

How I Survived Bariatric Surgery

by James A. Marusek

Introduction

On 16 May 2013, I underwent Bariatric Surgery. The operation is called a Roux-En-Y Gastric Bypass. In this operation, the stomach is cut in two. The smaller part becomes my new stomach and is rerouted to the intestines. The cut end of the larger part is closed up. The larger part still connects to the intestines but food no longer passes through it. It is kept because it still generates some important enzymes.

The operation was done laparoscopically. This technique, also called minimally invasive surgery (MIS), is a modern surgical technique in which operations in the abdomen are performed through small incisions (usually 0.5–1.5 cm) as opposed to the larger incisions. This shortened the recovery process significantly.

There are several different forms of Bariatric Surgery. I chose Roux-En-Y because it produced the quickest and deepest weight loss. Also it had the lowest rate for revisions. I did not want to go through this type of operation again. Once is enough for me. A recent study led by Dr. Anita Courcoulas that looked at the effectiveness of bariatric surgery among 1700 patients found that three years following gastric bypass surgery, the median weight loss was 32% of initial body weight; 67% had demonstrated remission from diabetes; and 38% had remission from hypertension.

Why Surgery

In a strange sort of way, it was due to my mother. She has diabetes and high blood pressure. I have helped care for her for the past 6 or 7 years, taking her to doctors visits and the hospital, staying with her when she runs into problems, coordinating her care and medicine. Because of the diabetes, she developed diabetic ulcers in her feet and because of the diabetes and the bone spurs in her feet; they will never heal. The foot ulcers are open wounds that invite infections. If she doesn't constantly take care of her feet, they will go bad and she will need to get them amputated. She cannot even cut her toenails; a doctor must cut them. She doesn't exercise and would rather sit on the couch all day watching television.

I have also developed diabetes and high blood pressure. I could see myself walking down the same path as mom. I am a grandparent taking care of a great grandparent. I should be enjoying my later years with my children and grandchildren. But instead I may become a burden to them.

So when I retired after working 4 decades, I resolved to exercise regularly and lose weight through dieting. I signed up for the YMCA. A few weeks later mom fell and broke her hip. When we pulled her from rehab, she was still unable to get around. We took her home and cared for her for 6 months while she recovered. This was 24 hours per day constant care. No time for the YMCA. This was how I used a good part of my membership.

That is not to say that I didn't pursue physical exercise or dieting. I did steep hill walking and swimming. I could swim a mile or two when I visited the YMCA. I could still leg lift over 400 pounds at age 65. But the exercise did not help me lose weight and the dieting did not help either. I think when you develop diabetes, the body somewhat shuts down and inhibits weight loss which then inhibits correcting diabetes and high blood pressure.

So that is why I decided to undergo this surgery. My wife was in favor of it. It is not a magic bullet. Some people lose weight only to gain it all back again.

Metrics.

There are three types of metrics that I gauged the success of this operation. They are

- Weight loss
- Medical issues resolved
- Clothes sizes

I lost 20 pounds pre-surgery and 80 pounds post surgery for a total weight loss of 100 pounds. I dropped from 260 pounds down to 160 pounds. I did not find daily weight loss as a major motivator. During the first few weeks after surgery, I experienced significant weight loss and then it began to taper off dramatically.

The surgery resolved a number of medical conditions. When I left the hospital two days after surgery, I was off all my diabetes medicine. Within three or four weeks after surgery, I was off all my high blood pressure medicine. Although I was not officially diagnosed with sleep apnea, the fact that my wife complained violently about my snoring and how it deprived her of sleep meant that I probably had this condition. This also disappeared a few weeks after surgery. Now I sleep so quietly it scares her. She cannot hear me breathing and sometimes she wakes up in the middle of the night and thinks I am dead, I breathe so quietly. I also had a problem with frequent urination. I would wake up every hour on the hour and have to use the restroom. I could not go on long trips. After surgery, this problem was resolved. Another condition that I had was profuse sweating. This also went away. Since most of these problems were resolved within a few weeks after the operation, they no longer seemed like a major motivator for continuing the weight loss.

I had a significant reduction in clothes size and this became a major motivator for continued weight loss. I dropped from a size “46” in pants down to a size “33”. I dropped from a size “3X” in shirts down to a size “S”. While I was losing weight, I would buy a new shirt or pants that I liked. I could barely put it on; it was so tight. I felt that if I took a deep breath, it would split apart at the seams. But then a couple weeks later, the shirt or pants would fit like a glove. This was a great motivator during the weight loss process.

Pre-Surgery Weight Loss

One of the requirements of the program was to cut out all caffeine and carbonated beverages. For years, I drank Coke. Then I switched over to Diet Coke, in order to hold down my weight. This change did not cause any weight loss. Normally I consumed around 6 cans a day. So at the start of my medically supervised weight loss program, I cut out Cokes completely and went cold turkey. I went through a week or two of withdrawal symptoms. My body would ache all over. It was horrible. But I lost 20 pounds based on that change alone. Some individuals said that was due to the artificial sweeteners. But that was not the case. I still consumed them but in a different form. I believe that it was the carbonated beverages. When I drink carbonated beverages, it is like drinking many small explosions [little carbon dioxide bubbles]. They expand my stomach minutely; therefore I can eat more because my stomach becomes microscopically larger each day.

Post Surgery Weight Loss

One of the most interesting aspects of this surgery is that after surgery I lost all sense of *hunger*. When a person is not hungry, it is not difficult to eat less; and the weight just seems to melt away. After surgery, people would come up to me and congratulate me on my weight loss. [They seemed to equate this with a

diet.] I found this to be very strange because from my perspective I didn't have anything to do with it. It was the surgery that was responsible for the weight loss. I was just dragged along for the ride by this heavy moving freight train.

Preparation for Surgery

Prior to surgery, I was encouraged to walk each day. I feel this helped me during my recovery process. When I checked in with the anesthesiologist just prior to surgery, I told her that after the surgery, I did not want any pain medicine. She said that she would go light on the anesthesia during the operation. After the operation, I felt very little pain. It was a major inconvenience being wired up to monitors and intravenous tubes. I was encouraged to walk once every two hours round the clock. The first walk, I went for 5 lapses. They had a whiteboard, to keep individual scores. It took 17 lapses to make a mile. So the next walk, I went around 12 more times. The nurse came into the room in a panic and told me that I should not walk so much. She said that after the anesthesia wears off, I would be in great physical pain. So I dropped back down to 5 lapses per walk. I think the anesthesia wore off around 2 or 3 o'clock at night. But the change was so slight that I couldn't tell for sure. The nurse that administers the pain medicine would show up periodically and want to give me some pain medicine. I told her I was in no pain and did not want any pain medicine. She would give me a scowl and then walk off. By the time I left the hospital 2 days later, I had walked a hundred lapses.

Meal Plan

The recommended meal plan defines the quantity of protein, starch, vegetables and fruits with the recommended volumes as a function of time after surgery. It also lists the food choices by category. These are given in ounces (1/8 cup). The meal volume allowed starts at 2 ounces per meal after surgery and after 18 months increases to 8 ounces. I found this approach very difficult to use. Instead I began to rely on homemade chili and soups to satisfy my meal requirements. These chili and soups are high protein and also low in sugars. They contain around twice the protein per volume as store bought soups in cans found in the grocery stores. They comply with the recommended meal plan, except they combine ingredients. I have included my recipes in Appendix A. I began using this approach when I reached week 9 after surgery, because at that time, I was then approved for all the ingredients that make up the chili recipe.

This method of using high protein soups and chili was very beneficial. It helped me to reach a *happy state* at around month 6. The benefits of this approach are as follows:

- There is less hassle. At mealtime I take one scoop of soup or chili and place it in a soup cup and microwave it. That is it; really simple! Currently I am up to a ¾ cup scoop. I cook up a soup or chili in a large pot and then when it is done, I fill up several containers. I place one in the refrigerator and the others I freeze. In the beginning, cooking the soup in the microwave caused major splatter. I found a large cup with a vented lid that was ideal for cooking soups and chili in a microwave without splattering. I have several different soups in rotations at any given time, which gives me variety.



- Does not have the pain from eating solid foods or dumping syndrome. When I eat a meal of solid food, I will reach a point when my stomach informs me that I am full. And it's merciless. What started out, as an enjoyable experience in eating a meal is lost in a moment's time. It's terrible! If I try to then eat a little more, it quickly leads to dumping syndrome. When I consume soups or chili, this doesn't seem to happen. Also since I am using a measured scoop, I am consuming the prescribed amount of food in each meal.
- Foods have flavor again. After surgery most foods lost their flavor and taste. They became very bland. The soups and chili gave me good tasting food to eat.
- Greater consistency and control. I dropped down to 160 pounds. I weigh myself each morning. For the past 3 months, I have maintained my weight between 160.0 and 162.0 pounds on a daily basis. I have fallen outside this range on 8 occasions: 6 on the low side and 2 on the high side.
- The high protein meals reduce dependency on protein supplements.
- This approach to my meal plan gave me better control as I transitioned up intake volumes. As I increased the volume of food over time, I could fine-tune the protein supplements, calories and water requirements to keep me within caloric window of stable weight. [I found that if I eat less than around 1200 calories per day, I would lose weight and if I ate more than 1600 calories per day I would gain weight. This is my caloric window.]
- This approach allows me maximum experimentation. If I gain weight outside my range, I fall back to the basic meal plan, and my weight quickly falls back in to the stable range.

The specialized egg drop soup mixes were difficult to find in the grocery stores, so I ordered them in bulk over the Internet at Amazon.

In the recipe for chili, I originally used *Campbell's* Tomato Soup, but this contained too much sugar, around 30 grams per can. I switched to Kroger's Value Condensed Soup, which only contains 17.5 grams of sugar per can. Also, although the recipe calls for 95% fat free hamburger meat, this is difficult to find and very expensive. Generally I use 80 or 90 % fat free meat that I precook. I cook the meat in a covered pot and drain off the fat before using. [My dog loves this mixed in with his dry dog food.] I have found that tomatoes grow nicely in our garden, especially cherry tomatoes. And when the cherry tomato crop

comes in, we are overwhelmed with tomatoes. My wife said it was impossible to can cherry tomatoes. I began using them in my chili recipe in place of the stewed tomatoes. They dramatically increased the flavor of the chili. I would use around a gallon of cherry tomatoes in a pot of chili. I also found out that I could freeze the cherry tomatoes. They lost a little flavor during the freezing process but were still better than stewed tomatoes. I also incorporated sweet peppers from the garden into the chili during the season.

Protein Supplements

After surgery, I was required to consume 75-90 grams of protein daily. At the beginning since there was very little protein content derived from the meals, this required that I consume protein supplements (concentrated forms of protein). Generally these are called protein shake. Most are terrible tasting and it is an illusion to think of them as a milk shake. I relied upon a supplement called Muscle Milk Light. It was Lactose Free and gave me 25 grams of protein in each shake. For me it was the best of the worst. As I transitioned up my meal intake volume, I was able to rely less on these artificial supplements. I transitioned from 3 protein shakes per day down to 2 protein shakes per day. When I bottomed out in my weight, I felt free enough to experiment on the protein side of the program. I transitioned completely off protein shakes and instead I drank 2 large cups of hot cocoa in the morning and 1 large berry smoothie in the afternoon. When I transitioned to $\frac{3}{4}$ cups per meal, I dropped off one of the cups of hot cocoa. I use No Sugar Added cocoa. The berry smoothie is really, really good. It is almost like having a great milk shake. When the grandchildren come for a visit, they especially look forward to drinking one of my berry smoothies. I use a Ninja blender to make the smoothies. They have individual serving size glasses with a removable blender head. The recipe is included in Appendix A.



The protein supplements do not count against the meal plan. I can have a 2½-cup berry smoothie each day and it doesn't go against my volume limit for meals. It is one of the things that helped me achieve a *happy state*.

Water Requirement

The fluid requirement is 8-10 cups of fluids each day. In the beginning I relied on Crystal Light (5 calories per serving) and the water in the protein shakes to meet this requirement. Currently I meet this requirement by having a large cup of tea, a large cup of decaffeinated coffee, milk in cocoa and water contained in soup broth. I found that *Harney & Sons* make a variety of excellent and exceptional teas. One example is the Royal Wedding Tea. I figured if it is good enough for the Queen of England, it is probably good enough for me. Tea is another ingredient that has put me in a *happy state*. I generally order these over the Internet using Amazon.

On The Go

There are many days when I am up and about. This presents a few challenges, such as not having a blender to mix a protein drink. I found that protein bars help to solve this problem. The one I began to use is called a *QuestBar*. They come in a variety of exotic flavors. The one I like best is called Coconut Chew. It has 20 grams of protein, 2 grams of sugar and 17 grams of dietary fiber. Many so-called protein bars contain a large quantity of sugar. They could almost be called candy bars. So beware, not all protein bars are alike. Dietary fiber was important to me because of my problem with constipation. My meal plan allowed maximum experimentation and when I was on the go, eating meals out was one of those experiments. I would eat one crunchy taco at *Taco Bell*. [Before surgery, I would generally consume 5 at a time.] Another choice was to have a bowl of chili at *Wendy's*. At most non-fast-food restaurants, I would order a full meal, eat 1/3rd to 1/4th, bag the rests and eat it over several days for lunch. *Olive Garden* has introduced a \$4 small plate menu. I especially like their *Tortellini al Forno*. It is the right size and full of flavor.

Weight Loss Plateau

After the surgery, I lost weight very rapidly for several weeks and then my weight loss came to a dramatic halt. [This was around the midpoint of my weight loss.] This lasted for a couple weeks. I looked over my meal plan and the only thing I could figure out was that I was consuming too many calories. Since I wasn't consuming hardly any calories in the meals it must lie in the protein supplement side of the equation. I cut myself down from 3 protein shakes per day down to 2 per day. I reasoned that I still had many fat cells that would act as a cushion during my weight loss. This did the trick, and I began to lose weight again until I reached my real bottom. [The real bottom is when the nutritionist tells you that you have reached bottom and if you lose any more weight, you should call them immediately.]

Vitamins and Minerals

After surgery, my body was not able to extract all the vitamins and minerals from foods. Therefore I had to take a series of prescribed vitamins and minerals. For my calcium requirement I had to consume 6 large (horse) pills of *Citracal* each day. For my iron requirement I had to consume 3 *Flintstones* chewable tablets each day. Since calcium and iron absorption conflict with each other, I had to space the iron and calcium two hours apart.

After surgery, I couldn't swallow most of my vitamins. I had to cut them in half or smash them into powder. The *Citracal* was a very large pill and had to be crushed and tasted awful in powder form. At 3 months after surgery, the nutritionist asked me to try and swallow one. I did and it worked and it was one of the changes that allowed me to get to my *happy state*.

Periodically, I would undergo blood testing. The goal was to keep my body in balance. The 6-month blood work showed that my red blood cell count / hemoglobin / hematocrit was out of range on the low side. As a result they recommended that I take an iron supplement (ferrous sulfate). This I did but I made one other change. I had a 2-hour separation between my iron and calcium supplement. But since I had switched to milk for part of my protein requirement, I reasoned that the calcium in the milk was colliding with my iron and causing the problem. So I moved the *Flintstone* vitamins and the iron supplement to the end of the day instead of the beginning. Since I was taking in calcium from milk, perhaps I didn't need as much *Citracal*. I reduced these pills to 4 per day. I just went through another round of blood work. Perhaps that will tell me if I am on the right track.

Insurance

I was in a constant war with my health insurance provider. It started from almost day one. According to the plan booklet in order to qualify for Bariatric Surgery, I had to have a body mass index of 40 or greater (or 35-40 when there is a co-morbid condition). I had a BMI of greater than 40 along with co-morbid conditions (diabetes, high blood pressure, hypertension, and asthma). They also required that I attend a medically supervised program of diet and exercise of at least six months duration. I entered a medically supervised program but the insurance company refused to pay for this program even though they mandated it as a precondition. What was equally odd was that they in fact paid for every other visit. So there was no consistency.

I also had to get preauthorization for the surgeon and the hospital where the operation was to be done. And although I went to great pains to cross the T's and dot the I's; the provider did not cover many of the charges. For example, they didn't want to cover the assistant surgeon. They didn't want to cover several of the pre-op tests and specialist. In one case, I argued with them that a particular specialist was being charged as non-PPO (out of network) when he should be showing up within network. He was even listed as within network on their on-line providers database. They tried to tell me that they were not responsible for the accuracy of their on-line network. It was all very exasperating. I just took the attitude "damn the torpedoes, full speed ahead."

Constipation

After the surgery, I developed a serious problem with constipation. I tried several things to resolve the problem including probiotics, *Metamucil*, and laxatives; without success. The only thing that was effective was using glycerin suppositories. I just couldn't accept inserting a suppository up my rectum every three days for the rest of my life as a viable solution. This was a serious problem. Then almost by accident I stumbled on a simple solution. I found that eating an apple or two each night before I went to bed corrected the problem. But it was important to also eat the skin of the apple.

Over 30 years ago, I planted some fruit trees. Most died over the years. We have a beautiful apple tree in front of the house but it never produced any apples. My wife said we should cut it down. So one day I went outside and I spoke to the apple tree. I said, "Tree, I planted you many years ago and you have not produced any fruit. My wife said I should cut you down. I have tried to be patient. I will give you one more year but if you fail, I will cut you down." That year, the tree produced a bumper crop of apples.

The next year there was another crop of apples and they were even better tasting. Well when the apples came in this year, I couldn't refuse eating a few [even if it wasn't on my approved meal plan at the time]. It was almost an obligation to the tree. And so my constipation problem was resolved. [I told my brother Mark in California, about my talk with my apple tree. He then talked to his avocado tree that was barren for 15 years, and it then also began to produce profusely.]

Clothing

For me, clothing was one of the most pleasant and unexpected outcomes from the surgery. Before surgery, I was so large that most department stores no longer carried my size. Also when you're overweight, even the best brands of clothing, do not look good. I bought a suit for my daughter's wedding and a few months later at the wedding I could barely fit in to it. I was becoming an embarrassment.

One of the words of advice that I received was *after surgery, don't buy any new clothes*. I broke this rule and found that clothing became a major motivator after the operation for continued weight loss. I would buy a shirt or pants that was way too tight. If I took a deep breath, it would split apart at the seams. Two weeks later, it would fit like a glove. That brought me tremendous pleasure. I discussed this with the nutritionist. She said that when most surgery patients buy clothes, they buy the size that fits, and two weeks later the clothing is too large. But when you buy clothing you do something different, you buy a tool to immediately measure your success.

Now that I have reached my recommended bottom weight, I have completely replaced my wardrobe. I am an avid shopper. I look at it like a treasure hunter. I generally buy clothing at 75% off retail. So replacing my wardrobe was fun. I bought some of the top brands and the clothes looks really good on me.

I thought I could keep some of my old clothes, but that didn't work out. Even the coats and jackets no longer fit because I shrunk at the shoulders and as a result the sleeve length dropped below my fingertips. When I put on an old sport jacket for church a few weeks ago, my wife commented that I looked like a walking skeleton. On some people, even their feet get smaller and they shrink in shoe size. Most of my belts had to be replaced. The western style belts composed of a solid strip of leather were still useable. I picked up a rotary hole puncher from *Jo Ann Fabrics*. I punched new belt holes and cut off the end of the belt and I was good to go.



Wrinkles

When you lose significant weight, you are left with excess skin. Nowhere is this visible more than on your face. I developed very fine wrinkles; almost paper thin crinkles, all over my face. I looked like I was a hundred years old. I think women have the upper hand on this problem. My wife told me to use *Bio-Oil* available in the drug stores. It solved the problem. Since then I also started washing my face in the morning with African bar soap, which imbeds additional moisturizers into the skin.

Appearance

When you lose this much weight, you change your appearance. As a result some people will not recognize you. It is a common problem. Some individuals that undergo this surgery appear to be very sensitive to this subject, as if they are being slighted. They feel that being overweight put them into an invisible category and they feel offended because they were treated badly before. I draw on my past experience. When I went to boot camp a lifetime ago, for the first few days, I would bond and form friendships with my fellow soldiers. Then we were marched to the barbers and had all our hair shaved off. I could not recognize anyone anymore. I had to start from scratch. I am not offended by not being recognized due to the effects of the surgery.

Who to Inform

Who do you tell about your surgery? I tell everyone about my surgery, even strangers on the street. But many patients are more reserved, telling almost no one and going to great lengths to keep it *secret*. I guess this is a personal choice. Sure someone will react negatively to the news of the operation but most people are very supportive and many are curious. Perhaps it comes from the fact that many people try various diets, they succeed for a while but ultimately fail and maybe the series of failures reflect badly in their core self worth and they just want to go quietly in the night. Perhaps I tell everyone because I own the success or failure of this operation. I want a thousand eyes on me, just to ensure that I succeed. And if anyone reflects negatively, then “*damn the torpedoes, full speed ahead.*”

Appendix A

Delicious High-Protein Recipes

Secret Recipe Homemade Chili

(20 cups)

	Calories	Protein
3 lbs. 95 % Lean Ground Beef	2616	396 g.
1 cans [low sugar] Tomato Soup	175	3 g.
2 cans Dark Red Kidney Beans	700	49 g.
1 large Sweet Onion (peeled and sliced thin)	40	1 g.
2 large cans (or 4 small cans) of Stewed Tomatoes *	420	14 g.
Seasoning to Taste		
TOTAL	3951 calories	463 g.

* During harvest season, I use fresh cherry tomatoes from my garden and sweet peppers instead of canned stewed tomatoes, which really sweetens up the chili and adds significantly more flavor.

1/3 cup = 66 calories, 8 g. protein

1/2 cup = 99 calories, 12 g. protein

3/4 cup = 148 calories, 17 g. protein

1 cup = 198 calories, 23 g. protein

Cook and brown ground beef, drain excess fat. Then add all the other ingredients and cook on low heat for several hours.

Beef Pho Soup

(9 cups of solids, 2 cups broth)

	Calories	Protein
<i>Sun-Bird</i> Vietnamese Beef Pho Soup Mix		
<i>A Taste of Thai</i> Vermicelli Rice Noodles (1/2 box)	400	6 g.
Beef Chuck Flat Iron Steak (sliced very thin) (1.3 lbs.)	1000	105 g.
1 large Sweet Onion (peeled and sliced thin)	40	1 g.
3 Carrots (peeled and sliced thin)	90	3 g.
1 can Sweet Peas (drained)	385	21 g.
6 cups of water		
Teriyaki Sauce		
Seasoning to Taste		
TOTAL	1915 calories	136 g.

1/3 cup solids = 71 calories, 5 g. protein

1/2 cup solids = 106 calories, 8 g. protein

3/4 cup solids = 160 calories, 11 g. protein

1 cup solids = 213 calories, 15 g. protein

add broth to solids, it doesn't count in computations

Seafood Egg Drop Soup

(6 cups solids, 3 cups broth)

	Calories	Protein
<i>Kikkoman</i> Chinese Style Seafood Soup Mix		
1 pound Shrimp (peeled)	480	93 g.
1 large Sweet Onion (peeled and sliced thin)	40	1 g.
3 Carrots (peeled and sliced thin)	90	3 g.
1 can Sweet Corn (drained)	210	4 g.
1 large Potato (peeled and diced)	120	3 g.
2 eggs **	150	12 g.
3 cups of water		
Teriyaki Sauce		
Parsley Flakes and other Seasoning to Taste		
TOTAL	1090 calories	116 g.

** Mix eggs in separate glass and stir into soup at the end, when the soup is almost done.

1/3 cup solids = 61 calories, 6 g. protein

1/2 cup solids = 91 calories, 10 g. protein

3/4 cup solids = 136 calories, 15 g. protein

1 cup solids = 182 calories, 19 g. protein

add broth to solids, it doesn't count in computations

Chicken Egg Drop Soup

(11 cups solids, 8 cups broth)

	<u>Calories</u>	<u>Protein</u>
Kikkoman Chinese Egg Flower Soup Mix (Corn)		
4 Skinless Chicken Breast (approximately 2.5 pounds)	1284	241 g.
1 large Sweet Onion (peeled and sliced thin)	40	1 g.
3 Carrots (peeled and sliced thin)	90	3 g.
1 can Sweet Corn (drained)	210	4 g.
1 can Sweet Peas (drained)	385	21 g.
1 large Potato (peeled and diced)	120	3 g.
3 small or 1 large piece (stalk) of celery	10	0 g.
2 eggs	150	12 g.
2 Chicken Bouillon Cubes		
10 cups of water		
Teriyaki Sauce		
Parsley Flakes, Pepper, Salt, Poultry Seasoning and add other Seasonings to Taste		
TOTAL	2289 calories	285 g.

Step 1. *It is important to cook the chicken until it is so soft and tender that it falls apart.* Take the chicken and cut off excess fat and cut into pieces. Place these in a pot with 10 cups of water and add bouillon cubes and other spices. Place covered pot on stove and bring to boil at medium heat and then reduce the heat to low and cook for 1½ hours.

Step 2. Add all the other ingredients except for the eggs and cook for an additional 1½ hours on low heat.

Step 3. Mix eggs in separate glass and stir into soup at the end, when the soup is almost done. Bring to boil for 5 minutes.

1/3 cup solids = 69 calories, 9 g. protein

½ cup solids = 104 calories, 13 g. protein

¾ cup solids = 156 calories, 19 g. protein

1 cup solids = 208 calories, 26 g. protein

add broth to solids, it doesn't count in computations

Protein Drinks

Berry Smoothie

	<u>Calories</u>	<u>Protein</u>
1 Banana	105	1 g.
½ cup Frozen Berries Mix (Blackberry, Blueberry, Raspberry)	36	0.5 g.
½ cup Frozen Strawberries	23	0.5 g.
½ cup White Grape Juice	70	0.5 g.
½ cup Greek Yogurt	<u>65</u>	<u>11.5 g.</u>
TOTAL	299	14.0 g.

Place ingredients in blender and blend until smooth.

Hot Cocoa

	<u>Calories</u>	<u>Protein</u>
2 cups of warm Milk	300	16 g.
2 tablespoons of Nesquik (No Sugar Added) Chocolate Cocoa	<u>35</u>	<u>1 g.</u>
	335	17 g.