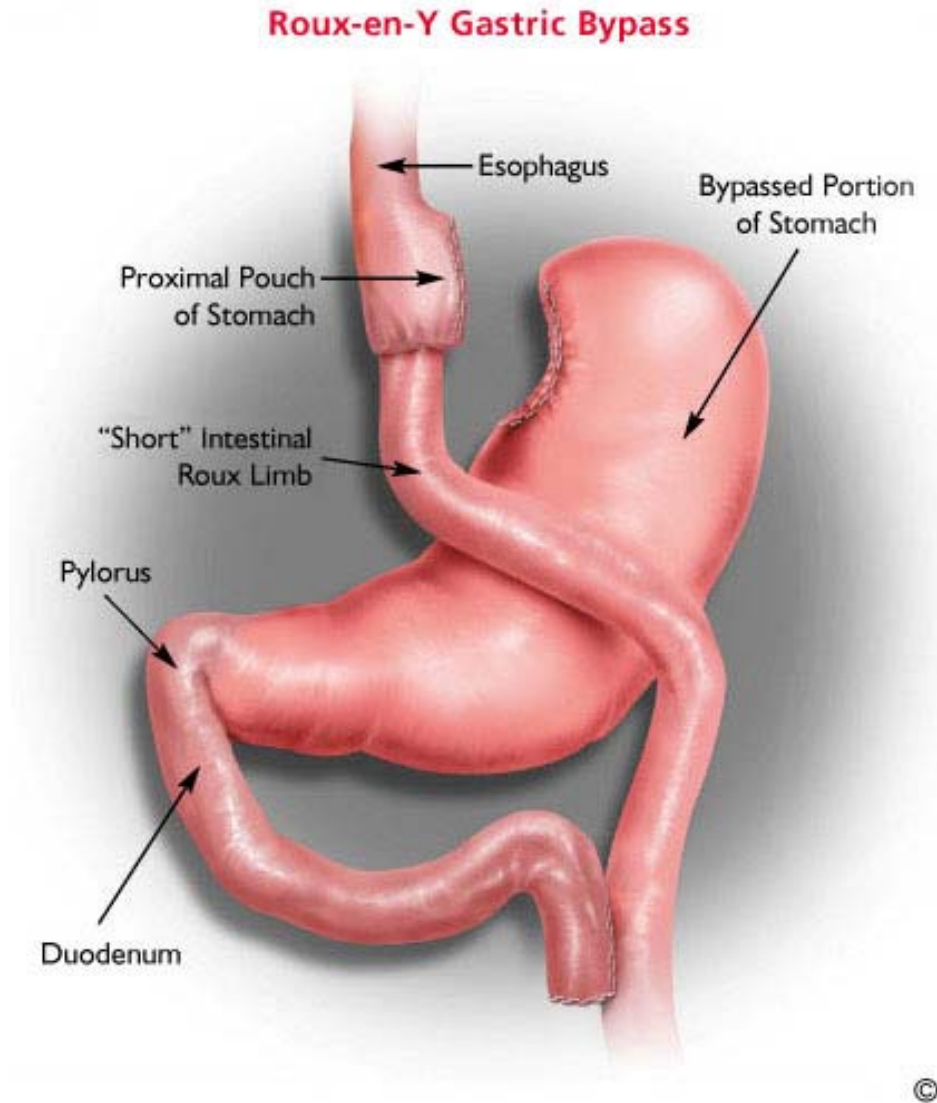


Nutrition Guidelines
Roux-en-Y Gastric Bypass Surgery
Johns Hopkins Center for Bariatric Surgery
Johns Hopkins Bayview Medical Center



How does this procedure work?

The Roux-en-Y gastric bypass surgery you will undergo is to help induce weight loss and to prevent, cure, or improve some of the medical complications associated with obesity. The surgery greatly reduces the size of your stomach to approximately that of a small egg. Additionally, a portion of the intestine is bypassed and calories, fat, protein, and certain vitamins and minerals are not absorbed as well. Therefore, it is vital for you to eat nutritious foods after your surgery to help heal the incision and to maintain your nutritional health. A commitment to a changed eating pattern is essential to achieve substantial weight loss, avoid gastric discomfort, and to prevent nutritional deficiencies. Typically patients lose 60-70% of their excess weight loss following gastric bypass surgery.

Questions to ask yourself and things to remember:

1. This surgery creates a **“tool”** to help you lose weight. **It is up to you** to change your life to succeed.
2. Are you ready to do the work needed to get healthy?
3. Are you ready to change your life?
4. Do you have the social support intact to help you post-operatively?

Why should I follow this diet?

1. To help prevent nutritional deficiencies as a result of the malabsorption.
2. To help you achieve the maximal amount of weigh loss.
3. Help prevent side effects such as nausea and vomiting, hair loss, and dumping syndrome.

Dietary, Lifestyle, and Behavioral Changes

It is a good idea to start working on these behaviors **before** surgery to help you prepare for your new lifestyle after surgery.

1. **Eat slowly and chew your food thoroughly.** Failure to do so can cause pain, nausea, vomiting, and irritate your new pouch.
Tips: Use infant utensils or chop sticks to help slow you down. Take tiny bites (e.g. pencil eraser-size), and chew thoroughly until the food is liquid. Allow about 10 minutes per ounce of food (medicine cup or 1/3 of a deck of cards), and at least 30 minutes for a meal.
2. **Watch portion sizes at meals.** The less food in front of you, the less you may eat.
Tips: Use saucer-sized plates for meals; buy small Tupperware for portion control. If dining out, take at least half home (perhaps more, depending on portions).
3. **Stop eating when you feel comfortably satisfied.** It takes 20 minutes for your brain to identify that your stomach is full. When you feel a pressure in your upper stomach area, this is your new full feeling. If it is painful, you probably took one too many bites, or perhaps ate too quickly, or maybe the food was too dry (e.g. grilled food, leftovers)
Tips: Eat slowly to recognize this feeling of fullness. Avoid distractions, as much as possible, while eating, promoting mindfulness.

*****4. Drink adequate fluids to prevent dehydration. Aim for 48-64 oz (6-8 cups) of fluid a day. Avoid fluids with meals, and wait 30 minutes after a meal to resume drinking.**

For the first week post-op your stomach is swollen and it may take 30-60 minutes to drink a cup of liquid. Keep sipping all day to help prevent dehydration. Know that it gets easier as the weeks pass. Soon it will only take 5-15 minutes to finish a cup.

Beverages must be sipped, not gulped.

Tips: try children's "sippy" cups or a sports top water bottle to slow you down; keep fluids with you all day long and keep sipping, avoid fluids on the table while you eat.

*****Your urine should be very light, if not clear, as a sign you're getting enough fluid. Increase your fluid intake if any of the following signs are present: dark urine, headache, dizziness, confusion, a white coating on the tongue.**

Avoid carbonated beverages and beverages containing sugar or caffeine.

The bubbles may cause pouch irritation and gas. Caffeine can irritate the lining of the stomach and may increase your risk of ulcers after surgery.

-Tips for Beverages to Choose After Your Surgery:

- Wean off carbonated and caffeinated beverages before surgery to help prevent withdrawals.
- Choose beverages with **10 calories** or less per serving. Choose sugar-free, non carbonated drinks such as: Crystal light[®], Propel Fitness Water, Fruit 2O[®], Diet Snapple[®], Light Minute Maid[®] drinks, etc...
- If plain water sits heavy and you are having problems tolerating it add a sugar-free flavoring (e.g. True Lemon[®], lemon or orange slice, etc.)

6. Avoid alcoholic beverages. Alcohol, beer, and wine can cause weight gain and result in poor nutrition, since they are high in calories and low in nutrients. Alcohol may be absorbed more quickly than before due to your small stomach. Alcohol is discouraged overall, but your doctor may give you the okay to drink small amounts of dry wine several months after surgery. You may feel the effects of the alcohol after consuming a small amount, so definitely avoid driving or operating heavy machinery if you have ingested any alcohol.

7. Read food labels. Food choices should be no sugar added and low in fat. Foods that are high in sugar and fat may cause diarrhea and abdominal discomfort or cause the “**Dumping Syndrome**”. Additionally, these poor food choices can slow down the rate of weight loss and may even cause weight regain.

Dumping Syndrome: results from the rapid passage of food into the small intestine, which results in a rapid shift of fluid into the intestines. This can result in diarrhea and dehydration. *Cramping, sweating, flushed appearance, dizziness, weakness, and headache characterize dumping syndrome.* This is caused by eating and drinking at the same time and by eating sweets or foods high in sugar. Foods that are fatty or greasy may cause a similar reaction.

Avoid concentrated sugars. Keep sugar out of the first 3 ingredients on the food label. The number of sugar grams on the label includes both added and natural sugars; therefore, it is important to read the ingredients to find out what type of sugar the food contains. **Aim for no more than 15 grams of “sugars” per serving of yogurt, cottage cheese, etc. at one sitting to lower your risk of dumping and/or to keep simple sugars lower in your diet.**

The following ingredients are also known as (a.k.a.) sugar and commonly found on food labels: dextrose, high fructose corn syrup, corn syrup, glucose, sucrose, molasses, and honey.

Note: Artificial sweeteners such as NutraSweet/Equal®, saccharine/Sweet & Low®, and sucralose/Splenda® are acceptable to use.

Watch out for foods containing sugar alcohol such as sorbitol, xylitol, mannitol, and starch hydrolysates. Large amounts of sugar alcohol found in sugar-free candies, cookies, or ice cream may lead to cramping, abdominal pain, excess gas, or diarrhea.

8. Limit high fat foods. Low fat means 3 grams or less of total fat per ounce or per serving on a food label and/or per mini-meal or snack. Meals may contain more fat than this, but avoid fried or fatty foods, such as cream sauces or butter added. Examples of high fat foods to avoid: potato chips, fried foods, fast food, bacon, sausage, hot dogs, bologna, pepperoni, cream soups, alfredo sauce, donuts, cakes, cookies, and pastries.

*****9. Protein is the most important nutrient you need to consume after surgery. You need at least 60-80 grams of protein a day.** Protein should be consumed first at each meal, then vegetables and fruits, then “whole” grains.

*****PROTEIN and FLUID are both KEY to success after weight loss surgery.**

PROTEIN CONTENT OF COMMON FOODS

Meats, Poultry, and Fish	Portion Size	Grams of Protein
Beef/Turkey Jerky	1 oz dried	10-15
Beef, Pork, Poultry, Fish	1 oz (2 Tbsp)	7
Cheese, hard (low-fat)	1 oz	7
Kraft free/Healthy Choice/Bordon fat free singles	1 oz 1 slice	5
Cottage cheese, Ricotta (part skim)	2 Tbsp	3.5
Imitation Crab Meat	1 oz	3
Crabmeat	1 oz (2 Tbsp)	6
Shrimp, Lobster	1 oz	6
Egg	1	6
Baby Food Meat	1 oz (2 Tbsp)	4
Potted Meats/Spam Lite	2 oz	8.5
Hot Dog, Low-fat (average)	1 oz	3.5
Tuna Fish	1 oz	7
Legumes and Nuts		
Almonds	1 oz	6
Cashews	1 oz	4
Lentils	½ cup cooked	9
Lima Beans	½ cup cooked	7
Peanut butter	2 Tbsp	7
Red kidney beans	½ cup cooked	8
Soy beans	½ cup cooked	14
Tofu	1 slice	5
Refried beans	½ cup	6
Sunflower seeds	1 oz	5
Chili with beans, drained	½ cup	10
Milk and Dairy		
Milk, skim, 1%, or lactaid	8 oz	8
Soy milk	8 oz	7
Yogurt, fat free, no sugar added	6 oz	8
Greek Style Yogurt, plain, nonfat	5 oz	13
Sugar free pudding, made with milk	½ cup	4

NOTE: The foods above are not necessarily the healthiest choices (e.g. Spam Lite), but this list is intended to give you an idea of where protein might come from, and the protein content of COMMON foods.

In general, each medicine cup or 1/3 deck of cards worth of chicken, meat, fish or turkey provides about 7 grams of protein. A deck of cards' worth provides about 20 grams of protein.

Protein Supplements

There are numerous brands of supplements available (ready to drink or powders). For some examples, check out:

- Look for drinks made with **whey protein isolate** (this is absorbed very well, and has no lactose or milk sugar). Whey protein concentrate contains lactose, which may be an issue after your gastric bypass surgery. Lactaid pills can help with tolerance.
- Strive for a protein with at least 20 grams of protein per serving
- Mix with skim or 1% milk for an additional 8 grams of protein per serving
- Aim for a product with less than 3 grams of sugar per serving.
- **Avoid and/or limit products with collagen (not complete protein).**

Examples of acceptable protein supplements:

Ready to drink – Atkins®, E.A.S. Myoplex Carb Sense®, Zero Carb Isopure®

Powders – Designer®, Unjury®, Nectar®, Bariatric Advantage®, Chike®

10. Exercise! Aim for at least 30 minutes every day. Exercise helps maintain long term weight loss. The first four weeks, walking may be your main form of exercise. After about 8 weeks, try introducing strength exercises. Always check with your surgeon to be sure though.

11. Avoid “last supper” eating (that “last hurrah” before your surgery). Weight gain, especially within a few weeks of your surgery, can increase the size of your liver, and may make it harder for your surgeon to get under your liver and to your stomach to perform your weight loss surgery.

12. Vitamin and Mineral Supplementation

Because you will absorb vitamins and minerals differently after surgery, daily supplementation is required for the **rest of your life**.

Multivitamin (MVI) with Minerals

- Take **two** chewable OR liquid multivitamins **once** a day for the first month
- OKAY to change to gel cap, or continue on chewable or liquid MVI after 4 weeks

*MVI must contain 100% RDA for iron (18 mg), folic acid (400 mcg), and thiamin (1.5 mg))

- Take with food to help with absorption.
- Examples: Flintstone Complete®, Centrum Chewable®

Calcium

- 1500 mg of calcium citrate per day. Maximum of 600 mg at one time for absorption. Look for ELEMENTAL calcium on the bottle to make sure you’re getting enough calcium and check the DOSAGE first to check calcium.
- Must contain Vitamin D (at least 400 IU) and Magnesium
- Make sure you read the SERVING SIZE on the label to get the right dosage in

Calcium supplements-(continued)

- Take chewable or liquid calcium citrate plus vitamin D for the first month then okay to switch to tablet form (or continue on chewable or liquid, if you like).
- Take with food or in between meals. Calcium citrate does not need an acid stomach to be absorbed.
- Examples: Twinlab® chewable calcium wafers (2 tab, 3x a day), Citracal® plus D (1 tabs, 3x a day), Solaray® Calcium plus D and Mag (2 wafers, three times a day)
- Allow 2 hours in between taking calcium and iron and/or multivitamin with iron.
- **AVOID CALCIUM CARBONATE** (e.g. Tums, Viactiv, Caltrate), since this form of calcium requires plenty of acid to be absorbed, and your pouch is low in acid.

Iron

- For menstruating women and/or patients with iron deficiency anemia
- Total of 54-65 mg of elemental iron a day (18mg – 29mg of ferrous fumarate in addition to the 36 mg you will receive from taking two MVIs)
- Try to take on an empty stomach with a fluid that contains vitamin C
- Examples: Vitron C®, Freeda®, Bariatric Advantage®, Repliva 21/7- (prescription)

SAMPLE Table for Taking Your Supplements

	Extra Iron	No Extra Iron
Breakfast	2 vitamins (avoid with dairy foods)	2 vitamins (avoid with dairy foods)
Snack	500-600 mgs calcium	500-600 mgs calcium
Lunch	500-600 mgs calcium	500-600 mgs calcium
Snack		
Dinner	500 mgs calcium	500-600 mgs calcium
Snack	iron	

PLUS, you need to ALSO take Vitamin B 12, one of below options:

Vitamin B12

- 500 mcg sublingual tablet (under your tongue) once a day or 1000 mcg sublingual tablet every other day
- Examples: Twinlab® Dots-500 mcg, Rexall® brand B12 sublingual-500mcg (Wal-Mart), 1000 mcg sublingual B12 (GNC)

OR

- 1000 mcg vitamin B12 shot once a month (injections prescribed by your PCP)

Diet Progression

In the Hospital

A diet will be prescribed for you while in the hospital

Bariatric Surgery Diet – Clear Liquids

- 1 ounces (oz) per hour (one medicine cup) (this doubles to 2 cups/hour 2nd day of liquids). Don't expect a tray the day of your surgery.
- Food tray will contain: 4 ounces of: sugar free gelatin, low sodium broth, crystal light®; Prosource® (protein supplement)
- Mix the Prosource® with the crystal light in the 1 oz medication cup the nurses will provide
- **After you're discharged, FLUID GOAL: 48-64 ounces total fluid/day.**

At Home

Once discharged from the hospital you must follow a **Full Liquid Diet** for one week, followed by a **Pureed Diet** for three weeks.

To consume 60-80 grams of protein per day, drink at least 3 high protein supplements per day, and aim for 48-64 ounces of fluid per day (including protein drinks).

Liquid Diet: Week 1

You will be on a liquid diet for the first week after surgery. :

- Broth (the salt in the broth can help your body hold on to fluid better)
- Low-fat/light yogurt (try fat-free plain Greek yogurt)
- Fat-free cottage cheese (no fruit added)
- Fat-free ricotta cheese
- Sugar-free gelatin (e.g. diet Jell-o)
- Sugar-free Fruit drinks
- Sugar-free Popsicles
- Sugar-free Sherbet or Sugar-free Italian Ice
- Water, decaffeinated tea, decaffeinated coffee
- Diluted fruit juice (maximum of 4 ounces juice per day, diluted with 4 ounces water)
- 1% or skim milk
- Protein supplements (please see approved list)

Sample Full Liquid Meal Plan (1st week post-op gastric bypass surgery)

8:00	am	2 Tablespoons fat-free plain Greek-style yogurt (high in protein)
11:00	am	8 ounces whey protein isolate drink (e.g. Isopure Zero Carb) with 8 ounces of skim or 1% milk (16 oz total, taking at least 30-60 minutes to drink)
1:00	pm	4 ounces fat-free ricotta cheese
3:00	pm	8 ounces whey protein isolate drink (e.g. Unjury)
6:00	pm	8 ounces Crystal Light; 4 ounces sugar-free pudding
8:00	pm	8 ounces whey protein isolate drink made with skim or 1% milk

Pureed Diet: Post-op Weeks 2-4

NOTE: If you're struggling with just getting enough fluids in, call your dietitian and/or doctor before you advance from full liquids to purees.

For safe weight loss you need to eat a healthy, well-balanced diet. Everything needs to be blended to the consistency of applesauce for three weeks. This may be a challenge. Stick to it and be creative! Buy or borrow a blender or food processor if you do not own one.

Instructions for pureeing foods:

1. Cut food into small pieces about the size of your thumbnail.
2. Place food in the blender.
3. Add enough liquid (fat free chicken broth or fat free gravy) to cover the blades.
4. Blend until smooth like applesauce.
5. Strain out the lumps, seeds, or pieces of food.
6. Use spices (avoid spicy ones) to flavor food.
7. Blend and enjoy!

Tip: **Use ice cube trays.** Each cube holds about 1 ounce. This will help you to control portion sizes and estimate protein (each cube is about 7 grams of protein if you're putting pureed meat, chicken or turkey in the trays). Try preparing reduced fat cream soups or pureed meats and vegetables and storing them in the trays.

Instructions:

1. **Limit food to 2 to 4 ounces per meal (approximately 4 to 8 tablespoons).** Do not forget to consume protein first at each meal, then vegetables and fruits, then "whole" grains.
2. **Aim for 6 small meals per day at this point.** *See pureed food recipes.
3. Keep in mind you may be in the "honeymoon phase" and not have any interest in food, but your body truly needs and wants at least 3 meals a day, even if only a "cube-full" of pureed meat, so hang in there! Protein supplements (see list) containing at least 20 grams of high-quality protein, 3 times a day can really "fill in the gaps" until you're able to get in more protein at one sitting and/or per day.
4. **Drink at least 6-8 cups (48-64 ounces) of fluid per day.** Liquids should be sipped in between meals. Liquids taken with meals may cause nausea, vomiting, or dumping syndrome. Also, they may fill you up and you may not be able to consume all of the foods and nutrients you need.
5. **Treat your new stomach (called a pouch after surgery) like a "baby stomach in training," and avoid anything too spicy, too hot or cold, and try only ONE new food at a sitting so that you know what you can tolerate.**

PUREED FOODS:

FOOD	CHOOSE	AVOID
Beverages	Water, Crystal Light [®] , coffee, tea, non-carbonated beverages, and nutritional drinks	Fruit drinks, iced tea with sugar, soda, alcohol, and all carbonated beverages
Soups	Egg drop soup, reduced fat cream soups, broth, and bouillon	All others
Bread, Cereal, Pasta and Rice	Hot cereal (oatmeal, grits, cream of wheat), mashed potatoes	Pasta, bread, rice, and all other starches
Vegetables	Any cooked soft and blended or mashed with a fork	All others
Fruits	Unsweetened applesauce, mashed bananas, any fruit pureed without the seeds, skin or hulls	All others
Meats, Poultry, Fish, Nuts, Beans and Eggs And Tofu	Pureed fish, tuna, poultry, veal, pork, or beef; baby food meats; mashed tofu, scrambled egg or egg substitutes	Peanut butter; all others
Milk, Cheese, and Yogurt	Fat free or 1% milk, low-fat cottage cheese, low-fat or non fat cheese (Alpine Lace [®]), low fat/unsweetened/low sugar yogurt (Dannon Light and Fit [®])	Chocolate milk, sweetened condensed milk, 2% or whole milk
Miscellaneous (all should be sugar-free)	Gelatin, popsicles (Dole [®]), pudding, custard, sugar free frozen yogurt, sugar free fat free ice cream	All others

Sample Pureed Menu

8:00 a.m.	¼ of a medium banana (mashed) 2 tablespoons of fat-free Greek yogurt
9:30 a.m.	2 tablespoons of low fat cottage cheese
11:00 a.m.	8 oz fat-free or 1% milk with one serving of a protein powder supplement
12:00 p.m.	8 oz decaffeinated iced tea
1:00 p.m.	2-3 tablespoons pureed chicken or mashed tofu 2 tablespoons pureed green beans 1-2 tablespoons mashed potatoes 1 tablespoon fat-free gravy
2:30 p.m.	8 oz Crystal Light®
3:00 p.m.	2 oz low fat ricotta cheese 2-3 tablespoons applesauce
4:00 p.m.	8 oz water with lemon
4:30 p.m.	8 oz skim or 1% milk with protein powder
6:00 p.m.	2-3 tablespoons pureed fish or scrambled eggs 2 tablespoons pureed broccoli 2 tablespoons mashed sweet potato
7:30 p.m.	6 oz broth
8:45 p.m.	4-6 tablespoons sugar-free pudding

Keep food records. This will help you to monitor your intake and tolerance to foods. Look for patterns of foods tolerated well and food that are not tolerated well. The records will also be helpful for your dietitian to provide suggestions for better tolerance or nutrient balance.

Record the: Time
 Type of food (ex. Baked chicken without skin)
 Amount eaten (ex. ½ chicken breast or ½ cup)
 How your food was prepared (ex. Baked with broth). Be sure to include any butter, oil, grease or margarine that was added to the food.

Please remember to bring these records with you for the dietitian to review.

Soft Diet – (Usually about 4 weeks after surgery, unless you’re really struggling with fluid and/or protein intake).

Instructions:

1. Limit food to 4 to 6 ounces per meal (approximately 8 to 12 tablespoons) and/or until you feel chest fullness or pressure. **STOP eating if you feel chest pain, regardless of the amount you’ve eaten.** Do not forget to consume protein first at each meal
2. Aim for three meals per day with one high protein snack.
3. Eat slowly!!! Chew your food until it’s liquid.
4. Food choices should be low in fat and low in sugar (less than 15 grams “sugars” per serving) and less than 3 grams of fat as snack; !10-15 grams of fat per meal.
5. Use any of the foods recommended on the pureed diet.

SOFT FOODS – This is to be followed for 2-4 weeks after the pureed diet

FOOD	CHOOSE	AVOID
Beverages	Same as “Liquid and Pureed Diet”	All others. Limit carbonated beverages
Soups	Same as “Liquid and Pureed Diet”	All Others
Bread, Cereal, Pasta, and Rice	Hot or refined cereal, mashed potatoes without the skin, rice, pasta, toast, or crackers	All Others
Vegetables	Soft cooked vegetables	Vegetables with tough hulls or skins like peas and corn
Fruits	Unsweetened cooked or canned fruit in their own juice (no syrup), fruits without seeds or skin, banana and citrus fruits without the membranes	All others
Meat, Poultry, Fish, Nuts, Beans, Tofu and Eggs	93% (or leaner) Ground lean meat (meatloaf, meatballs, hamburgers), poultry or fish (cooked soft and moist), tofu, casseroles made with ground meat, kidney beans, lentils, creamy peanut butter, eggs	AVOID tough/dry/grilled steak or chicken, and include low-fat gravy to moisten.
Milk, Cheese, and Yogurt	Fat free or 1% milk, low-fat cottage cheese, low-fat or non fat cheese (Alpine Lace [®]), low fat/unsweetened/low sugar yogurt (Dannon Light and Fit [®])	Chocolate milk, or sweetened condensed milk, 2% or whole milk
Miscellaneous (sugar free)	Gelatin, popsicles (Dole [®]), pudding, custard, sugar free frozen yogurt, sugar free fat free ice cream	All others

Sample Soft Menu

7 am	8 ounces water with lemon or lime
8 a.m.	1 scrambled egg with 1 oz of low-fat cheese 1 soy sausage link
9 am	8 ounces Crystal Light or other beverage without caffeine, carbonation or sugar (10 calories or less per serving)
10 a.m.	8 oz skim milk with one serving of a protein powder
12 p.m.	2-3 tablespoons tuna fish (made with low fat mayonnaise) or tofu 2 tablespoons unsweetened apple sauce 2 tablespoons cooked green beans
2 p.m.	2-4 oz sugar free yogurt or low fat cottage cheese with 2 oz pureed fruit or 2-4 oz low fat ricotta cheese with cinnamon
3 pm	8 oz skim or 1% milk
6:00 p.m.	4 tablespoons chicken (very tender and moist; try crock pot) 2 tablespoons soft cooked broccoli 1 peach half (canned in natural juices)
7-9 pm	16 ounces Crystal Lite or Propel (sipped, not gulped)

***After 2-4 weeks of the soft food diet you should gradually introduce more food choices and progress to a “REGULAR Diet.”** This consists of raw fruits and vegetables and whole grains, but avoid tough skins and/or doughy breads for better tolerance.

Keep food records of your tolerance and intake. Remember that food intolerance is highly individualized.

Take your time at meals and chew very well to help increase your tolerance to these foods. Eventually you should be able to tolerate diced meats and a wider variety of breads, cereals, fresh fruits, and fresh vegetables.

Keep in mind that your diet needs to be *low-fat, low calorie, low in simple sugars, and portion-controlled* for the rest of your life. This is the commitment you must make to achieve maximal weight loss and keep it off, but we know you can do it!!! Success is yours!

Some possible nutrition problems that may occur post-op:

- **Trouble tolerating dairy products or lactose intolerance:** Milk and other dairy products may cause cramping, bloating, excessive gas, and diarrhea. If these problems occur, try Lactaid 100[®] milk or natural soymilk.
- **Hair loss:** This is usually due to rapid weight loss, and typically presents about 3-6 months after surgery. The good news is that it's usually just all-over thinning, not noticeable (usually only to you), and typically resolves in another 3-6 months. Biotin (a B vitamin) may help, as well as ensuring that your fluid, protein, iron and zinc levels or intake are good. Also, watch stress, since that's another possible cause of hair loss. Thyroid issues may also cause hair loss.
- **Nausea or Vomiting:** Usually caused by eating too fast, too much, or drinking with your meals. If it is not food related, call your surgeon's office.
- **Bad taste in mouth:** This is common right after the surgery and should go away after a few weeks.
- **Decreased appetite and taste changes.** It is very common to not feel hungry right after surgery and to have altered taste sensation. You need to eat ensure that you get proper nutrition and to prevent complications.
- **Increased gas:** This is also common after the surgery, especially during the first few weeks. It can be a sign of a lactose intolerance. If you have gas pains at home, try simethicone drops (Gas X[®]). Deverom[®] can help with the smell.
- **Excess skin:** With significant weight loss, there is usually excess skin, but the level will depend on several factors, including how much weight you lose, where you lose it, genetics, age, and whether you're a man or a woman. Weight training may help minimize the appearance of loose skin, but only plastic surgery will help to get rid of it. Most people find it's really not a big issue, especially in light of how great they feel at a much lower weight, and how they're improved their health with the surgery and weight loss.
- **Pregnancy:** This must be avoided for the first 18 months following surgery. Pregnancy during this time could cause complications and deficiencies for you and your baby and may result in birth defects. For this reason you need to take precautions to prevent pregnancy, even if you had problems getting pregnant in the past. Rapid weight loss increases fertility so you must be very careful.

CHECKLIST AFTER GASTRIC BYPASS SURGERY

- ✓ 60-80 grams of protein a day
 - Eat protein first at all meals
- ✓ Eat slowly and chew well
 - Meals should take 30-45 minutes
 - Avoid snacking on high calorie foods in between meals
- ✓ 48-64 oz of fluid a day (more if your urine is dark or you're dizzy)
 - Beverages less than 10 calories per serving
- ✓ Vitamin/mineral supplementation for life
 - Multivitamin (two a day, with food; not with calcium or dairy)
 - Calcium 1500-2000 mgs a day...in divided doses (at least 3 times a day) and no more than 600 mgs at one time, and apart from multivitamin and iron)
 - Iron (if needed) bed-time best, not with calcium.
 - Vitamin B 12 (shot once a month or under-the-tongue option daily or every other day, depending on dosage)
- ✓ Exercise
 - Aim for at least 30 minutes on most days of the week...5 minutes at a time, and gradually build up, as tolerated
 - Incorporate light weights (about 2 months after surgery, and/or as your surgeon recommends)
 - Consider stretching and the importance of a stress management program in your regimen

DIETITIAN VISITS:

- ✓ 2 - 4 weeks post-op
- ✓ 3 months post-op
- ✓ 6 months post-op
- ✓ 1 year post-op
- ✓ Once a year after first year

NOTE: You may need to see your dietitian more often than above if you're having any nutrition problems and/or if your doctor feels you need to be seen for any reason.

You can schedule your nutrition appointment with Access Services: (410) 550-7728.

*Pureed Food Recipes

Basic Meat Stew

2 tbsp. oil
1 ½ pounds boneless stew meat, cut into 1 inch cubes
1/3 cup flour
3 cups liquid (water or vegetables juice)
4 medium potatoes, scrubbed and cut up
5 medium carrots, scrubbed and cut up

Heat oil in a large size heavy saucepan over medium high heat. Coat the meat in flour and brown in the oil. Add the liquid and cover tightly. Simmer over medium heat for 1 ½ hours. Add potatoes and carrots. Cover and simmer for 20 minutes. Puree stew in food processor or blender until smooth. Store in refrigerator up to 2 days or in the freezer for 2-3 months. Makes 20-25 food cubes

Nutrition Facts:

Serving Size: per 4.65 ounces

Calories: 139 Protein: 13 grams Total Fat: 4.21 grams

Soybean Puree

1 cup dry soybeans
3 cups water
¾ cup unsalted tomato juice for thinning

Rinse and soak the soybeans overnight in the refrigerator. Simmer beans in 3 cups water for about 2 hours. Puree with food processor or blender, adding tomato juice to thin. Makes 12 food cubes

Nutrition Facts:

Serving Size: per 3.17 ounces

Calories: 67 Protein: 6 grams Total Fat: 3 grams

Combination Dinner

1 cup cooked meat (beef, chicken, fish, ham, etc.)
2/3 cup cooked vegetables
1 cup stock

Place in blender or food processor. Puree and freeze into ice cube trays.

Nutrition Facts:

Serving Size: per 2 ounces

Calories: 36 Protein: 5 grams Total Fat: less than 1 gram

Pureed Legumes

1 cup any legume (black beans, kidney beans, garbanzo beans, navy beans, pinto beans, black eye beans, lentils, etc...)

3 cups water

$\frac{3}{4}$ cup nonfat milk

Rinse 1 cup of any legume. Soak in water overnight or bring to a boil for 2 minutes, cover, and then allow to sit for 2 hours. Drain off the soaking water or cooking water, then add 3 cups fresh water and bring beans to a boil. Reduce heat and simmer, covered, until beans are tender (30 minutes-2 hours depending on the legume). Skim the surface often as beans are simmering. Puree with $\frac{3}{4}$ cup nonfat milk. Freeze in ice cube trays.

Nutrition Facts:

Serving Size: per 2 ounces

Calories: 28 Protein: 2 grams Total Fat: less than 1 gram

Cream of Tomato and Chile Soup

1 Tbsp Olive Oil

1 large yellow onion, diced

3 cloves garlic, minced

10 plum tomatoes

2 red jalapeno peppers, diced, seeds removed

Water as needed

$\frac{1}{3}$ cup skim milk

3 scoops protein powder

Salt and pepper to taste

Heat oil in a stock pot or large saucepan over medium heat. Add onion and garlic, sauté until onion has softened. Add the tomatoes and jalapeno peppers, cook until heated through. Add just enough water in the pot to just cover the vegetable mixture. Simmer for 10-15 minutes over low heat. Place the contents of the pot into a blender or food processor, puree until smooth. Strain contents of the blender through a fine colander. Add milk, protein powder, and salt and pepper to taste. Store in the refrigerator for up to 2 days or 1 month in the freezer.

Makes: 32 1oz. food cubes

Nutrition Facts:

Serving Size: per 1 ounce

Calories: 23 Protein: 3 grams Total Fat: less than 1 gram

Basil Mashed Potatoes

4 medium Yukon gold potatoes, peeled, cut into 1 inch cubes

3 Tbsp Smart Balance spread

$\frac{1}{4}$ cup skim milk

$\frac{1}{3}$ cup of fresh basil leaves, pureed with 2 Tbsp of olive oil

Salt and pepper to taste

Place potatoes in a stock pot filled with cold water. Place pot on stovetop over high heat. Boil potatoes until very soft (To check if the potatoes are soft enough, just take a fork and push a piece of potato against the side of the pot. If the potato breaks easily it is ready).

Strain out the water from the pot in a colander. Place potatoes back in the empty stockpot. With a hand mixer mix the potatoes until they are a “paste” consistency. Mix in the Smart Start spread, butter, basil puree, and salt and pepper. Store in the refrigerator for up to 2 days or 1-2 months in the freezer.

Makes: 25-30 1oz servings

Nutrition Facts:

Serving Size: per 1 ounce

Calories: 38 Protein: 1 gram Total Fat: 2 grams

Chocolate and Banana Pudding

1 cup of sugar free/ fat free chocolate pudding

1 whole banana, peeled and pureed

1 scoop of protein powder

Combine all ingredients in a medium sized bowl. Mix thoroughly. Serve cold. Keep in the refrigerator for up to 1 week or 2-3 months in the freezer.

Makes 10-12 1oz. food cubes

Tip: If freezing pudding in ice cube trays. Place a toothpick inside of each cube of pudding before freezing to create chocolate and banana fudge popsicles.

Nutrition Facts:

Serving Size: per 1 ounce

Calories: 28 Protein: 3 grams Total Fat: less than 1 gram

Orange and Cream Protein Smoothie

2 cups of vanilla fat free yogurt

1/3 cup of orange juice

1 cup of skim milk

3 scoops of protein powder

Combine all ingredients in a blender. Blend until smooth. If you would like a thinner smoothie, just add more skim milk to blender until desired consistency is reached. Keep in the refrigerator for up to 2 days or 1 month in the freezer.

Makes 24-28 1oz. servings

(Tip: This recipe can also be made into a popsicle by using the same method as the Chocolate and Banana Pudding.)

Nutrition Facts:

Serving Size: per 1 ounce

Calories: 32 Protein: 4 grams Total Fat: less than 1 gram

Recipe Reminders:

- ❖ Be creative. Try pureeing different meats and vegetables.
- ❖ Add flavor by using liquids other than water.
- ❖ Try adding herbs and spices.

Notes: