack is www.mybariatricpantry.com.



Post-Op Diet Advancement Guidelines (Bypass/Sleeve)

Stage 1: Clear Liquids

Days 1-3 Post-Op

- You can start this diet on DAY 1 in the hospital.
- Clear liquids only.
- On DAY 3 you may start adding protein drinks back into your diet
- AT LEAST 75 grams of protein daily

Stage 2: Full Liquids

Days 4-14 Post-Op

- All liquids must be pourable from a cup, NO CHUNKS
- 1-2 ounces of water to be sipped every 15 minutes while awake
- It is important to consume at least 64 ounces of fluid daily while awake.
- Examples of acceptable foods/liquids:
 - o Cream of wheat (thinned), cream of rice (thinned), mashed potatoes (thinned).
Must be thinned with fat free milk or broth
 - o Lactose-free milk, skim milk, sugar-free and low-fat yogurt (NO fruits or seeds)
 - o LOW sodium vegetable juices
 - o Unsweetened applesauce (thinned with water)
 - o Unflavored protein powder, flavored low-carb/high-protein shakes
 - o Blended creamy soups, broths, bouillon
 - o Sugar-free gelatin (liquid state only)
 - o Sugar-free pudding (thinned)
 - o Sugar-free custard (thinned)
 - o Sugar-free popsicles
- Besides what is listed above, nothing else is allowed.
- Start your chewable multivitamin on DAY 7 after surgery.

Post-Op Diet (Bypass/Sleeve)

Stage 3: Pureed Foods

Day 14-35

- You may now have pureed foods.
- During this stage you will learn your new style of eating.
- Listen to your pouch, it will guide you on portion sizes.
- Stop eating when you feel a slight pressure in your chest area.
- Pureed foods should be the consistency of baby food.
- Add foods slowly, one at a time, to test your tolerance of each food.
- You may add protein powder to pureed foods to add more protein.

- **Foods allowed on this stage include all full liquids from previous liquid stage, plus:**
 - Cream of wheat, cream of rice
 - Thinned oatmeal and grits
 - Mashed potatoes, skinless sweet potatoes (slightly thinned)
 - Lactose free milk, skim milk
 - Sugar-free & low-fat yogurt (no fruits or seeds)
 - Low-fat cottage cheese (pureed)
 - Low-fat ricotta cheese
 - Soft-cooked pureed vegetables, Stage 1 baby food (no more than ½ cup/day)
 - Unsweetened apple sauce, unsweetened or lite canned fruit without seeds (pureed), Stage 1 baby food
 - Pureed chicken, turkey, or fish (Stage 1 baby meats)
 - Fat-free refried beans (thinned)
 - Hummus
 - Protein powder and drinks
 - Blended creamy soups, broths, bouillon soups
 - Sugar-free gelatin
 - Sugar-free pudding, sugar-free custard
 - Sugar-free popsicles
 - Herbs and mild spices

- **From here on out make sure to chew each bite 20-30 times and avoid liquids 10 minutes before, during, and 30 minutes after meals and snacks.**

Post-Op Diet (Bypass/Sleeve)

Stage 4

Day 35-999

As you transition to solid foods, this is still a time of learning. You will start this phase on **DAY 35**. Let your pouch be your guide on portion sizes. 1) Take small bites. 2) Chew each bite to applesauce consistency. 3) Pause 30 seconds between each swallowed bite. Remember, overeating can lead to nausea, vomiting, and stretching of your pouch.

- This stages includes foods listed in previous stages, plus:
 - Lean ground beef, chicken, or turkey (90% lean)
 - Fish, egg whites, or egg substitute (Egg Beaters)
 - Vegetable patties
 - Lean canned chicken or tuna (in water)
 - Low fat deli meat, shaved
 - Creamy peanut butter
 - Low-fat or fat-free cottage cheese and ricotta cheese
 - 2% or fat free string cheese or cheese slices
 - Canned fruit (fruit cocktail—no grapes or cherries) **in its own juice, lite, or no sugar added**
 - Bananas (remove strings)
 - Soft cooked or canned vegetables and vegetable juice
 - Toasted breads or crackers
 - Low-fat yogurt (without seeds and whole fruit)
 - Butter Buds, Fat-free butter spray, low-fat or lite mayo, olive oil, safflower oil
 - Herbs and mild spices (most herbs, spices, and low calorie condiments are okay)
- Remember 1 oz of meat provides 7 grams of protein
- Make sure to choose a protein food FIRST and a fruit or vegetable SECOND. You may also select a starch/grain LAST if you still have room.

- Avoid any of the following sugars as they inhibit weight loss and can cause severe stomach and intestinal cramps (severe dumping syndrome in bypass patients and potentially mild dumping syndrome in some gastric sleeve patients). Keep any eye out for and avoid the following sugars:

a. Sugar b. Invert sugar c. Honey d. Granulated sugar e. Glucose f. Fruit sugar g. Fructose h. Molasses i. Raw sugar j. Brown sugar k. Sorbitol* l. Sorghum	m. Turbinado sugar n. Xylitol* o. Maple sugar p. Mannitol* q. Maltose r. Levulose s. Dextrose t. Maltodextrin u. Corn syrup v. Confectioner's sugar w. Sucrose
--	--

* Sugar alcohol: okay in 2-4 grams/day quantities

In place of these sweeteners we recommend: Just Like Sugar™, Stevia, and limited amounts of Splenda (sucralose).

Your diet at this point is going to be trial and error. Remember, to eat soft and tender meats. Make sure and meet your protein and fluid needs daily! As your diet advances, remember to introduce one new food at a time. If a certain food does not agree with you, try it again in a few months. If you experience a problem with a particular food, it does not mean that you cannot ever eat it again, just wait a while before trying it again. Bread, pasta, steak, and dry meats are foods most patients cannot initially tolerate.

Your main purpose now should be proper nutrition and weight loss. To maximize weight loss and maintain good nutrition, high protein solid foods should be eaten almost exclusively. In addition, eat fresh vegetables and fruits, and baked and steamed meats. Processed carbohydrates, soft calories such as frozen yogurt and mashed potatoes and gravy, and chips should not be eaten and may cause weight gain.

10 Nutrition Tips to Receiving Optimal Results from Surgery

In working with over 2000 patients who have had weight loss surgery, we have learned how patients should eat to obtain the best results possible from surgery. Our knowledge of the research and our hands-on experience has taught us what does and does not work. Based on our experience, we have developed 10 Nutrition Success Tips that if followed on a consistent basis will help you achieve optimal results from your surgery. We have listed the 10 Tips below and we will discuss them in detail in the pages that follow.

Tip #1: Consume Adequate Protein

Tip #2: Eat & Don't Drink Your Calories

Tip #3: Stay Hydrated

Tip #4: Eat Your Fruits and Veggies & Take Juice Plus+

Tip #5: Consume Small Amounts of Good Fats Frequently

Tip #6: Choose the Right Carbohydrates and Always Eat Them Last

Tip #7: Eat 3 Small High Protein Meals & 2 High Protein Snacks Daily

Tip #8: Eat Slowly, Chew Food Thoroughly, and Stop Eating When 80% Full

Tip #9: Take All of Your Required Vitamins & Minerals Daily

Tip #10: Use the Plate Method & Our Cheat Sheet for Long-Term Success!

Nutrition Success Tip #1: Consume Adequate Protein

To achieve your weight loss goals, it is very, very, VERY important that you consume adequate amounts of protein on a daily basis! In fact, our recommendation is to make sure you consume protein at each meal and protein first at the beginning of each meal and snack.

Consuming enough protein before and after surgery is important for the following reasons:

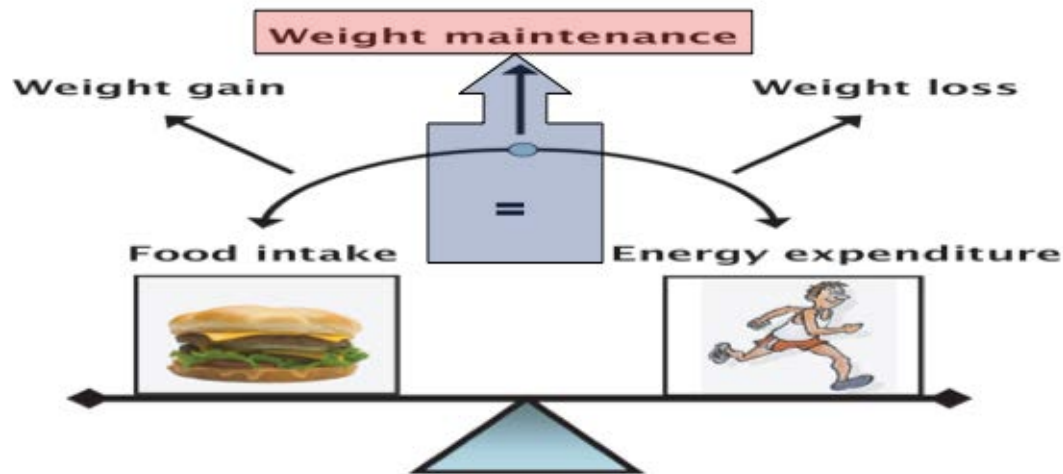
Reason #1: Protein Helps You Maintain Your Muscle Mass While You Burn Fat!

When people lose weight, they have a tendency to lose both equal parts of muscle and fat. Most people attempting to lose weight are just focused on the scale going down, and they could care less about where that weight loss is coming from. While this is understandable, it is not the right way to do things! While we want you to lose a significant amount of weight after surgery, we want to ensure that the lost weight is coming from fat and not muscle.

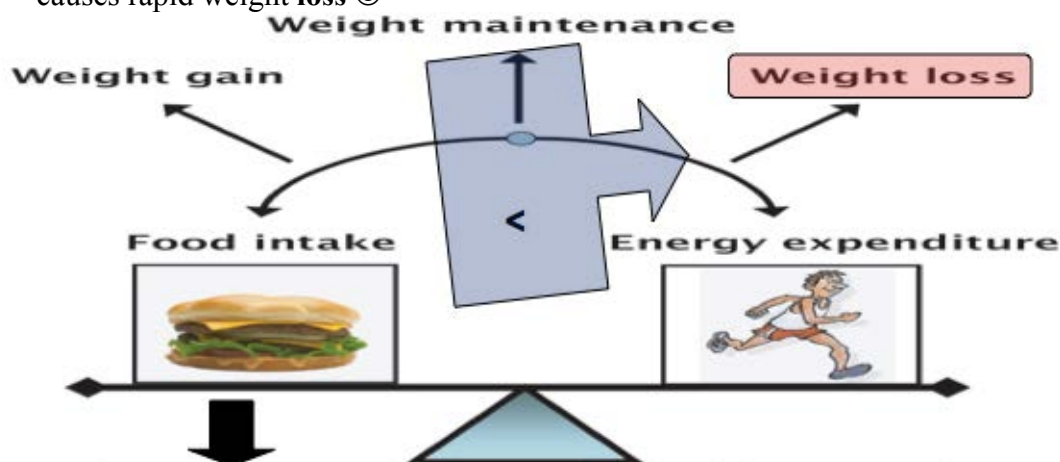
Why? Well because muscle burns a lot of calories at rest and keeps your metabolism (engine) revving at high speed. In fact, research has shown that one pound of muscle burns 25 calories per day. That's a lot! So, what do you think would happen if, say, you lost 100 pounds in the first 6-12 months post-op, but you didn't consume enough protein, and, in the process, lost 50 pounds of muscle and 50 pounds of fat (100 pound loss total)? If you guessed that your weight loss would plateau before you reached your goal weight, or that you would regain weight in the long-term, then you are correct. On the next page, we outline what happens to the patient that fails to meet their protein needs consistently after surgery.

What happens if you don't consume enough protein after surgery:

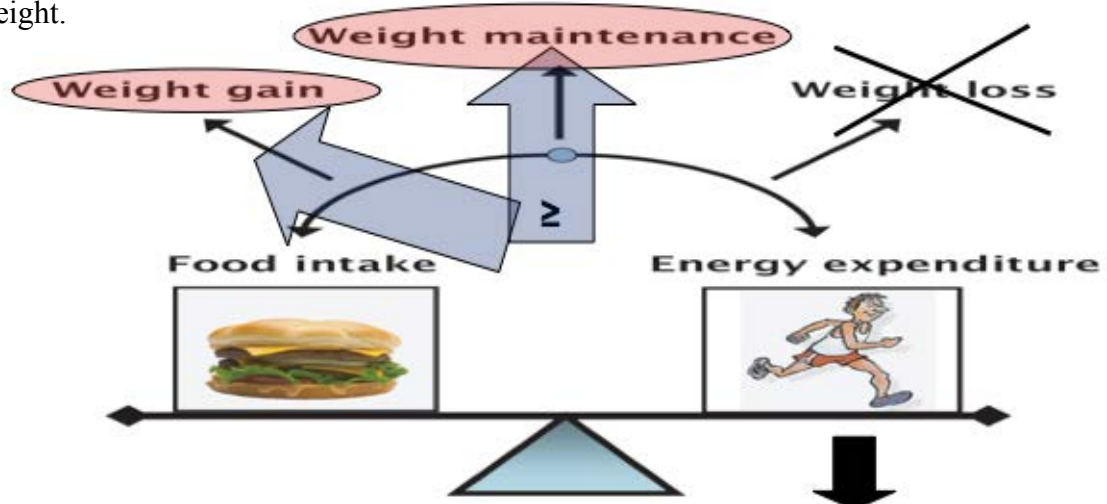
A. At the point of surgery, calories in equals calories out & weight is **stable**



B. Immediately following surgery food (calorie intake) drops rapidly and significantly and causes rapid weight **loss** ☹



C. Patient does not meet protein needs, loses too much muscle and their energy expenditure decreases to the point to where calorie intake = calorie output again (weight loss **plateaus**), or worse yet, calorie output drops below calorie intake and patient **regains** weight.



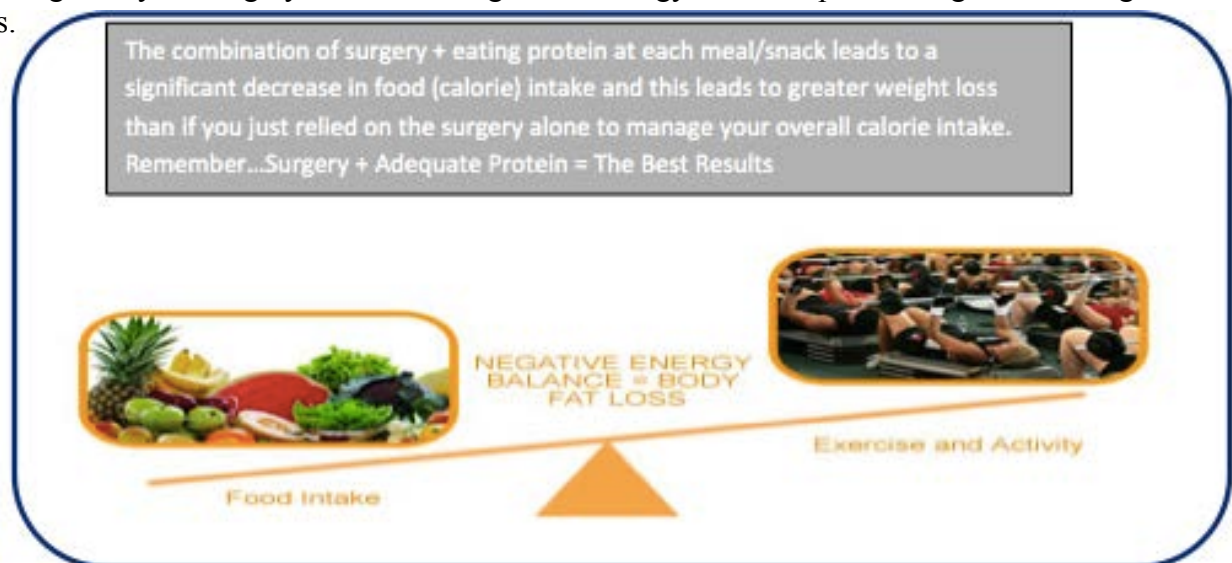
It should be obvious to you now...you should consume protein at each meal and consume the protein first at the beginning of each meal. Failure to do so will slow your metabolism (how many calories you burn at rest) to a crawl and will negate the calorie deficit that surgery provides, so make sure and keep your metabolism revved up by maintaining your muscle mass. This is easily accomplished by exercise and consuming adequate amounts of protein on a daily basis.

Reason #2: Protein Helps Fill You Up and Keep You Full

The second reason that we recommend consuming protein at each meal and protein at the beginning of each meal is because protein is very satiating which is just a fancy way of saying that it does a good job of filling you up and keeping you full.

In fact, research has shown that patients that simply consume protein at each meal eat around 400 calories less per day than those who do not, and they do this without even trying to count calories.

As Discussed previously and as outlined below, when calorie intake is less than calorie output, weight loss occurs. So by eating protein at each meal and snack after surgery, you will be working with your surgery to create enough of an energy deficit to produce significant weight loss.



Reason #3: Protein Helps Minimize Complications After Surgery

Protein, in addition to assisting with weight loss, serves some other important functions for the weight loss surgery patient, such as:

- In combination with the right vitamins and minerals, helps to minimize extent and duration of any hair loss that may occur after surgery.
- Helps to maintain energy levels and strength
- Keeps your immune system strong and healthy
- Speeds the healing process after surgery

Why Eat Protein First?

As you may have noticed, in addition to recommending that you consume protein at each meal and snack, we have also been encouraging you to always eat your protein first. Why do we suggest this? Well, as you know, surgery will limit your portion sizes to small/very small amounts (like ½ to 1 cup of food max at one time). So, what do you think would happen if you had fruits, veggies, and good carbs (not that these foods are bad for you) before you got to your protein? That's right...if you ate these foods first, before your protein foods, then you would be too full by the time you got to your protein and you would skip it. As noted, this would lead to a loss of muscle, which will slow down your metabolism and prevent you from reaching your weight loss goal. So, have your protein and always, always, ALWAYS have it first!

What Are Good Sources of Protein for the Weight Loss Surgery Patient?

Okay, hopefully by now you understand that it is pretty important to get plenty of protein in daily if you want to lose lots of weight and keep it off for good, but you are probably wondering what some good sources of protein are so you can consume them before and after surgery. To help make it easy for you, we have developed the following list of Recommended High Protein Foods that are healthy and that should be well tolerated after surgery. You can print this list out and use it to develop your menus and shopping lists as needed.

Recommended High Protein Foods:

- Lean ground beef
- Low-fat chicken, tuna, and egg salad
- Skinless dark meat poultry (grilled or baked)
- Tenderized & marinated red meat that has not been overcooked
- Any grilled/baked fish
- Eggs (as tolerated)
- Canadian and turkey bacon
- Cottage cheese
- No sugar added Greek yogurt
- String cheese
- Low-fat refried beans with 2% cheese
- Moist brisket
- Moist/tender beef jerky (not dry!)
- Lean Deli meats (less than 3 grams fat/ounce)
- Any other very moist and tender meat, poultry, or wild game
- Quest protein bars
- Doc Hale Unflavored protein powder (www.dochalnutrition.com)
- Syntrax Nectar Protein
- Bariatric Advantage Meal Replacement shakes



How Much Protein?

Females	Males
Lap-Band/Gastric Sleeve = 80-100 grams/day	Lap-Band/Gastric Sleeve = 100-120 grams/day
Gastric Bypass = 100-120 grams/day	Gastric Bypass = 120-150 grams/day

How to Keep Track of Your Protein Intake

To help you keep track of your protein daily, we encourage you to utilize a smart phone (if you have one). There is an app called My Fitness Pal (www.myfitnesspal.com), and, if you can, we recommend putting it on your phone or setting up an account on your computer. Then, whenever you eat something, you simply log in to your My Fitness Pal account and enter what you had and an approximate portion size. From there, My Fitness Pal will let you know how many grams of protein are in the meal/snack you consumed, and it will keep a running total so you always know how you are doing and will help you adjust accordingly.

If you don't have a smart phone, and you don't want to utilize the My Fitness Pal website to keep track of your protein intake, then this can easily be done with a pen or pencil and paper.

To manually track your protein intake, all you have to do is know that one ounce of animal protein (meat, chicken, fish, eggs, light cheese, deli meat, etc.) equals exactly 7 grams of protein. So, as long as you know how many ounces of protein you are consuming, then you simply multiply this number by 7 grams to calculate how many grams of protein your meal snack has provided. Here is an example:

Meal	Food Consumed	Approx. Portion Size	Grams of protein consumed (portion size in ounces x 7)
Breakfast	Low-fat cottage cheese with fruit	4 ounces	28 grams protein
AM Snack	1 Quest protein bar	1 bar	20 grams protein (1 bar=20 gms pro)
Lunch	Low-fat chicken salad with steamed veggies	3 ounces	21 grams protein
PM Snack	1 scoop Doc Hale unflavored protein powder in 3 ounces of fluid	1 scoop	20 grams of protein (1 scoop=20 gms pro)
Dinner	Boneless/skinless chicken thigh + ¼ cup cauliflower	4 ounces	28 grams protein
Total			117 grams protein

We recommend keeping track of your protein intake as you go and around 2:00-3:00PM see where your intake stands in relation to your needs. If you need 80 grams daily and it is 3:00PM and you have only had 30 grams, then it is time for a high protein meal, bar, or shake! Also, we encourage you to always ask yourself the following question before you go to bed each night: Have I met my protein goal today? If not, you need to eat or drink some protein to ensure that your needs are met before you go to sleep!

Nutrition Success Tip #2: Eat and Don't Drink Your Calories

Have you been counting calories your whole life in order to try and manage your weight? If so, that is about to end because after surgery there is practically no way you will over-consume calories as long as you eat and don't drink your calories.

However, if you fail to follow this tip consistently, then it is possible to still exceed your calorie needs (and fail to meet your weight loss goal) because none of the weight loss procedures are designed to restrict how many liquid calories you can consume. All procedures work well when you eat the majority of your calories, but it is possible to cheat your surgery and not meet your weight goals if you do not eliminate the following liquid and sugary drinks from your diet on a consistent basis:

- Soft drinks
- Juice (a glass of orange juice has the same amount of sugar as 5-6 whole oranges. Could you ever eat that many oranges at one time? Nope! So...eat and don't drink your fruit)
- Tea (with sugar)
- More than 1 cup (8 ounces) of low fat milk daily
- High-sugar/High-calorie coffee drinks (yep...that 500 calorie Starbucks drink has to go!)
- Gatorade or any other sports drink containing added sugar
- Milkshakes
- Alcohol
- Energy drinks high in sugar
- Any other liquid containing added sugar



DON'T DRINK YOURSELF FAT.
**How to cut back on soda,
juice and other sugary beverages.**

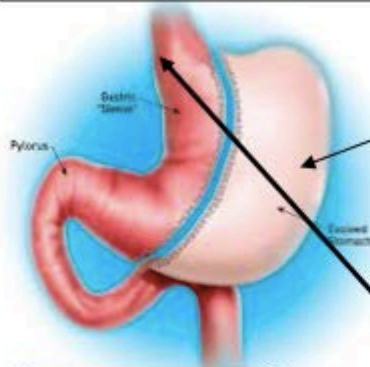
How the Intake of Liquid/High Sugar Beverages Can Prevent Weight Loss After Surgery

Now that you know it is important to Eat and Not Drink Your Calories (with protein drinks being the only exception), let's take a look at why sticking to this tip is so important to ensuring optimal results.

- A. None of the surgical procedures are designed to restrict your intake of liquid calories. Let's look at how each procedure works to restrict your calorie intake so you can better understand how it is easy to cheat your surgery by consuming too many liquids high in sugar and calories.

The Gastric Sleeve

The Gastric Sleeve Controls Food/Calorie Intake via 3 Separate Mechanisms and you can cheat the gastric sleeve if you drink liquids high in sugar



Mechanism 1: With the Gastric Sleeve this part of the stomach is removed. This is important because this part of the stomach produces 70% of the hunger hormone called Ghrelin. This hormone makes you hungry. So, considering the sleeve decreases your body's production of this hormone it should be obvious that it significantly decreases your appetite and thus your overall food/calorie intake

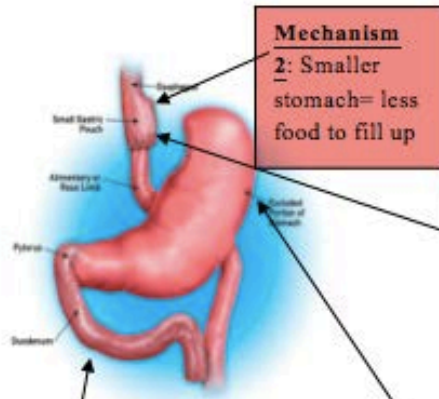
Mechanism 2:

Smaller Stomach =
The ability to hold
less food. Duh!

Mechanism 3: This part of the stomach contains high numbers of stretch receptors and once they have enough tension on them then a nerve signal is sent to the brain telling you to stop eating. After surgery it takes a very small amount of solid food to stretch these receptors out enough to tell your brain you are full; however, liquids empty from the stomach faster after surgery than they did before and thus they don't ever put enough stress on these receptors to fill you up and keep you full! Thus, if you drink too many liquid/sugary calories then you can still over consume calories (and not meet your weight goal after surgery)!!!

The Gastric Bypass

The Gastric Bypass controls food (calorie) intake and leads to weight loss via 4 different mechanisms. Early on it's difficult to cheat the gastric bypass by consuming liquid/sugary calories because the intake of foods/liquids high in sugar leads to Dumping Syndrome and trust us.... If you Dump once you will do anything it takes for it not to happen again. That being said, Dumping Syndrome tends to go away long-term after surgery and it is at this point that you can cheat your bypass if you resume liquids high in sugar. So, don't do it!!



Mechanism 2: Smaller stomach= less food to fill up

Mechanism 4: This part of the stomach contains high numbers of stretch receptors and once they have enough tension on them then a nerve signal is sent to the brain telling you to stop eating. After surgery it takes a very small amount of solid food to stretch these receptors out enough to tell your brain you are full; however, liquids empty from the stomach faster after surgery than they did before and thus they don't ever put enough stress on these receptors to fill you up and keep you full! Thus, if you drink too many liquid/sugary calories then you can still over consume calories (and not meet your weight goal after surgery)!!!

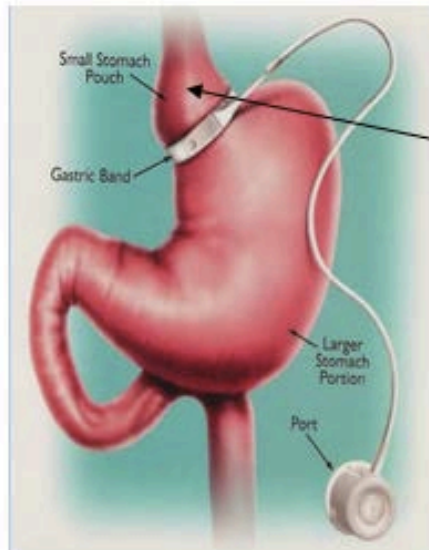
Mechanism 3:

This part of the small intestine is bypassed. This is where most of the digestion and absorption of food takes place. Thus, by bypassing this part of the intestine, you don't digest and absorb all of the food (calories) that you consume and this creates an even greater calorie deficit and leads to very rapid weight loss.

Mechanism 1: This part of the stomach is bypassed. By bypassing this part of the stomach you significantly decrease your body's production of ghrelin (the hunger hormone) and thus you no longer feel hungry most of the time. As a result your food/calorie intake decreases significantly and you lose weight.

The Lap-Band

The Lap-band works via one mechanism and can easily be cheated by consuming liquids that are high in calories and sugar.



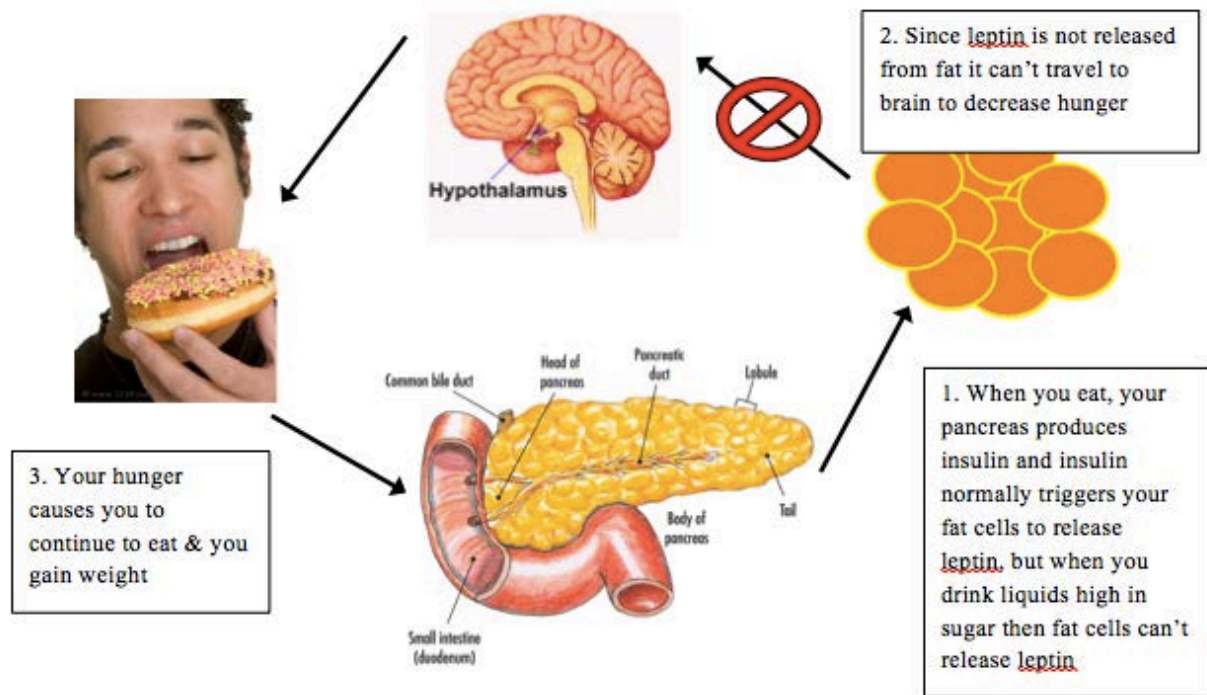
Mechanism of Action: After a series of adjustments (fills) the lap-band creates a small pouch at the top of the stomach (that holds about 4 ounces of food) and it decreases the diameter between this small pouch and the rest of the stomach that is below it. The upper pouch that is above the band contains a large number of stretch receptors and once these receptors have enough tension on them then they send a nerve signal to the brain which makes you feel full and keeps you full for 3-4 hours after small meals. Once the band is properly restricted then it takes a very small amount of solid food (around 4oz or $\frac{1}{2}$ cup) to make and keep you full; however, with the band, the passage of liquids between the small upper pouch and the stomach below it is not delayed and thus liquid calories don't stay above the band long enough to put enough tension on the stress receptors to feel you up and keep you full. As such, it should be obvious that it is very, very easy to cheat your band (and not lose weight) if you consume too many liquids that are high in sugar and calories. So, don't do it!!!

Continued...How the Intake of Liquid/High-Sugar Beverages Can Prevent Weight Loss After Surgery

- B. Liquids high in sugar contain high amounts of the sugar known as fructose (fruit sugar) and fructose makes it very difficult to lose weight and be healthy for the following 2 reasons:
1. Fructose (found in fruit juice, beverages sweetened with high fructose corn syrup and as part of the table sugar known as sucrose) is JUST ONE CHEMICAL REACTION AWAY FROM BEING CONVERTED TO FAT IN YOUR LIVER!! In fact, we always say that drinking liquids high in fructose or table sugar is like drinking liquid fat because that is essentially what happens in your body when you consume them.
 2. Fructose overrides our bodies built in weight control system.

As outlined in the diagram on the next page, when we eat lean protein and good carbohydrates, then our pancreas (an organ that sits to the left and behind the stomach) produces a hormone known as insulin. Insulin's job is to shuttle protein and carbohydrates into your cells so that they get the nutrition that they need, and it keeps excessive amounts of sugar from building up in the blood where it can cause a lot of damage. In addition to pushing nutrients into the cells, insulin also talks to your fat cells and lets them know when there are plenty of calories coming into the body from your diet. In response to this message from insulin, your fat cells produce another hormone called leptin which travels up to your brain and says "Hey, you have plenty of calories in your body, so we are going to speed up your metabolism (how many calories you burn at rest) and shut down your appetite so that you don't gain weight!" As you can see, if this system is working like it should, then your body remains at a healthy weight; however, as outlined below, the excessive intake of fructose inhibits the ability of the fat cells to release leptin and thus no matter how many calories you have coming into the body, your brain never gets the message and your metabolism stays low, your appetite stays high, and you gain weight. By avoiding/significantly reducing your intake of liquid calories high in sugar, you allow your fat cells to start releasing leptin again and at that point, your metabolism speeds up, your appetite decreases, and you start losing weight.

How the excessive intake of liquids high in sugar overrides your body's weight control system



C. Fructose Fuels Cancer Cells

One of our favorite sayings at Bariatric Dietitian Services is that it does not do any good to be skinny dead!

What does this mean? Well, if by some chance you continue to consume liquid/sugary calories after surgery and somehow lose a whole lot of weight (which we doubt will happen if you are not adhering to this tip) that does not necessarily mean you are healthy! In fact, you can be very skinny and still die of multiple medical conditions including cancer.

You see, liquid sugary drinks contain large amounts of fructose and this sugar is the preferred fuel source for all cancer cells within the body. So, if you cut liquid/sugary drinks out of your diet, then in effect you will have significantly reduced your risk for multiple types of cancers.

As you can see, eliminating liquid/sugary drinks will aid in weight loss, and it will significantly decrease your risk for multiple types of cancers.

SO REMEMBER TO EAT AND NOT DRINK YOUR CALORIES!

Nutrition Success Tip #3: Stay Hydrated

While we certainly want you to eliminate all liquid/sugary drinks from your diet, it is important to note that you need to replace these drinks with **at least 64 ounces of water-based no- or low-calorie liquids** on a daily basis in order to stay well hydrated. Avoid carbonated beverages and no straws when drinking!

Considering that water makes up 60% of total body weight, it should be obvious that getting enough of it consistently is pretty important!

Water serves numerous important roles in the body such as transporting nutrients in the blood to the cells of the body, dissolving toxins, and allowing for their elimination in the urine, allowing chemical reactions to occur in the body, lubricating joints, and acting as a shock absorber for the eyes and spinal cord, and regulating body temperature.

Healthy options include:

- ❖ Good old-fashioned water
- ❖ Tea that has been sweetened with Stevia or Just Like Sugar™
- ❖ Homemade lemonade or limeade (water + lemon/lime juice + Stevia or Just Like Sugar™)
- ❖ Crystal Light Pure (note: the Pure brand is sweetened with stevia and just a touch of sugar. It contains 15 calories, or about 3 grams of sugar, per serving and this is not enough to cause issues)
- ❖ Very diluted 100% grape or apple juice (4 parts water to 1 part juice)
- ❖ V8 vegetable juice (not the fusion or others that have fruit juice as part of the mix)

What about drinks sweetened with Splenda, Sweet 'n' Low, and aspartame?

While we believe that these artificial sweeteners are okay to consume in small amounts, we do not feel comfortable recommending that you use significant amounts of these products on a consistent basis. Each of these artificial sweeteners is likely okay in small amounts, but overconsumption of them has been shown to lead to negative healthy effects, so they are obviously not our preferred sugar substitutes.

Our Preferred Sugar Substitutes

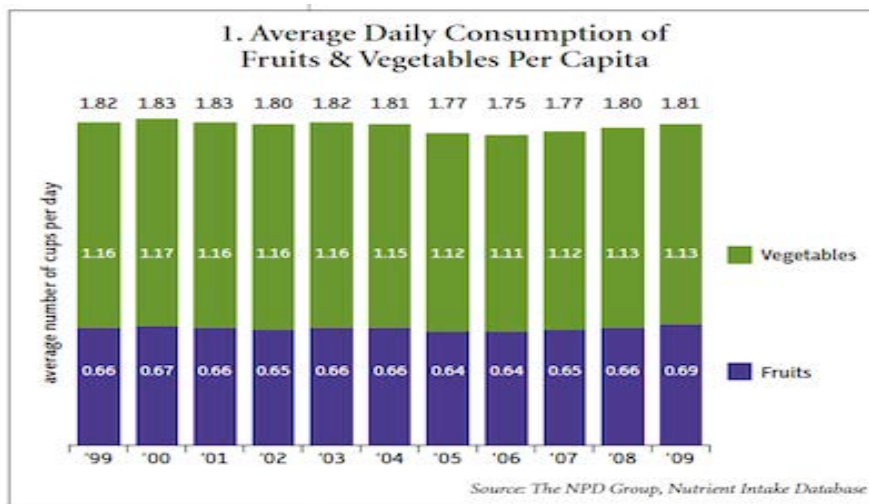
If you are looking for a healthy sugar substitute to use to sweeten your drinks and to use in baked goods, then we suggest using stevia or a unique product called Just Like Sugar™. Each of these sweeteners taste good, and they have both been shown to actually produce healthy benefits! Stevia has been shown to reduce blood pressure in some people and Just Like Sugar™ has been shown to feed the good bacteria in your gut, increase calcium absorption, and decrease the risk of colon cancer. Now, what more could you ask for in a sugar substitute? It does not get any better than calorie free and good for your health!

Stevia can be found under the brand name Truvia and SweetLeaf, and Just Like Sugar™ is tough to find in stores, but can be purchased at <http://www.justlikesugarinc.com/>

Nutrition Success Tip #4: Eat Your Fruits & Veggies and Take Juice Plus+ as Needed

Do you eat the recommended 7-13 servings of fruits and vegetables per day on a consistent basis? If you are like most people, then the answer is very likely no.

Research shows that we need 7-13 servings of fruits and vegetables daily in order to be healthy, but unfortunately most people come nowhere near achieving this goal. In fact, as outlined in the graph below, the average intake of fruits and vegetables of Americans is a measly 1.81 servings/day (1.13 servings of vegetables per day and 0.68 servings of fruits per day)



It goes without saying that this is not good!!

The Benefits of Consuming 7-13 Servings of Fruits & Vegetables Daily

As should be obvious, the health authorities recommend that we eat so many servings of fruits and vegetables daily because they do some pretty important things. Research has shown that consuming lots of fruits and vegetables has the following health benefits:

- Significantly decreases the risk of cardiovascular disease
- Improves intestinal health
- Reduces the risk of multiple types of cancers
- Aids in fullness and decreases overall calorie intake
- Decreases blood pressure
- Improves vision
- Reduces damage to the cells and slows the progression of aging
- And...most likely aids in weight loss via 2 different mechanisms which we will discuss now

As just mentioned, the consumption of large amounts of fruits and vegetables daily (around 7-13 servings per day) has the ability to aid in weight loss via two different mechanisms. Let's discuss each mechanism.

This allows leptin (remember this hormone) to cross the blood-brain barrier and act upon the brain to decrease your appetite and increase how many calories you burn at rest.

A: What happens with your weight when you don't eat lost of fruits/vegetables:

As previously noted, most of us are drinking too many liquid/sugary drinks and these drinks inhibit the ability of fat cells to produce and release leptin.

However, we feel confident that once you eliminate liquid/sugary drinks from your diet, then your fat cells will start releasing plenty of leptin and this is a good thing; however, getting your fat cells to release leptin is only part of the process. Before leptin can do what it does, it must first cross the blood-brain barrier. Unfortunately, when there is too much inflammation going on inside of your body (which is usually the case when you do not eat enough of the good fats and when you do not eat your fruit and veggies) then your body produces a nasty chemical called C-Reactive Protein, or CRP, for short. As seen in the diagram below, CRP (that is produced in response to inflammation) binds to leptin and does not let it cross the blood-brain barrier and as a result your appetite continues to remain high and your metabolism (how many calories you burn) remains low and the vicious cycle of weight gain continues.

Leptin Resistance

Hunger Stimulated

CRP > Leptin Complex Can't cross the Blood Brain Barrier (BBB)

CRP Binds Leptin

Leptin Resistance

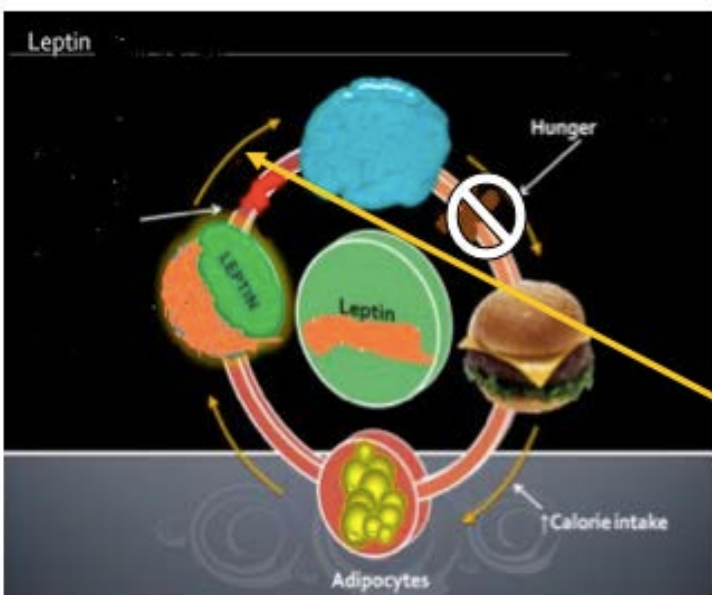
Adipocytes

↑ Calorie Intake

Once leptin is released it must travel to your brain decrease hunger. As seen here C Reactive Protein (CRP) likes to bind to leptin and prevent it from reaching your brain. The lack of fruits/vegetables & healthy fats in the diet increases inflammation & CRP & in doing so this prevents leptin from reaching your brain to control your weight.

B: What happens with your weight when you do eat 7-13 servings of fruits & veggies daily:

As just mentioned, a lack of good fats (the omega-3 fats found in fish & krill oil) and a lack of fruits and vegetables in the diet will lead to excessive amounts of inflammation in the body. As outlined on the previous page, this inflammation leads to the excessive production of CRP and this chemical binds to leptin and does not let it get to the brain to help control your weight. That's the bad news!! But, the good news is that this does not have to be the case. As outlined in the diagram below, excessive amounts of inflammation and CRP levels are easily resolved by consuming 7-13 servings of fruits and vegetables daily and by consuming more good fats (from high quality fish and krill oil) on a daily basis. Once this inflammation is resolved, then CRP levels fall and now leptin is able to reach your brain to shut down your appetite and speed up your metabolism, and as a result, it becomes much easier to control your weight.

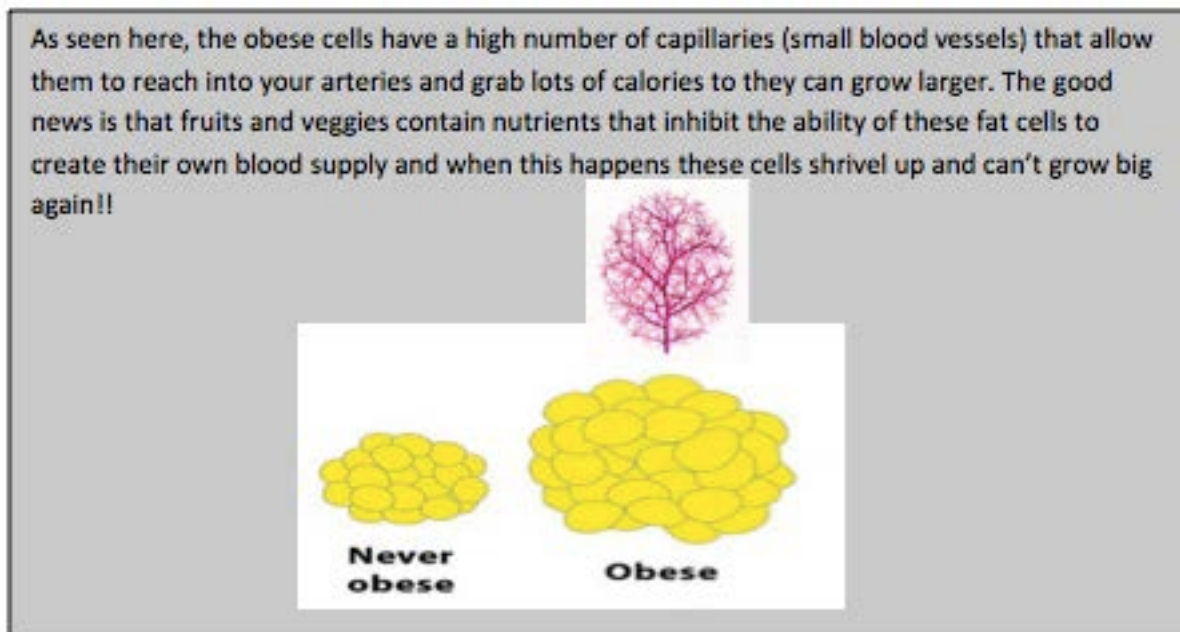


Consuming lots of fruits/veggies and good fats (like fish or Krill Oil) has been shown to decrease inflammation & CRP levels. As seen here, once CRP levels decrease then leptin is free to reach your brain and say...Hey, you have plenty of calories so we are going to shut off your appetite and speed up your metabolism so you don't gain weight. This is exactly what you want to happen! So, Meet Your Fruit & Veggie needs!



Mechanism #2: The nutrients in fruits and vegetables inhibit the ability of both cancer and fat cells in your body from creating their own blood supply. Without a good blood supply these cells do not get the nutrients they need to grow and eventually die or shrivel up.

As outlined in the diagram below, fat cells can create their own blood supply through a process called angiogenesis. Obviously this is not a good thing because the more fuel lines (capillaries) your fat cells have the more they can grow. Now, the good news is that research has shown that the nutrients found in fruits and vegetables have the ability to inhibit both fat and cancer cells in your body from creating their own blood supply. And what do you think happens to the fat and cancer cells in your body when they do not have a good fuel supply? Yep, they cannot grow, and eventually they shrivel up really small or die. So it should be obvious that if you want to starve off the fat and cancer cells in your body, then you need to consume lots of fruits and vegetables each and every day!



By now it should be obvious to you that if you want to be healthy and achieve your goal weight, then it is vital that you consume the 7-13 servings of fruits and vegetables daily. However, we understand that this is not always easy for weight loss surgery patients to do because many individuals are supertasters (meaning they have a very strong aversion to the bitter taste of most vegetables) and because there is not much room left for fruits and vegetables after surgery because once you finish your protein, you will likely already be too full to fit your fruits and veggies in. Considering these factors, we have devised a number of ways to assist our patients in meeting their fruit and vegetable needs daily so they can take advantage of the health promoting and fat fighting properties that these foods provide. Our tips for meeting your fruit and veggie needs are outlined on the next page.

How weight loss surgery patients can meet their fruit & vegetable needs consistently

Suggestion #1: Take Juice Plus+ Daily

Juice Plus+ is a supplement that we at Bariatric Dietitian Services highly recommend that all weight loss surgery patients take daily. This supplement is made by juicing 17 different fruits and vegetables, removing the water and sugar via a proprietary process, and encapsulating the dried fruit and vegetable powder that remains.

Multiple gold standard studies performed at major research universities have shown that Juice Plus+ can replicate a number of health benefits obtained by actually eating 7-13 servings of fruits and vegetables daily. These studies have demonstrated that Juice Plus+:

- ❖ Reduces oxidative stress (or cell damage)
- ❖ Reduces inflammation (which as you know can aid in the weight loss process)
- ❖ Improves immune system health
- ❖ Protects DNA
- ❖ Supports cardiovascular wellness
- ❖ Improves skin health
- ❖ Supports healthy gums

Essentially, Juice Plus+ has been shown to successfully bridge the gap between how many servings of fruits and vegetables a weight loss surgery patient needs daily and how many servings they can actually consume. To obtain these benefits, all you have to do is consume 4 Juice Plus+ capsules daily in addition to the fruits and vegetables that you are able to obtain as part of your diet. As you can see, using Juice Plus+ daily before and after surgery provides for a convenient and effective way to ensure that you are meeting your fruit and vegetable needs daily. Juice Plus™ is meant to supplement (not replace) the fruits and vegetables you should be eating!

Juice Plus+ may be purchased by calling **Carolyn McMillian (RN) at 940-399-9588**.

Suggestion #2: Juice Lots of Veggies with Just a Hint of Fruit

Another good method to ensure that you are obtaining the nutrients from vegetables and fruits on a daily basis is to purchase a high quality juicer. Freshly juiced vegetables are loaded with nutrients that will allow you to achieve a high level of health and they can aid in the weight loss process.

This method is more time-consuming than using Juice Plus+, but it works and it is a good option for those who have the time available to shop for and juice vegetables and fruits on a frequent basis.

When juicing use caution!

While juicing is a great way to get your produce in daily, you do want to be careful when making your juice and ensure that you do not overdo the fruit! Fruit juice is loaded with liquid sugar and as you know this is a big no-no for anyone trying to lose weight. It is okay to use a slice or two of apple and a little carrot juice to mask some of the bitter taste of vegetables, but do not go overboard. When juicing, we encourage you to stick with 4 parts vegetable juice to every 1 part fruit juice.

Suggestion #3: Get a High Quality Blender and Make Smoothies

Another good way to meet your vegetable and fruit needs after surgery is to make Super Smoothies daily. Super Smoothies are loaded with protein, fruits and veggies, and small amounts of healthy fats (such as almonds, all-natural peanut butter, and cashews).

A Super Smoothie recipe includes the following ingredients:

1. 5-10 ice cubes (less for a thinner smoothie, more for a thicker smoothie)
2. 1 cup of liquid (water or unsweetened soy or almond milk)
3. 1 scoop of Doc Hale unflavored protein powder
4. 1 cup of fresh or frozen fruit (we like 2/3 cup berries and ¼ frozen banana)
5. Lots of fresh veggies (we like 2 cups of washed raw spinach, celery, and peeled cucumbers)
6. 2 Tablespoons of health nuts (walnuts, pecans, almonds, etc.) or 1 tsp of all natural peanut butter
7. Combine above ingredients and blend on high until smooth.

Making Super Smoothies can be a fun and tasty way of ensuring that your fruit and vegetable needs are taken care of.

Just find a way to make it happen!

We here at Bariatric Dietitian Services do not really care how you obtain your fruits and vegetables daily. Instead, we just care that you find a way to do it daily! Failure to do so will lead to poor health in the long-term and can potentially negatively impact your ability to lose weight. Most of our patients combine all three of these suggestions to ensure that they consistently meet all of your vegetable and fruit needs. The key is to find a method that works best for you and to be consistent with it.



Nutrition Success Tip #5: Consume a Small Amount of Healthy Fat Daily

When trying to lose weight, it is important to know that you need to eat some healthy fats daily to actually lose fat!

Most people think that eating fat will make them fat and therefore they avoid it entirely when trying to lose weight. In fact, we still come across Registered Dietitians and “Nutritionists” who caution their patients not to consume more than 5 grams of fat in any one meal or snack. This makes us cringe because not only is this advice not helpful, it is actually harmful.

An enormous body of research, and our own experience, has shown that patients who incorporate a small amount of healthy fats into their diets daily achieve better health and weight loss outcomes than those who try and avoid all fat.

So, we highly recommend that you incorporate a small amount of healthy fat into your diet daily.

What are the Healthy Fats?

Healthy fats we suggest you consume on a daily basis include:

- Raw/natural almonds, pecans, walnuts, and cashews
- All-natural nut butters (peanut, almond, or cashew)
- Avocado
- Extra virgin olive oil
- Olives



These fats are known as monounsaturated fats, and each of these fats have been shown to decrease the risk of cardiovascular disease and Type 2 Diabetes as well as limit the body’s ability to store fat in the central/abdominal region (where it causes the most damage). As you can see, consuming these healthy fats daily will ensure an optimal state of health.

How Much to Consume?

When it comes to healthy fats, it is important to know that you need them, but to also understand that a little goes a long way! All fats are very calorie dense (containing 9 calories per gram) and thus it is important that you do not overdo them as doing so can negatively impact your weight loss goals if you exceed your calorie needs. Our recommendation is to keep fat intake to around 30% of your calorie intake. Depending on how far out from surgery you are, this would fall somewhere in the range of 20-50 grams of healthy fat daily. In the first 1-6 months post-op you will stick with around 20-30 grams of healthy fat per day, and after that, you would increase to 30-50 grams per day as it becomes easier to tolerate slightly larger portion sizes.

How to Determine How Many Grams of Fat You Are Consuming Daily

As discussed previously, the best way to track your nutrient intake (including calories and protein, carbohydrate, and fat grams) is to use an online tool or smartphone app such as My Fitness Pal (visit www.myfitnesspal.com to learn more).

However, if you do not have regular access to a computer or smartphone, then this may not be a good option for you, and you may need to track your fat intake manually. For those that want or need to track their fat intake manually, we have included the following list of healthy monounsaturated fats and the amount of each of these fats that it takes to equal 5 grams of fat. So, if doing this manually, you would simply determine how many servings of fat you have consumed or plan on consuming and then just multiply by 5 to get the total grams of fat in that meal or snack.

Food	Serving Size = 5 grams of fat
Almonds	6 pieces
Avocado	2 Tablespoons
Cashews	6 pieces
All-natural nut butters	1.5 teaspoons
Extra virgin olive oil	1 Tablespoon
Pecans	4 halves

Do not forget to take fish or krill oil daily!

In addition to consuming a small amount of the above fats daily, it is also very important that you take a high quality fish or krill oil supplement daily before and after surgery!

Fish and krill oil are loaded with omega-3 fats, which most people do not get enough of. The omega-3 fats have been shown to:

- Significantly decrease inflammation and aid in weight loss
- Increase muscle mass and decrease fat mass
- Decrease levels of the stress hormone cortisol
- Decrease pain and swelling which allows for more intense workouts
- Speed recovery from exercise
- Improve mood

There is not one single person that we know of that should not be taking a high quality fish or krill oil supplement each and every day, and should you choose not to take one, then your health, and likely your weight, will suffer in the long run.

Our favorite is MegaRed Krill Oil. We like krill oil over fish oil because the omega-3 fats that it contains are in a form that is more easily absorbed and incorporated into the cell membranes than the omega-3 fatty acids found in fish oil. Furthermore, krill oil contains a unique chemical called astaxanthin that gives it a red color and is also a power anti-inflammatory substance in its own right. It is so powerful in fact that we have seen it eliminate a patient's tendency to sunburn with 4 weeks of use, and we have seen it completely resolve a patient's severe case of arthritis in her hands and wrist after just 2 months of daily use.

Nutrition Success Tip #6: Choose the Right Carbohydrates and Always Eat Them Last

As part of your weight loss attempts in the past, you have likely been told that all carbohydrates are the enemy and you must avoid them at all costs if you want to lose weight. While there is truth in this message, we here at Bariatric Dietitian Services do not believe in telling patients to avoid carbs!

Instead, we encourage our patients to adhere to 3 Simple Rules when it comes to carbs:

Carb Rule #1: Avoid Bad Carbs 90% of the Time!

Let there be no doubt about it, the overconsumption of bad carbohydrates such as sugar, liquid/sugary drinks, white bread, sugary cereals, doughnuts, mashed potatoes, and any other high carb/low fiber food will cause weight gain and make it next to impossible to burn fat.

These carbohydrates are quickly digested and absorbed into your blood stream and as a result, lead to a dramatic increase in your body's insulin levels. Once your insulin levels are elevated, then it is impossible to lose weight because this hormone turns on all fat storage systems in your body and turns off all fat-burning systems. So, if you really want to achieve your weight loss goals, then you need to avoid refined/low fiber carbohydrates and sugar 90% of the time. Just say NO 90% of the time. And when you do have them 10% of the time or less, then make sure and only consume them within 30 minutes of a very intense workout, as your body can handle them better at this time than at other times.



Carb Rule #2: When Eating Carbs Make Sure and Eat Complex Carbs High in Fiber

Despite what you have been told, carbohydrates are not the devil! When you eat carbs, you will be okay as long as you eat them in small amounts and as long as they are complex carbohydrates that are loaded with fiber.

Good complex carbohydrates to choose from include:

- Berries
- Red potatoes with skin (as tolerated)
- Beans
- No sugar added old-fashioned oatmeal
- 100% whole wheat bread (toasted)
- Quinoa (an ancient grain high in protein)

Carb Rule #3: When Eating Carbs Always Eat Them Last After Protein & Veggies

Most nutrition professionals have their weight loss patients closely track how many carbohydrates they are consuming; however, we do not believe in this method. Instead, we simply want you to eat the right carbs and always eat them last!

After your surgery your ability to tolerate large portions will be non-existent, so, if you were to eat your protein first, your vegetables second, and any good/complex carbohydrates last, then what do you think will happen by the time you get to your carbs? Yep...you will be too full to even think about overeating them, and there is no possible way that you will eat enough carbohydrates to negatively impact your weight loss.

In summary,

Don't be deathly afraid of carbohydrates. Instead, just limit the bad ones, choose the good ones, and always eat them last (after your protein and vegetables) and you are set!

Nutrition Success Tip #7: Eat 3 Small High Protein Meals & 2 High Protein Snacks Daily

After surgery, it is important to consume 3 high protein meals and 2 high protein snacks daily. Considering that your portion sizes will be very small, there is practically no way possible that you can meet your protein needs if you are eating less frequently than this.

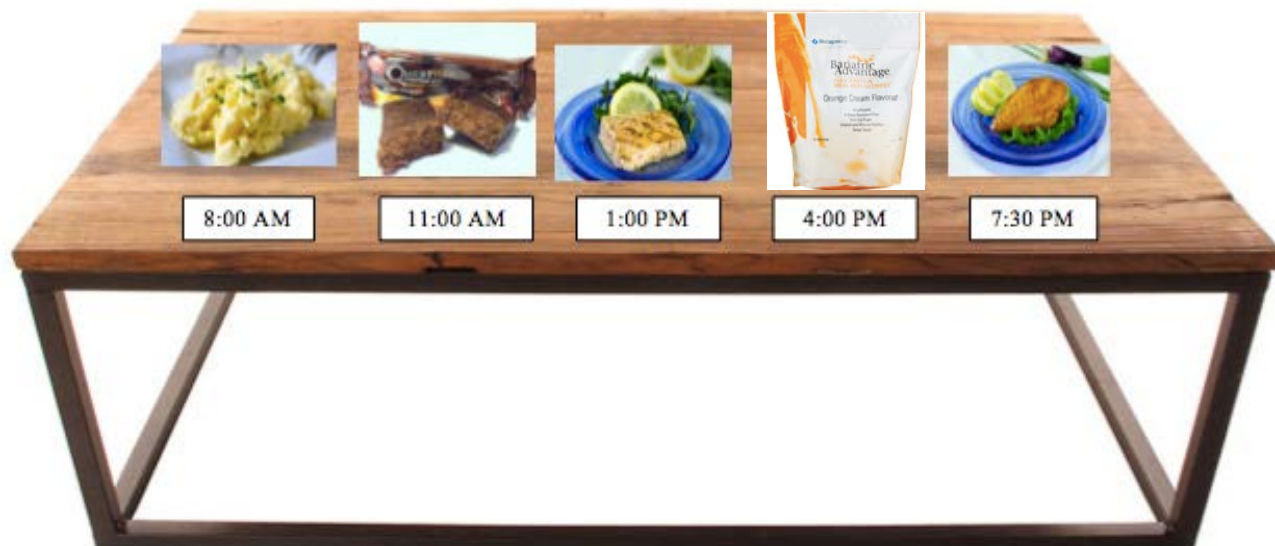
So, make sure you are eating a high protein meal or snack every 3-4 hours after surgery so that you obtain the nutrition that your body requires.

But, do not eat more frequently than this!!!

While it is important to eat frequently after surgery, it is important that you do not eat more than 5-6 times per day after surgery (3 meals and 2-3 snacks). Unfortunately, we see far too many patients cheat their surgery (and still over-consume food/calories) by grazing on small or very small volumes of food non-stop throughout the day. These patients will eat an ounce of food and never really feel full, and then they will turn around 20 minutes later and eat another 1-2 ounces of food. Then they will repeat this process over and over during the day, and in doing so, they become constant grazers who are still able to overeat despite the restrictive advantages the surgery provides.

This is not how your surgery is designed to work! Instead, your surgery works best when you eat enough food (usually 3-4 oz max) to make you feel full and to keep you full for a good 3-4 hours.

So, as you can see, it is very important to eat three high protein meals and 2-3 high protein snacks on a daily basis, but not more than this.



Nutrition Success Tip #8: Eat Slowly, Chew Food Thoroughly, and Stop Eating When 80% Full

Many of us eat far too quickly. At each meal, we expect to eat until the point of fullness. Unfortunately, this leads to poor performance and overall health. The communication between your stomach and your brain is very slow. In fact, research has shown that it takes 20 minutes from the time you start eating before your brain finally says, “I am full so you can stop eating” signal. So, as you can see, eating too quickly leads to excessive calorie consumption and makes weight loss difficult.

Further, eating too quickly and eating too much food after surgery can lead to severe stomach and intestinal distress and trust us...this is not a pleasant experience.

Therefore, we encourage you to make sure and eat slowly. The goal should be 15-20 minutes per meal at a minimum, with a more optimal time frame being 15 minutes for a small snack and 20-30 minutes for your main meals.

Some tips to help you slow down your pace of eating include:

- Sit down at the table
- Eliminate distractions (no TV, tablets, or smartphones)
- Eat with someone and have a conversation
- Sit your eating utensil down between bites
- Use toddler-sized eating utensils to help you take smaller bites
- Spend time tasting your food.



Every time you eat a meal, sit down, chew slowly, and really pay attention to the flavors and textures.

Chew Your Food Thoroughly!

In addition to slowing down, we also suggest that you chew your food very, very, very thoroughly after surgery. In fact, we like to say that after surgery we want to make your mouth do the work that your stomach was once able to do! You see, the job of your stomach is to pulverize food into a liquid consistency in order to prepare it for further breakdown and absorption in the intestine. However, you can imagine that if you remove, or bypass, a large part of your stomach, then it will not have the same ability to break down food after surgery as it did before surgery. Therefore, after surgery it is very important that you chew the heck out of your food, as doing so will help slow down your pace of eating, and it will prevent stomach pain and indigestion that can occur after surgery if you swallow large pieces of food.

So, make sure and chew your food to liquid consistency before you swallow!

Stop Eating When You are 80% Full

In addition to eating slowly and chewing your food thoroughly after surgery, it is also important to listen to your body and to stop eating when you feel 80% full. This is defined as eating until no longer hungry instead of eating until full.

Most people are accustomed to eating until the point that they are stuffed. Doing so leads to over-consuming food/calories and will lead to very uncomfortable stomach pains after surgery. Therefore, as you start to eat slower and to chew your food thoroughly, we encourage you to pause periodically during your meal and ask yourself, “Am I still hungry?” If the answer is yes, then keep eating slowly, but make sure to put your fork down and walk away from the table as soon as the answer is “No!”



Nutrition Success Tip #9: Take All of Your Required Vitamins & Minerals Daily

Let us ask you a question. Is your decision to have weight loss surgery based on the goal of being thin, being healthy, or being both thin and healthy?

If you are like the majority of our patients, then most likely your decision to have surgery was based on the goals of reaching a healthy weight, while also achieving a high level of health and vitality. If so, then weight loss surgery is only one part of the solution to your current weight and health situation.

Weight loss surgery (when combined with the previous 8 Nutrition Tips) will certainly help you achieve a healthy weight; however, the surgery alone will not help you achieve a high state of health and vitality. In fact, it may actually lead to a worsened state of long-term health unless you consistently adhere to the pre- and post-op supplement protocol that your surgeon requires his or her patients to follow.

The table below outlines common nutrient deficiencies that can occur after surgery in those that do not consume their required vitamins and minerals after surgery. As you can see, the risk of multiple vitamin and mineral deficiencies is extensive for all surgery types.

Surgery Type: Risk for Nutrient Deficiency

At Risk = Y

Low or No Risk = N

Nutrient	Lap-band	Gastric Sleeve	Gastric Bypass
Vitamin B1 (Thiamine)	Y	Y	Y
B12 & Folic Acid	Y	Y	Y
Calcium	Y	Y	Y
Iron	Y	Y	Y
Zinc	Y	Y	Y
Selenium	Y	Y	Y
Vitamin A	N	N	Y
Vitamin D	Y	Y	Y
Vitamin E	N	N	Y
Protein	Y	Y	Y

Side Effects of Nutrient Deficiencies

Now that you understand that all weight loss surgery patients are at an increased risk of multiple nutrient deficiencies, let us take a look at what can happen should you experience long-term deficits of any of these vitamins and minerals.

Nutrient Deficiency	Side Effects and Symptoms
Vitamin B1 (thiamine)	Potentially irreversible nerve damage, fatigue and poor memory
Vitamin B12	Anemia, nerve damage, fatigue, & elevated homocysteine levels (increased cardiovascular disease risk)
Folic Acid	Anemia, fatigue, nerve and muscle pain, swollen/red tongue and an increased risk of birth defects for those patients who are of child bearing age
Calcium	Increased risk for severe bone loss (osteoporosis)
Iron	Anemia, fatigue, inflammation of the gums and tongue, feeling cold all of the time
Zinc	Hair loss, poor wound healing, taste changes, poor immune health
Selenium	Decreased immune system health, brittle hair and nails, fatigue and rash
Vitamin A	Poor night vision, rough/dry skin, birth defects while pregnant, headache and nausea
Vitamin D	Poor bone health (osteoporosis), tooth decay, elevated blood pressure, decreased immune system health, increased risk of cancer and spontaneous fractures
Vitamin E	Increased levels of inflammation and increased oxidative stress to the cells of the body
Protein	Loss of muscle mass which results in weight loss stall/regain, fatigue and loss of strength

As you can see, nutrient deficiencies that may occur after surgery can lead to some serious physical conditions and many of these symptoms are irreversible once they set in. It is imperative that you take action well in advance of your surgery to ensure that all your vitamin and mineral levels are maximized at the point of surgery and that you stay persistent with taking all of your required vitamins and minerals consistently for life after your surgery. To help ensure you do not experience nutrient deficiencies after surgery, your physician has developed a supplement protocol outlined on the following pages. It is important to note that following this protocol is not optional, and failure to comply with these requirements will likely lead to poor health outcomes long term. Make sure to follow your surgeon's orders!

Sleeve & Bypass Nutrition Supplement Prescription

Name _____

Dr. Bagshahi

817-524-0308

Address _____

All vitamin and mineral supplements must be either chewable or liquid form to enhance absorption and prevent ulcers. Avoid all gummies.

R_x

- 1) Multivitamins (2 “complete” chewable MVI per day). NO GUMMIES
 - a. Your doctor recommends: Thorne MVI tablets
 - b. Other acceptable MVI: Celebrate Multiple Complete, Bariatric Advantage Advanced Multi EA
- 2) Vitamin B12
 - a. Sublingual B12 or B12 drops: 2500mcg per week
 - b. Or B12 injection once per month
- 3) Calcium Citrate (1500-2000 mg daily):
 - a. Chewable calcium citrate plus vitamin D and magnesium
 - b. Do not take calcium citrate with iron, and allow 2-3 hours between 500mg doses of calcium citrate
 - c. Acceptable choices: Celebrate calcium chews, Bariatric Advantage soft chews
- 4) Iron (if instructed to take an additional supplement)
 - a. Ferrous fumarate is best tolerated
 - b. Men & postmenopausal women: 18-27mg total daily
 - c. Premenopausal women or anemic: 50-100mg total daily
- 5) Vitamin D (if instructed to take an additional supplement)
 - a. 2000-5000 IU daily (Vitamin Shoppe Liquid Vitamin D3)
- 6) Protein Supplements: use any of the following as needed to meet protein needs:
 - a. Bariatric Advantage meal replacement shake
 - b. Doc Hale Unflavored protein powder
 - c. Quest protein bars
 - d. Oh Yeah! Victory protein bars
 - e. Isopure or Nectar protein drinks/powders
 - f. Premier protein shakes/bars

Refills: Unlimited. Patient to take for life!!!

Signature _____

Sample Vitamin Schedule

AM	1 chewable multivitamin + B12 + iron
Mid-AM	1 calcium citrate chew (500 mg)
Mid-Day	1 chewable multivitamin
Mid-PM	1 calcium citrate chew (500 mg)
Bedtime	1 calcium citrate chew (500 mg)

Highly Recommended Supplements (these are NOT required)

In addition to the above required vitamin and mineral supplements your doctor requires you to take, it is also *highly recommended* by us to take Juice Plus+ (2 Garden and 2 Orchard capsules daily) and a high-quality krill oil (MegaRed).

As mentioned previously, most people do not consume enough fruits and vegetables and healthy omega-3 fats in their diet, and this is especially the case after surgery. The inadequate intake of fruits/veggies and healthy fats long-term can lead to an increased risk of numerous medical conditions (cancer, insulin resistance, poor brain health, and advanced aging to name a few) and as outlined previously can inhibit one's ability to lose weight.

Juicing or taking a product like Juice Plus+ and taking krill oil daily will help you bridge the gap between your fruit/veggie and omega-3 fat needs and actual intake of these nutrients.

Remember...an ounce of prevention is worth a pound of cure!

When to Start Taking Supplements

As discussed earlier in this handbook, your surgeon has requested that you start supplementing with all of the required supplements as soon as possible after your initial consult. We also *recommend* starting Juice Plus+ and a high-quality krill oil well in advance of your surgery.

Research has clearly shown that majority of weight loss surgery patients are deficient in a number nutrients before surgery. As such, waiting until after surgery to start your nutrition supplements makes no sense because it will leave you playing catch-up and will most likely slow your post-op recovery.

So, if you think you will be having surgery within the next 1 to 6 months from reading this, then make sure to go ahead and start taking all of your supplements immediately.

Where to Purchase?

1. Doc Hale Unflavored protein powder:
 - a. www.dochalnutrition.com or by calling 1-844-DOC-HALE
 - b. You can also order a free sample at the website listed!
2. Quest Protein bars available at GNC and Vitamin Shoppe
3. Juice Plus+ is available by calling Carolyn McMillian at 940-399-9588
4. Just Like Sugar (healthy sugar substitute) available at <http://www.justlikesugarinc.com>

Disclosures:

Bariatric Dietitian Services: Bariatric Dietitian Services discloses the following:

- We receive a small commission for online sales of Doc Hale Unflavored protein powder
- We receive no commission on the sales of Just Like Sugar or Juice Plus
- Our supplement recommendations are based on sound research/clinical experience and we feel strongly that the supplements & services we recommend are beneficial for our patients.

Nutrition Success Tip #10: Use the Plate Method, Our Tip Sheet, & Supplement with Protein Shakes/Bars for Long-Term Success

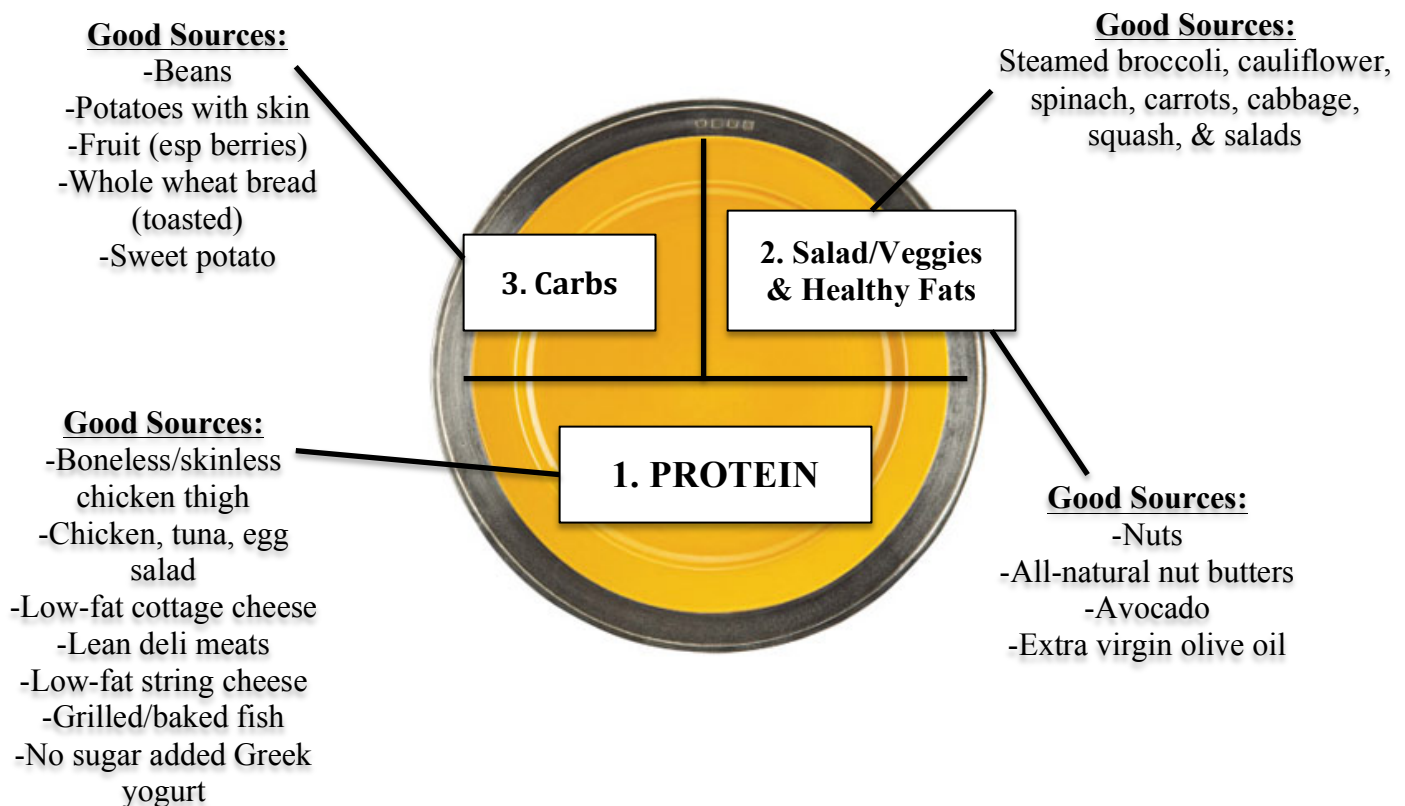
By now you should know the 9 main nutrition tips to ensuring the best results from your surgery; however, we understand that this is a lot to absorb and that it will likely be difficult to apply these habits consistently without some tools that make it an easy process.

Therefore, in this section, we provide a number of helpful suggestions and tricks that will make complying with our nutrition tips as easy as 1, 2, 3!

Suggestion #1: Use the Plate Method of Eating

As already discussed, you should be eating protein at each meal and having your protein first, you should be trying incorporate as many low starch vegetables into your diet as possible, you should be eating a small amount of healthy fat daily, and you should be limiting your carbohydrate intake to good carbs only and only consuming your carbs at the end of the meal. Now, that is a lot of tips to remember, and the good news is that you do not have to! Instead, we encourage you to use the plate method as outlined below to make implementing these tips an easy process.

As seen here, to follow the plate method of eating you simply take a small salad plate (vs. a large dinner plate) and fill the bottom half with a good source of protein. Next, you divide the upper half into 2 parts and fill 1 part with low starch vegetables and the remaining part with good sources of complex carbohydrates. Lastly, you add a small serving of good fats and they you simply eat your protein 1st, your veggies and good fats 2nd, and any carbs last and you are all set!



Suggestion #2: Print out and use the following Nutrition Tip Cheat Sheet to Ensure that Each of Your Meals Stacks Up to Our Nutrition Guidelines.

In place of the Plate Method the Nutrition Cheat Sheet can be used to help guide you in making healthy meal selections before and surgery. We encourage you to print out, fold up, and keep copies in areas where you will commonly be eating. Then, just reference it to make sure your meals and snack are on track!

1. Does this meal or snack contain protein? Examples include: meat, chicken, fish, cheese, eggs and high quality protein shakes/bars 2. If this meal/snack contains carbs then are they good carbs (beans, fruit, whole grains, potatoes with skin) & if so then do I plan on eating these carbs at the end of the meal/snack only? 3. Does this meal contain a small amount of healthy fats such as: olives, avocado, extra virgin olive oil, nuts like almonds/cashews, or nut butters? Have I taken my fish/or krill oil? 4. Am I close to getting my 7-13 servings of fruits and vegetables in today? If not then I need to make a vegetable juice or super smoothie and/or take my Juice Plus®! 5. Am I Eating My Calories & Not Drinking My Calories Today? The only exception being protein drinks. If not then vow to do better the rest of day!	6. Am I on track with meeting my fluid needs for the day (64 oz minimum)? If not, then I will start drinking more fluids the rest of the day to catch up. 7. Am I on track with eating 3 high protein meals & 2 high protein snacks today and with meeting my protein requirements? If not, then I need to have a few protein shakes/bars before bedtime tonight to catch up. 8. Am I in tune with my hunger and am I consistently stepping away from the plate at 80% full? If not, then I will become more diligent about following this habit! 9. Am I on track with taking all of the vitamins/minerals that my surgeon requires me to take daily? If not, then I will take these now/very soon so I will not develop severe nutrient deficiencies. <i>BARIATRIC DIETITIAN SERVICES</i> <i>NUTRITION TIP CHEAT SHEET</i>
--	---

Fold here

Suggestion #3: Use Meal Replacements and Protein Bars as Needed

Research has shown that individuals who replace 1-2 meals or snacks per day with a meal replacement or protein drink, or a protein bar or protein snack tend to consume a healthier diet than people who choose to self-select their meals and snacks. As such, we encourage you to keep plenty of our recommended protein drinks, bars, and crisps on hand at all times (at work, at home, and in your purse/travel bag) so that you do not leave yourself an opening for eating a meal or snack that you know is unhealthy for you. Keeping Bariatric Advantage Meal Replacement shakes, Doc Hale unflavored protein powder, Nectar, Isopure, and keeping Quest bars and Oh Yeah! Victory bars available at all times will help ensure that a healthy high-protein food source is always available when and where it is needed.

Diet Guidelines

To prepare for a safe and effective operation, your surgeon may request that you lose 5-10% of your initial weight prior to surgery. Losing this weight makes for a safer operation and has been proven to lead to a decreased hospital stay and improved long-term weight loss outcomes.

To achieve the required weight loss, we recommend implementing the following diet protocol as soon as possible after completing your required nutrition education and after you have met and spoken with your Dietitian.

Phase 1: High Protein, Low Calorie, and Low Carbohydrate Diet (~1200 calories per day)

When to start: The earlier the better, in fact, we recommend starting immediately; however, at a minimum start at least 1 month before your surgery, if at all possible.

What to have:

1. Breakfast:
 - 4 ounces of lean protein, such as scrambled eggs/low fat omelet, Canadian bacon, low-fat cottage cheese with a small amount of fruit and turkey bacon with a small piece of fruit (no more than 1 cup)
 - Or, you may have a high-protein meal replacement shake (Bariatric Advantage or equivalent)
2. AM Snack:
 - 3-4 ounces of lean protein such as low-fat string cheese, low-fat deli meat (3 gm fat/oz), low-fat cottage cheese, a Quest or Oh Yeah! Victory protein bar, Ostrim Jerky, no sugar added Greek yogurt, or a high-protein meal replacement shake
3. Lunch:
 - 4 ounces of lean protein such as very lean ground beef (90/10 or leaner), sirloin steak, lean brisket, grilled or baked chicken breast, skinless chicken thigh or leg, grilled or baked fish, lean pork (visible fat trimmed), low-fat chicken, tuna, or egg salad
 - Plus 1-3 cups of low-starch veggies such as broccoli, cauliflower, green beans, cabbage, spinach, zucchini, California blend, Brussels sprouts, tomatoes, asparagus, low-fat stir fry veggies, or garden salad with low-calorie dressing (no croutons)
4. PM Snack:
 - Any options suggested for AM snack
5. Dinner:
 - Same as outlined for lunch
6. **Start the following supplements:** all required vitamins and minerals. We also recommend a high-quality Krill Oil (like MegaRed) and a fruit & vegetable supplement (like Juice Plus+)

****Stick with water or water-based, no or very low calorie liquids such as Crystal Light, Propel, Vitamin Water Zero, etc. No juice, milk, sweet tea (with sugar), soft drinks, or high-sugar coffee drinks!****

Phase 1: 7-Day Sample Meal Plan

To make the meal planning process easy for you, we have provided the following 7-Day meal plan to be used as is, or as a guide to assist you in planning your own meals and snacks during this phase.

Sunday:

Meal	Foods
Breakfast	2-3 plain egg omelet + 2 oz Canadian turkey bacon + ½ cup fresh/frozen berries
AM Snack	Bariatric Advantage Meal Replacement shake (or equivalent)
Lunch	4 oz rotisserie chicken breast + 1-3 cups of stir fry veggies + 24 raw/natural almonds
PM Snack	Quest Protein bar
Dinner	4 oz grilled salmon + 1-3 cups of broccoli florets + 1 Tbsp extra virgin olive oil on broccoli

Monday:

Meal	Foods
Breakfast	2-3 egg Western omelet + small orange + 6 pecan halves
AM Snack	Bariatric Advantage Meal Replacement shake (or equivalent)
Lunch	4 oz rotisserie chicken breast + 1-3 cups of stir fry veggies + 24 raw/natural almonds
PM Snack	2 sticks of low-fat string cheese or 1 Ostrim jerky stick
Dinner	4 oz moist brisket + 1-3 cups Sicilian vegetable blend + ½ small avocado with tomato slices

Tuesday:

Meal	Foods
Breakfast	Bariatric Advantage Meal Replacement shake (or equivalent)
AM Snack	2 pieces low-fat string cheese + 1 small apple and 12 almonds
Lunch	4 oz pork tenderloin + 1-3 cups steamed asparagus + ½ Tbsp all natural peanut butter
PM Snack	Quest Protein bar or Oh Yeah! Victory bar

Dinner	4 oz lean hamburger with light mayo or mustard + 1-3 cups green beans
--------	---

Wednesday:

Meal	Foods
Breakfast	4 oz low-fat cottage cheese blended with ¼ frozen banana and topped with ½ cup fresh berries. Add Stevia to taste.
AM Snack	Quest protein bar or Oh Yeah! Victory bar
Lunch	4 grilled teriyaki chicken + 1-3 cups Italian green beans + ½ Tbsp extra virgin olive oil on veggies
PM Snack	1 piece of low-fat string cheese wrapped in 1 oz lean deli meat
Dinner	4 oz meatloaf (made with 90/10 ground beef or ground turkey) + 1-3 cups cauliflower

Thursday:

Meal	Foods
Breakfast	2-3 plain egg omelet + 2 oz Canadian turkey bacon + ½ cup fresh or frozen berries
AM Snack	Quest protein bar or Oh Yeah! Victory bar
Lunch	4 oz turkey breast + 1-3 cups steamed spinach + 1 Tbsp extra virgin olive oil on spinach
PM Snack	Bariatric Advantage Meal Replacement shake (or equivalent)
Dinner	4 oz fajita chicken breast + 1-3 cups of Capri-blend veggies + 12 raw/natural almonds

Friday:

Meal	Foods
Breakfast	Bariatric Advantage Meal Replacement shake (or equivalent)
AM Snack	2 pieces low-fat string cheese and 1 small apple
Lunch	6 small meatballs + 1-3 cups of green beans + an Adult beverage (just checking to see if you are actually reading this ☺)
PM Snack	Ostrim jerky stick or 2 pieces low-fat string cheese with small orange
Dinner	4 oz sirloin steak + 1-3 cups steamed asparagus + 2 small red potatoes

Saturday:

Meal	Foods
Breakfast	Cheddar omelet + 2 pieces turkey bacon + ¼ cup blueberries
AM Snack	Bariatric Advantage Meal Replacement shake (or equivalent)
Lunch	4 oz pot roast + 1-3 cups of zucchini
PM Snack	Quest protein bar or Oh Yeah! Victory bar
Dinner	4 oz sweet oriental chicken breast + 1-3 cups stir fry veggies + ½ Tbsp almond butter

Quest protein bars, Oh Yeah! Victory bars, Bariatric Advantage Meal Replacement shakes (or equivalent), and Ostrim jerky sticks make for extremely healthy and great-tasting breakfast or snack options during this phase. See below for where to purchase:

1. Quest bars at www.questproteinbar.com/bariatricrd/, GNC or Vitamin Shoppe
2. Oh Yeah! Victory bars and Ostrim jerky sticks: GNC or Vitamin Shoppe
3. www.dochalenutrition.com or www.bariatricadvantage.com

If the above menus feel overwhelming, you also have the option of purchasing ready-made meals that are heat and serve. One option is My Fit Foods (www.myfitfoods.com). They have locations in Texas, Oklahoma, Illinois, Arizona, and California and offer breakfast, lunch, dinner, and snack options. You can even order meals online and they will have them ready for you when you want to pick them up! Make sure to choose items with 20 or more grams of protein and 10 grams or less of sugar.



A Note About Accountability, Support, and Mentorship

Over the previous pages, we have laid out exactly how to eat to succeed with weight loss surgery, and over the last few pages we have provided you with a few suggestions that makes eating right after surgery easy to do.

That being said, we understand that it is not what you know that matters, but instead it is doing what you know consistently that will make the difference between average outcomes and phenomenal results.

Our experience has shown that most patients need a system of accountability, support, and mentorship in place before and after surgery in order to stay consistently compliant with eating right after surgery.

As such, Bariatric Dietitian Services is proud to offer a post-op nutrition support plan that will help you stay on track during your weight loss journey.

For \$125, our post-op nutrition support program includes:

- Unlimited email and text communication with your dietitian
- Three post-op nutrition visits to be scheduled with your dietitian 21-30 days apart after your surgery

Helpful Resources

Recipe Ideas:

- Chef Dave Fouts (Chef and Weight Loss Surgery Patient: www.chefdave.org)
- Living after WLS: www.livingafterwls.com/Recipes.html
- Bariatric Eating: www.bariatriceating.com
- Theworldaccordingtoeggface.blogspot.com

Meal Replacement Recipes

Directions, Recipes, & Hints

Basic Ingredients to add to any shake:

- o Ice cubes
- o Fruit(s)
- o Flaxseed oil
- o Sugar free flavorings or extracts
- o Base: water, skim milk, light soymilk, unsweetened almond milk

IF YOU USE MILK AS A BASE, DO NOT ADD FRUIT TO YOUR RECIPE

Basic blending instructions:

1. Pour cold skim milk or cold water into a blender. Begin mixing on a low speed.
2. Slowly add protein powder while blender is mixing for about 15 seconds.
3. Add ice cubes, replace lid, and blend until smooth.

The addition of ice cubes will result in a frothy mixture. If you create a shake with fruit and water, try frozen fruit in place of the ice.

Shaker Directions:

1. Pour cold skim milk or cold water into shaker
2. Slowly add protein powder
3. Add small ice cubes if desired
4. Replace lid and shake until smooth

Hints:

- o To increase sweetness, add Splenda, stevia, or sugar free syrups
- o To decrease sweetness, increase water
- o Frozen fruits make the shakes creamer
- o For a thicker consistency, add sugar free yogurt
- o You may freeze the shakes for an ice cream consistency. Do not allow the shake to thaw. It must be eaten frozen
- o If you are using frozen fruit, you may or may not need to add ice cubes
- o **TOO MANY CARBOHYDRATES WILL PREVENT KETOSIS—CHOOSE EITHER MILK OR FRUIT**

Recipes

Banana-Chocolate Smoothie

2 scoops Bariatric Advantage Chocolate protein powder
8-10 oz of water or skim milk
½ to 1 banana
Blend until smooth
Option: add ice & eliminate water

Pina Colada Smoothie

2 scoops Bariatric Advantage Vanilla protein powder
2 oz coconut milk
6 oz pineapple juice
Add ice & blend
Option: add 4 oz cold water & eliminate ice

Very Berry Smoothie

2 scoops Bariatric Advantage Vanilla protein powder
½ cup fresh or frozen blueberries
½ cup fresh or frozen raspberries
8 oz cold water OR
4 oz cold water + 4 oz skim milk

Tart & Tasty Smoothie

2 scoops Bariatric Advantage Vanilla protein powder
2 oz pomegranate juice
2 oz pear juice
½ cup fresh or frozen raspberries
4 oz cold water

Orange-y Smoothie

2 scoops Bariatric Advantage Vanilla protein powder
6 oz low calorie orange juice
2-4 oz cold water
Option: add ice & eliminate water

Apple Pie Smoothie

2 scoops Bariatric Advantage Vanilla protein powder
1 4 oz container of unsweetened applesauce
8-10 oz water or skim milk

Chocolate Mocha Smoothie

2 scoops Bariatric Advantage Chocolate protein powder
6-8 oz skim milk
1 shot of espresso
½ banana
1-2 ice cubes

Chocolate Almond Smoothie

2 scoops Bariatric Advantage Chocolate protein powder
8-10 oz skim milk
1/8 tsp almond extract

Chocolate-Covered Strawberries Smoothie

2 scoops Bariatric Advantage Chocolate protein powder
½ cup fresh or frozen strawberries
1 Tbsp unsweetened cocoa powder
6-8 oz skim milk