EMMC Surgical Weight Loss
Diet Progression
“Following the PHASES”
## Diet Progression

<table>
<thead>
<tr>
<th>Gastric Bypass or Sleeve Gastrectomy</th>
<th>Gastric Banding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 1</strong></td>
<td><strong>Phase 1</strong></td>
</tr>
<tr>
<td>In hospital: day #1 after surgery</td>
<td>Sips of water only on the day of surgery</td>
</tr>
<tr>
<td><strong>Phase 2</strong></td>
<td><strong>Phase 2</strong></td>
</tr>
<tr>
<td>2 weeks before and after surgery</td>
<td>2 weeks before surgery</td>
</tr>
<tr>
<td>(4 weeks total)</td>
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<tr>
<td><strong>Phase 3</strong></td>
<td><strong>Phase 3</strong></td>
</tr>
<tr>
<td>Skip this phase</td>
<td>Post op day #1 until 2 weeks after surgery</td>
</tr>
<tr>
<td><strong>Phase 4</strong></td>
<td><strong>Phase 4</strong></td>
</tr>
<tr>
<td>Start at 2 wk follow-up appointment</td>
<td>Start at 2 wk follow-up appointment</td>
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<tr>
<td><strong>Phase 5</strong></td>
<td><strong>Phase 5</strong></td>
</tr>
<tr>
<td>Start at 6 wk follow-up appointment</td>
<td>Start at home 1 month after surgery</td>
</tr>
</tbody>
</table>
IN THE HOSPITAL

PHASE 1
(Sips of water)

(Post Op Day #1, Sleeve and Gastric Bypass patients)

Sips of water only; 30mL/hr. (1 ounce/hour) the day following surgery.
PHASE 2

High Protein Liquid Diet

You will remain on this diet for the first 2-3 weeks after surgery. Remaining on liquids is important because your stomach is tender, swollen and still healing. Following a liquid diet may also help to decrease or prevent nausea. Your surgical weight loss dietitian will advance your diet when you meet one-on-one at your 2-3 week follow-up appointment. You should NOT advance your diet before this appointment. The following liquid protein drinks will be acceptable:

- Skim, 1%, Fairlife, or Lactaid milk
- No Added Sugar Instant Breakfast
- Strained Cream Soup (low-fat such as Healthy Request by Campbell’s)
- Soy Milk (plain only)
- Almond Milk (plain only, mix with protein powder to increase protein content)
- Yogurt (must be light, Greek-style is higher in protein)
- No Added Sugar Hot Cocoa, made with skim or 1% milk
- Atkins Drink (only one per day, due to higher fat and calorie content)
- EAS AdvantEdge (both ready-to-drink and powder)
- Unjury protein powder with skim/1% milk
- High Protein Drinks (approved by your surgical weight loss dietitian)
- Tomato Soup, made with skim or 1% milk
- Homemade custard, made with a sugar substitute (see recipe later in this section)
- High Protein/Low Carbohydrate Slim Fast
- Premier Protein (both ready-to-drink and powder)

*The availability of these items change frequently. Do your homework ahead of time to locate the acceptable products and try them before surgery. Should you have questions about the appropriateness of a product that is not on this list, ask your surgical weight loss dietitian at your individual appointment. Make sure to provide your dietitian with either the container or nutrition information (serving size, grams of protein, fat and carbohydrate) for review.

**Protein Powders:** If protein powders are used to make high protein shakes they must be sugar free, low in carbohydrates and low in fat. Remember more protein is not always best. It is important to meet your protein needs, but exceeding your needs is not recommended. Here are some guidelines for a protein powder:

- Less than 4 grams of carbohydrate/serving
- Less than 3 grams of fat/serving
- Whey or Soy protein source (usually around 15-20 grams protein/serving)
**PHASE 2**

**HIGH PROTEIN LIQUID DIET:**

*Sample Meal Plan*

Remember, you need to focus on high protein beverages to help you heal and spare your muscle mass as you lose weight. Those who meet their protein requirement have MORE weight loss compared to those who do not. Do remember that your pouch may still be irritable. You may not be able to consume all of the liquids on this plan immediately after surgery. Slowly work up to this volume. Listen to your body; if it hurts, stop. Stop eating your “meal” after 30 minutes; do not stretch a meal beyond 30 minutes.

**Portion Size:** 8 ounces protein drink at breakfast, lunch and supper. Non-carbonated, calorie-free liquids between meals as well as 1 protein drink between meals AS NEEDED.

<table>
<thead>
<tr>
<th>Meal</th>
<th>Breakfast</th>
<th>Lunch</th>
<th>Afternoon liquids</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8 ounces no added sugar instant breakfast</td>
<td>8 ounces healthy request cream soup</td>
<td>Sugar-free Popsicle’s</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8 ounces skim or 1% milk</td>
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<tr>
<td>Morning liquids</td>
<td>8 ounces diluted juice (4 ounce juice and 4 ounce water)</td>
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<td></td>
</tr>
<tr>
<td>Lunch</td>
<td>8 ounces Unjury protein shake</td>
<td>8 ounces tomato soup (made with milk)</td>
<td>8 ounces of diluted juice</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(4 ounces juice and 4 ounces water)</td>
</tr>
<tr>
<td>Afternoon liquids</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supper</td>
<td>8 ounces Unjury protein shake</td>
<td>8 ounces no added sugar instant breakfast</td>
<td>8 ounces sugar free Popsicle</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8-ounces water</td>
</tr>
<tr>
<td>Evening Liquids</td>
<td>Sugar free Popsicle 8-ounces water</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Other Points to Consider:**

- 1 Tbsp. Dry skim milk powder can be added to milk and soup for extra protein.
- Liquids should be consumed slowly. **8-ounces should take you 30 minutes to finish.**
- Lactose-free milk is available.
- If you have concerns about your diet please discuss with your dietitian.
- This meal plan supplies ≥ 40 grams of protein, which is the minimum recommended amount. Sugar-free Carnation Instant Breakfast can be difficult to find. Call ahead to your grocery store. Many times they will carry the product if you request it. It is also available to purchase in bulk-mail order. Unjury protein powder needs to be ordered; a sample can be provided at your 1:1 dietitian appointment.
PHASE 2 OPTIONS
DIETARY ALLERGIES OR INTOLERANCES

(LACTOSE INTOLERANT)
Isopure
Fairlife Milk
Boost Glucose Control
Nectar Whey protein Isolate powder (GNC)
Soy milk (plain only)
Soy protein powders
Rice Protein Powder (GNC or NLC or VS)
Yogurt (tolerance may vary depending on lactose sensitivity)
Designer Whey (Ready to drink)
Muscle Milk (Powder and Ready to drink)
Muscle Milk light (Ready to drink)
Eggfit Protein powder (made from egg white)
PB2 (peanut butter based protein powder)
New Whey
Warrior Blend – Raw Vegan Protein Powder
Orgain Protein Drink (orgain.com)

(SOY ALLERGY)
Isopure
Eggfit Protein powder (made from egg white)
PB2 (peanut butter based protein powder)
Almond milk (lowfat)
Rice Protein Powder (GNC and NLC)
Greek Yogurt or Light Yogurt
Fat Free or lowfat milk
Nonfat dry milk
Protein Shot (clear liquid made by Body Fortress or Muscletech)
Whey Protein powders
Warrior Blend – Raw Vegan Protein Powder
Optimal Protein Powder (Amazon.com)
Bone Broth (Dr. Axe)
Orgain Protein Drink (orgain.com)

(GLUTEN INTOLERANT OR CELIAC DISEASE)
Isopure
Lowfat or Fat free milk
Soy milk (fat free or lowfat)
Soy protein powders (check label)
Nectar Whey protein Isolate powder (GNC or VS)
Yogurt (check label on flavored yogurts)
Muscle milk light (ready to drink)
Boost Glucose Control
Designer Whey (ready to drink)
Protein Shot (clear liquid made by Body Fortress or Muscletech)
Spiru-tein Protein Powder (NLC)
Biochem Sport Whey Protein powder (NLC)
Eggfit Protein powder (made from egg white)
PB2 (peanut butter based protein powder)
Optimal Protein Powder (Amazon.com)
Orgain Organic Protein Plant based powder
New Whey
Bone Broth (Dr. Axe)

(FREE OF ARTIFICIAL SWEETENERS)
Unflavored protein powder (Unjury or GNC or NLC)
Jay Robb Whey Protein Powder (Contains Stevia. Found at NLC)
Biochem Sport Whey Protein Powder (NLC)
Chicken Soup Flavored protein powder (made by Unjury)*
Fat free or low fat Milk with added nonfat dry milk or unflavored protein powder
Strained cream soup made with milk or with added unflavored protein powder
Greek Yogurt or plain light yogurt
NOW Whey Protein Isolate (Amazon.com)
Nonfat dry milk
Syntrax Nectar Naturals
Bone Broth (Dr. Axe)
PB2 or PB fit

MILK ALLERGY
PLEASE BRING SPECIALTY ITEMS WITH YOU TO THE HOSPITAL FOR AFTER SURGERY
Helpful Recipes

Sugar-Free Baked Custard
Makes 8 servings, 5 grams protein per serving

Ingredients
3 large eggs
1/3 C. sugar equivalent (such as Splenda)
1 tsp. vanilla
Dash of salt
2 ½ C. skim milk heated to very warm
1 tsp. ground nutmeg

Method
1. Heat oven to 350°F.
2. Mix eggs, sweetener, vanilla and salt in medium bowl. Gradually stir in hot milk. Pour into 6 or 8 custard cups. Sprinkle with nutmeg.
3. Place cups in 9x13” pan. Pour very hot water into pan, failing within ½” of tops of cups.
4. Place pan in oven and bake about 45 minutes or until knife inserted halfway between center and edge comes out clean. Remove cups from water and cool for about 30 minutes. Serve warm or cold. May be reheated in microwave.

Strawberry Lemon High Protein Jell-O
Makes 4, ½ c servings, 12 grams protein per serving

Ingredients
2 scoops or 2 packets Unjury Strawberry Sorbet
1 package Jell-O Sugar Free Lemon Gelatin
2 cups water

Method
1. Follow package directions for dissolving Jell-O in 1 cup of boiling water
2. After dissolving, set aside to cool for 3-5 minutes
3. In a different bowl, measure 1 cup cold water
4. Add 2 scoops or packets of Strawberry Sorbet Unjury to cold water, one scoop at a time, stirring slowly to dissolve.

The protein will settle somewhat to create a smooth cloud at the bottom. The taste is unchanged.
Chocolate Peanut Butter Protein Shake
Makes 1 serving, 34 grams protein total

**Ingredients**
1 scoop or packet Chocolate (Classic or Splendor) Unjury
1 cup skim milk
1 Tbsp PB2 or PB Fit
½ cup ice (optional – keep in mind blending shakes with ice will expand the volume, therefore you may not be able to drink the entire shake and get less protein)

**Method**
1. Mix all ingredients into a blender and blend for 5-10 seconds, until combined.
2. Pour into a glass and enjoy!

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High Protein Vanilla Decaf Chai Tea
Makes 1 serving, 21 g protein

**Ingredients**
1 packet or 1 scoop Vanilla Unjury
1 bag decaf Chai Tea
1 cup water

**Method**
1. Brew the tea and water according to package directions
2. Allow tea to cool to 140 degrees
3. Stir in Vanilla Unjury
Enjoy!
Nutrition Frequently Asked Questions

Pre-Surgery Liquid Meal Plan

1. Why do I have to follow the High Protein Liquid Meal Plan before surgery?
   The most important reason for following the liquid meal plan before surgery is weight loss. Weight loss before surgery will shrink the size of the liver. This allows for the surgeon to see the stomach better. Some studies have shown before surgery weight loss shortens OR times time as well. Weight loss before surgery reduces your risks of developing complications by lowering your BMI. In addition, if you have diabetes, the liquid plan will help to improve blood sugar control.

2. Will I feel hungry?
   Since you will not have a tool working for you, you may feel hunger. This is expected and normal. You will likely feel real physical hunger and also “head hunger.” Head hunger is the wanting to crunch or snack on certain types of foods. Do your best to stay busy-focusing less on the hunger. For most, the hunger will decrease after the first 2-3 days on this phase as your body goes into “ketosis.” Ketosis is a term that means your body is burning fat for energy and a byproduct of this process is the production of ketones (an acid).

3. What do I do if I feel hunger?
   You can expect to feel a certain amount of hunger and will have to manage with this. With excess hunger, you may consume an appropriate phase 2 items between your meal such as 8 oz. of low-fat/fat free milk, or 4oz of light or Greek yogurt or 4-6oz of a high protein liquid drink between meals.

4. How do I expand my variety?
   The reality is that your variety will be limited while following the high protein liquid plan. Your surgical weight loss dietitian has provided you with a list of acceptable liquid drinks. Try to include hot, cold, and frozen items in your plan to optimize the variety within the plan. The variety is limited-but remember this is only for a short period of time. Stay focused on the positive results of weight loss!
5. How will my surgeon know if I follow the plan or not?
The goal is to have weight loss. Following the liquid plan should guarantee a significant weight loss in a short period of time. Your surgeon will be able to evaluate your ability to follow the plan by the weight loss you have before surgery.

6. Can I have a last meal?
It is **NOT** recommended to over indulge before surgery. High blood sugars the morning of surgery may result in a canceled surgery. Focusing on having a “last meal” is missing the bigger picture of surgery.

7. Do I still take my vitamins on the Phase 2 High Protein Liquid Meal Plan?
Yes. Continue to take 2 complete multivitamins and 2 calcium supplements (with vitamin D) as directed by your dietitian until the day of surgery. For the first 2 weeks after surgery, your multivitamin will need to be chewable (but NOT gummy) and you will stop taking the calcium/D supplement temporarily.

8. Can I have pudding on the Phase 2 diet?
No. Pudding is not allowed on Phase 2. It does not contain enough protein and depending on what kind of pudding it is, it may have too many carbohydrates.

9. Can I blend fruit into my protein drinks?
No. This will add extra calories and carbohydrates to your protein drinks and after surgery the added fibers and seeds from the fruit can cause discomfort or other more severe complications.

10. I have diabetes and when I started the liquid diet I started having low blood sugars. Should I change the dosage of my insulin/oral diabetes medications?
If you have diabetes, it will be important to check your blood sugar more frequently as your start the Phase 2 liquid diet to monitor how it will affect your blood sugar levels. It is recommended to discuss a plan with your diabetes care team before starting the Phase 2 diet so you will be prepared should you need to make adjustments to your insulin or oral diabetes medicine regimen.
After Surgery

11. I can only tolerate 2 oz. of my liquid protein drinks at a meal. How am I going to reach my 60 gram of protein/day goal?

It is common in the first 2 weeks post op to fill up on 2-4 oz. liquid protein at meals. In this case, consuming small, frequent meals (2-4 oz. every 2-3 hours) will be necessary to meet protein goals. It can also help to make your protein drinks more concentrated by adding extra protein powder, and/or choosing a protein enhanced water for your between meal fluids.
PHASE 3
High Protein Soft Diet

The Phase 3 meal plan is to be followed upon discharge by **Gastric Band patients only**. You will remain on this meal plan for the first 2 weeks after surgery. This meal plan focuses on 1-3 ounces of soft protein at each meal with high protein drinks as needed between meals. Fruits and vegetables and starches are **not allowed yet**. The protein will allow you to lose body fat while preserving your muscle mass.

Your stomach is still very irritable. It will take approximately 2-4 weeks to heal. If the pouch is stretched by solid food or vomiting, there is a higher risk of disruption. If you have difficulty tolerating PHASE 3, follow PHASE 2. The following are a list of reasons to “fall back” to the PHASE 2 diet.

- Difficultly keeping up with your fluid needs
- Excessive nausea
- Dry mouth
- Difficulty tolerating soft solid foods

**Protein Sources**

- Chicken (white meat)
- Turkey (white meat)
- Beef (round or loin cuts)
- Ground beef (90% lean)
- Pork (round or loin cuts)
- Deli ham
- Deli turkey breast
- Tuna fish
- Shrimp
- Scallops
- Talipia
- Cheese (reduced-fat)
- Eggs (egg white has protein)
- Eggbeaters
- Tofu
- Yogurt/Greek Yogurt
- Cottage cheese (low fat or fat free)
- Peanut butter
- String cheese
- Ricotta cheese (reduced-fat)
- Halibut
- Salmon
PHASE 3

HIGH PROTEIN SOFT DIET:
Sample Meal Plan

- 1/3 cup soft protein allowed per meal as listed on the chart on page 6.
- Three meals each day.
- Between your meals you can drink 1 cup of a high protein drink such as milk, SF instant breakfast, or an Unjury protein shake.
- Choose your soft protein from the following list. Protein should be low in fat, chopped, ground or pureed, and moist (mixed with low-fat mayo, Miracle whip, low-fat gravy) for better tolerance.
- If you feel nauseated at a meal time, you can substitute a high protein drink for a meal.
- If you are hungry between meals you can drink up to 1 cup of a high protein drink (options are listed in the PHASE 2 diet) between meals.
- From the time you are discharged until you follow up with the dietitian 2-3 weeks later you should only be eating protein rich foods. **Fruit, vegetable, and starch are not allowed yet.**

### Breakfast
- 1 egg with 1 oz cheese
- AM FLUIDS
  - 8 oz SF Instant Breakfast
- Lunch
  - 2-3 oz tuna fish mixed with LF Mayo
- PM FLUIDS
  - 16 oz diet fluid beverage (no carbonation)
  - 2 Sugar Free Popsicle
- Dinner
  - 2-3 oz Chicken
  - 1/4c Fat Free Gravy
- **EVENING FLUID**
  - 8 oz SF Hot Cocoa made with milk
  - 2 SF Popsicle

### Breakfast
- 3 oz. “Light” yogurt with 1 TB dry milk powder
- AM FLUIDS
  - 8 oz skim or 1% Milk
- Lunch
  - 1-2 oz ham, 1 oz cheese roll-up
- PM FLUIDS
  - 8 oz Instant Breakfast
  - 8 oz Flavored water
- Dinner
  - 2-3 oz Egg salad made with LF Mayo
- **EVENING FLUID**
  - 8 oz NAS Instant Breakfast
  - 4 oz juice diluted with 4 oz water

Other Points to Consider:
- It is not recommended to use oral supplements like Ensure or Boost as they are usually high in sugar and fat and may cause dumping syndrome.
- You may not be hungry for the first few weeks at home. Avoid the temptation to skip meals as this will make it more difficult for you to meet your protein and nutrient needs. It may also increase your loss of muscle. Eat every 4 to 6 hours.
- From the time you are discharged until you follow up with the dietitian 2-3 weeks later you should only be eating protein rich foods listed on the previous page.
- If you experience nausea, it is ok to follow the high protein full liquid diet.
PHASE 4

**HIGH PROTEIN SOFT DIET** (with soft fruit and vegetables):

Sample Meal Plan

All patients will start this diet when you see the dietitian 2-3 weeks after surgery.

At that time your diet will be explained thoroughly to you. You will also be provided with a book of menus for meal planning ideas. You do not have to puree your food if you chew well. If you are having difficulty tolerating food, consider grinding or pureeing the food.

Rationale: Your stomach is still very irritable. The staple line takes approximately 2-4 weeks to heal. If the pouch is stretched by solid food or vomiting, there is a higher risk of disruption.

Here are two sample plans of what might be consumed 2-3 weeks after surgery. It may be tempting to advance your diet early, but following the rules will promote success! Portion size is around 1/3 cup at a meal (should not exceed this amount). However, some people may not be able to eat the full 1/3 cup yet. You should eat three meals per day.

**Breakfast**
- 1 scrambled egg
- 1 Tablespoon shredded cheese

**Morning Fluids**
- 8 oz. water
- 8 oz. diluted apple juice
- (4oz water + 4oz juice)

**Lunch**
- ¼ cup ham
- 1 TB mashed potato
- 1 TB soft green beans

**Afternoon Fluids**
- 8 oz. skim milk
- 8 oz. water

**Supper**
- ¼ cup chicken (made with LF gravy)
- 1 TB sweet potato
- 1 TB soft cooked carrots

**Evening Fluids**
- 4-8 oz. NAS Instant Breakfast
- 8-16 oz. water

**Breakfast**
- ¼ cup cottage cheese
- 1/8-cup applesauce

**Morning Fluids**
- 8 oz diluted orange jc.
- (4oz water + 4oz juice)
- 8 oz crystal light

**Lunch**
- ¼ cup tuna salad (made with LF mayo)
- 2-3 TB mashed banana

**Afternoon Fluids**
- 8 oz. skim milk
- 8 oz water

**Supper**
- ¼ cup ham
- 1 TB mashed potato
- 1 TB cooked green beans

**Evening Fluids**
- 8-16 oz water
Use the following chart as a guide for foods that will be tolerable over the next 4 weeks. Your dietitian will talk to you about this diet advancement. Please wait until you see your dietitian before advancing to this diet. Fruits and vegetables will be added into your diet. Remember that they still need to be soft!

<table>
<thead>
<tr>
<th>Food Group</th>
<th>FOODS ALLOWED</th>
<th>FOODS NOT ALLOWED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beverages</td>
<td>Water, skim or 1% milk, Lactaid, plain soy milk, plain almond milk, No sugar added instant breakfast, tea, coffee, diluted fruit juice</td>
<td>Whole or 2% milk, chocolate milk, milkshakes, eggnog, alcoholic beverages, soda</td>
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<tr>
<td>*Limit juice to 1 cup daily—may need to dilute it at first</td>
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<tr>
<td>Bread</td>
<td>None</td>
<td>All bread and cracker products</td>
</tr>
<tr>
<td>Cereal</td>
<td>None</td>
<td>All hot and cold cereals and granola</td>
</tr>
<tr>
<td>Eggs</td>
<td>Scrambled, poached and egg substitutes</td>
<td>All others</td>
</tr>
<tr>
<td>Fats</td>
<td>Tub margarine, butter spray, low-fat cream cheese, low-fat mayonnaise or salad dressing</td>
<td>Lard, cream, full fat mayonnaise, stick margarine, butter</td>
</tr>
<tr>
<td>Fruits</td>
<td>Pureed or soft, low fiber fruits such as applesauce, apricots, ripe bananas, cherries, fruit cocktail, melons, canned peaches or pears. All canned fruits packed in their own juice.</td>
<td>High fiber and citrus fruits such as apples, avocados, berries, dates, figs, grapefruits, fresh peaches or pears, raisins, tangerines and fruits canned in heavy or light syrup.</td>
</tr>
<tr>
<td>Meat, fish poultry, cheese and meat alternatives</td>
<td>Pureed or soft/ground lean beef, pork, ham, chicken, turkey. All fish, cottage cheese, creamy peanut butter, tofu, soy protein patties and strained baby meats.</td>
<td>Fried meats, fried fish, bacon, duck, salami, smoked meats and sausages, hot dogs, tough meat, meat with gristle, bologna, harvest burgers</td>
</tr>
<tr>
<td>Foods Allowed</td>
<td>Foods Not Allowed</td>
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<tr>
<td><strong>Potatoes and substitutes</strong>&lt;br&gt;(begin at 2 weeks post-op)</td>
<td>White potato, sweet potato, mashed potato (without skin)</td>
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<tr>
<td></td>
<td>Fried or highly seasoned potatoes, potato chips, pretzels, snack chips, popcorn, chow mien noodles</td>
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<tr>
<td><strong>Soups and sauces</strong>&lt;br&gt;(Best as a between meal liquid due to limited protein content)</td>
<td>Vegetable or broth based soups, broth, bouillon, or egg drop soup</td>
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<td></td>
<td>Gas producing soups such as bean chili, lentil, onion, split pea. Alfredo and Marinara sauces.</td>
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<tr>
<td><strong>Vegetables</strong></td>
<td>Pureed or soft low-fiber ones such as asparagus, beets, carrots, green beans, mushrooms, winter squash, spinach, summer squash, wax beans. Strained baby food vegetables.</td>
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</tr>
<tr>
<td></td>
<td>High fiber and gas producing ones such as broccoli, Brussel sprouts, cabbage, cauliflower, celery, corn, cucumbers, dried beans, green peppers, lettuce, lima beans, onions, peas, pumpkin, radishes, rutabaga, sauerkraut, scallions, tomato and other tomato products, turnips.</td>
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<tr>
<td><strong>Miscellaneous</strong></td>
<td>Vinegar, all herbs and spices, artificial sweeteners, salt, pepper, lemon juice, vanilla extract and other flavorings</td>
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<td></td>
<td>All nuts, seeds, and sugar. <strong>IN LIMITED QUANTITIES</strong> cocktail sauce, chili sauce, horseradish, Tabasco or hot sauce, mustard, BBQ sauce, olives, pickles, relish</td>
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**Tolerating Meat:**

Some people may not tolerate solid meat products after surgery as they did prior to it. Here are some tips if you have trouble:

- Try ground sirloin, veal, or lamb and shaved deli meats like roast beef or ham.
- Marinate your meat. This will make it more tender and easier to digest. Examples are soy sauce, meat tenderizer, vinegar, and wines.
- Use 1 teaspoon of a marinade to 1 ounce of meat, place meat in a Ziploc bag and put in the refrigerator overnight.
- Use fresh meat within three days or it will spoil.

***Solid Red Meat** may be harder to digest and more easily tolerated 3-6 months after surgery.

**REMEMBER TO ALWAYS EAT THE PROTEIN FIRST!**

**HELPFUL WEIGHTS AND MEASURES:**

<table>
<thead>
<tr>
<th>Ounces</th>
<th>Milliliters</th>
<th>Cups</th>
<th>Tablespoons</th>
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<tbody>
<tr>
<td>1 ounce</td>
<td>30 cc.</td>
<td>1/8 cup</td>
<td>2 TB.</td>
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<tr>
<td>2 ounce</td>
<td>60 cc.</td>
<td>¼ cup</td>
<td>4 TB.</td>
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<tr>
<td>3 ounces</td>
<td>90 cc.</td>
<td>1/3c</td>
<td>6 TB</td>
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<tr>
<td>4 oz.</td>
<td>120 cc.</td>
<td>½ cup</td>
<td>8 TB.</td>
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<tr>
<td>8 oz.</td>
<td>240 cc.</td>
<td>1 cup</td>
<td>16 TB.</td>
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</tbody>
</table>
PHASE 5
High Protein Regular Diet

- **Gastric Bypass & SLEEVE patients**: Started at 6 week follow-up appointment.
- **Adjustable Band patients**: Started at 4 weeks after surgery, at home.

At this time starch is added to your diet. Your dietitian will discuss the specifics of this. In addition to changing from a soft meal plan to a more regular consistency meal plan, you will now also start to slowly increase the fiber intake of your diet. Fiber is found in raw fruits, all vegetables, whole grain products and legumes. Continue to add one new food at a time to monitor for tolerance. You may find that a food settles well one day and not the next. It is usually not the food itself, but how fast you ate it, if is too dry, or how stressed you were at the time it was eaten. Foods that might have been intolerable three months after surgery may be tolerable six to nine months after surgery.

- **Every bite must count!** Since the quantity of food you can eat is reduced, your food choices now must be nutritionally balanced. There is no room for “extras.”
- **Never skip meals.**
- **Protein** should always be the main focus of your meals, along with a high fiber fruit and vegetable and small amounts of bread, cereal, rice or pasta. When you do eat from the grain group, choose those with at least 2 grams fiber per serving.
- **Measuring** food and following appropriate portion sizes of food is important. Usually by one-year post op, our patients can eat ¾ to 1 cup of food at mealtimes.
- **Avoid grazing**, or eating solid food between meals. This is a quick way to sabotage your surgery and regain your weight. If you experience hunger between meals, consult your dietitian for tips on how to deal with this. Usually it is a sign that the protein content was too low at the preceding meal.

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Foods to Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starches</td>
<td>Croissants, high fat crackers, chips, fries</td>
</tr>
<tr>
<td>Vegetables</td>
<td>Vegetables prepared with extra butter or cream sauces, salad dressings</td>
</tr>
<tr>
<td>Fruits</td>
<td>Fruits canned or dried with added sugar or oil</td>
</tr>
<tr>
<td>Meats/Meat Substitutes</td>
<td>Fried fish, meat or poultry; high fat luncheon meats, bacon, hot dogs, sausage</td>
</tr>
<tr>
<td>Milk/Milk Products</td>
<td>Whole or 2% milk, ice cream, custards, pudding, sugared yogurts, sweetened milk drinks, whole fat cheeses</td>
</tr>
<tr>
<td>Fats and Oils</td>
<td>Butter, cream cheese, gravy, lard, margarine, mayo, shortening, dips</td>
</tr>
<tr>
<td>Sweets</td>
<td>Cakes, candies, chocolate, cookies, doughnuts, jams, jellies, pastries, pies, sherbet, sugar, gum, sweet rolls, syrup</td>
</tr>
<tr>
<td>Beverages</td>
<td>Alcohol, soda, sugar-sweetened drinks</td>
</tr>
</tbody>
</table>
**PHASE 5**  
*HIGH PROTEIN REGULAR DIET*  
Sample Meal Plan

Portion size: 1/3 to ½ cup total food at each of your 3 meals per day

<table>
<thead>
<tr>
<th>Breakfast</th>
<th>Breakfast</th>
</tr>
</thead>
<tbody>
<tr>
<td>½ slice whole wheat toast</td>
<td>½ slice whole wheat toast</td>
</tr>
<tr>
<td>1oz low fat cheese</td>
<td>1/4c egg</td>
</tr>
<tr>
<td>1oz deli ham</td>
<td>1/8c fruit</td>
</tr>
<tr>
<td>1/8c apple sauce</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Morning Fluids:</th>
<th>Morning Fluids:</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 oz. skim milk</td>
<td>8oz skim milk with SF Hot Cocoa Mix</td>
</tr>
<tr>
<td>12 oz water</td>
<td>12oz water</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lunch:</th>
<th>Lunch:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 small whole wheat crackers</td>
<td>½ slice wheat bread</td>
</tr>
<tr>
<td>2oz cheese (made with skim milk)</td>
<td>2oz shaved turkey meat</td>
</tr>
<tr>
<td>1/8c or 2TB Peaches (packed in pear juice)</td>
<td>1/8c carrots</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Afternoon Fluids:</th>
<th>Afternoon Fluids:</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 oz. diluted juice</td>
<td>16oz water with lemon slices</td>
</tr>
<tr>
<td>16 oz. water</td>
<td>8oz skim milk</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supper:</th>
<th>Supper:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 oz. cooked roast beef</td>
<td>1/8c-cooked pasta (whole wheat)</td>
</tr>
<tr>
<td>1/8 cup mashed potato</td>
<td>1/8c tomato sauce</td>
</tr>
<tr>
<td>1/8-cup green beans</td>
<td>2oz or 1/4c cooked hamburger</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evening Fluids:</th>
<th>Evening Fluids:</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 oz. skim milk</td>
<td>16oz water</td>
</tr>
<tr>
<td>12oz water</td>
<td></td>
</tr>
</tbody>
</table>

*As you move further away from surgery, your volume will increase. Keep in mind that your dietitian will work with you as your volume changes. You are encouraged to always eat protein first and then eat high fiber foods (PHASE 5) but the volume will change over time. Your surgical weight loss dietitian will help to provide you with additional advice and guidance when your volume accommodates more food.*
This is a general guide. Based on your lab results and individual needs, you may require a different plan.

<table>
<thead>
<tr>
<th>Vitamin/Mineral</th>
<th>Gastric Bypass</th>
<th>Sleeve Gastrectomy</th>
<th>Adjustable Band</th>
<th>Suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multivitamin &amp; Mineral (MVI)</td>
<td><strong>TWO</strong> children’s multivitamin/mineral chewable/day</td>
<td><strong>TWO</strong> children’s multivitamin/mineral chewable/day</td>
<td><strong>ONE</strong> children multivitamin/mineral chewable/day</td>
<td>• Do not take on an empty stomach.</td>
</tr>
<tr>
<td></td>
<td>OR</td>
<td>OR</td>
<td>OR</td>
<td>• Do not take with tea, coffee or cola.</td>
</tr>
<tr>
<td></td>
<td><strong>TWO</strong> women’s multivitamin/mineral/day</td>
<td><strong>TWO</strong> women’s multivitamin/mineral/day</td>
<td><strong>ONE</strong> women’s multivitamin/mineral/day</td>
<td>• Separate from thyroid medication by 1 hour.</td>
</tr>
<tr>
<td></td>
<td>OR</td>
<td>OR</td>
<td>OR</td>
<td>• Separate from Calcium supplement for best absorption.</td>
</tr>
<tr>
<td></td>
<td><strong>TWO</strong> Bariatric formulated multivitamin/mineral/day</td>
<td><strong>TWO</strong> Bariatric formulated multivitamin/mineral/day</td>
<td><strong>ONE</strong> Bariatric formulated multivitamin/mineral/day</td>
<td>• <strong>Gummy vitamins are NOT suitable</strong></td>
</tr>
<tr>
<td>Vitamin B12</td>
<td>500 micrograms (mcg) daily in a pill, liquid, or</td>
<td>500 micrograms (mcg) daily in a pill, liquid, or</td>
<td>500 micrograms (mcg) daily in a pill, liquid, or</td>
<td>• Continue taking oral B12 supplement daily if having B12 IM injections.</td>
</tr>
<tr>
<td></td>
<td>sublingual form</td>
<td>sublingual form</td>
<td>sublingual form</td>
<td></td>
</tr>
<tr>
<td>Vitamin B-complex (providing</td>
<td>12-50 mg of Vitamin B1 in 1-2 B-complex tabs</td>
<td>12-50 mg of Vitamin B1 in 1-2 B-complex tabs</td>
<td>12-50 mg of Vitamin B1 in 1-2 B-complex tabs</td>
<td>• This vitamin recommendation is new (starting in 2017)</td>
</tr>
<tr>
<td>Vitamin B1 or Thiamin)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin D</td>
<td>2000 IU</td>
<td>2000 IU</td>
<td>2000 IU</td>
<td>• Vitamin D3 is found over the counter</td>
</tr>
<tr>
<td>Calcium with Vitamin D</td>
<td>Calcium and Vitamin D (together in one pill or</td>
<td>Calcium and Vitamin D (together in one pill or</td>
<td>Calcium and Vitamin D (together in one pill or</td>
<td>• Those on vitamin D2 by prescription, if prescription finished, begin</td>
</tr>
<tr>
<td></td>
<td>chew) *one pill/chew should have 500-600mg Calcium</td>
<td>chew) *one pill/chew should have 500-600mg Calcium</td>
<td>chew) *one pill/chew should have 500-600mg Calcium</td>
<td>taking over the counter vitamin D3 2000IU daily</td>
</tr>
<tr>
<td></td>
<td>and 400 IU of Vitamin D</td>
<td>and 400 IU of Vitamin D</td>
<td>and 400 IU of Vitamin D</td>
<td>• Amount in multivitamin and calcium/vitamin D is supplement not enough.</td>
</tr>
<tr>
<td></td>
<td>Take 1 pill/chew twice daily</td>
<td>Take 1 pill/chew twice daily</td>
<td>Take 1 pill/chew twice daily</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Calcium Carbonate is better tolerated with food</td>
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<td></td>
<td></td>
<td></td>
<td>• Do not take with tea, coffee or cola.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>• If you are on additional iron separate these by 2 hours for best</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>absorption.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>• Avoid taking Tums as a calcium supplement</td>
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<td></td>
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<td></td>
<td></td>
<td>• Calcium Citrate may be better tolerated if taken outside of meals than</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>calcium carbonate.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Take separately from thyroid medication by 1 hour</td>
</tr>
</tbody>
</table>
Suggested Timing for Taking Vitamin and Mineral Supplements

Breakfast:
- Take Multivitamin(s)
- Vitamin D

Lunchtime:
- 1 of your 2 recommended calcium/D supplements
- B-12

Supper:
- 2\textsuperscript{nd} calcium/vitamin supplement
- Vitamin B complex containing thiamin
Long Term Tips to Increase Success After Weight Loss Surgery

- **Eat slowly:** Remember that it takes your brain at least 20 minutes to get the message from your stomach that it is full. Eating only 1/3 to ½ cup servings makes it easy to eat too quickly. Don’t forget to put the fork down between bites. Identify what is distracting for you that may cause you to eat too quickly and try to avoid that.

- **Avoid drinking with meals.** Even a sip! It is a ‘slippery slope’ from just one or two sips with food to having a full glass with your meals again. Drinking with your meal or too quickly after can cause your food to liquefy too soon and allow the food to go through too quickly. This will cause you to experience hunger more often between meals.

- **Protein, protein, protein.** Yes it is our mantra. Even years after your surgery protein should still be the most important part of your diet. It is the thing unlike carbohydrate or fat that will stay with you the longest and contribute to less between meal snacking. In the first year after surgery it is critical to get it in to avoid using your bodies own muscles as an energy source which lowers your metabolism long term.

- **Skip the snacks.** Snacking between meals is the equivalent after surgery of binge eating for some. Unless you have become an endurance athlete it is unlikely that your body needs the extra calories between meals. If you simply must snack make sure it is fiber rich (2+ grams of fiber per serving) such as fresh fruit, vegetables, low-fat dairy such as light yogurts, string cheese or cottage cheese. If you crave the carbohydrates look for Triscuits, Wheat thins or popcorn (not movie style) to get some extra fiber.

- **Supplement:** Make taking your vitamins and minerals as common as brushing your teeth. Most people need to be on a multivitamin/multimineral and calcium with vitamin D. Discuss with your surgeon or dietitian if you need extra iron.

- **Increase your fluid intake.** Initially we encouraged you to get 2 cups of liquid between all three meals for a total of 6 cups a day. By one-year you should easily be drinking 8 cups a day and more if you are working in a hot environment. Keep your liquids calorie free - that means no cream/sugar in coffee/tea, no soda, alcohol, juices, or other sweetened beverages.

- **Exercise often.** 72% of Mainers are inactive. Don’t be one of them. If you chose to live in Maine you can not skip exercising in the winter which lasts too long here. We now know that weight lifting is also important to maintaining your lean muscle mass and improving your bone density. Read “Strong Women Stay Fit” by Dr. Miriam Nelson of Tufts University for further information.

- **Keep all of your medical follow-up appointments.** Also do your lab work as requested to minimize the health risks associated with surgery.
Potential Nutrition Problems Following Weight Loss Surgery

**Nausea/ Vomiting**
Eating too quickly, too much, not chewing food enough or drinking liquids right after a meal can cause this problem as well. Also, avoid lying down right after a meal. Too much—Too fast—Too dry can cause vomiting.

**Dumping Syndrome (associated with Gastric Bypass Surgery and sometimes Sleeve)**
This is experienced as nausea, vomiting, abdominal bloating, diarrhea, weakness, profuse sweating, dizziness, and/or hypoglycemia. It may be caused by foods high in fat or high in sugar and these should be avoided. There are 2 phases of dumping syndrome, early dumping and late dumping.

- **Early dumping** is caused by the high concentration of sugar in the small intestine. Water rushes to dilute the concentration. Thus, causing symptoms such as cramping, rapid heart rate, feeling cold, sweat, and diarrhea.
- **Late dumping** is associated with blood sugar levels. The small intestine is very effective at absorbing sugar. Rapid absorption of sugar will elevate blood sugar. In response to the high blood sugar, the pancreas will secrete insulin. The sugar that created the production of insulin is not sustained, meaning the blood sugar will fall back down at the time when the insulin is just beginning to work. This creates a low blood sugar. Other late dumping symptoms include weakness, sleepiness, and/or fatigue. Late dumping syndrome can also lead to a viscous cycle of eating. Low blood sugar which can occur 2-3 hours after a meal too high in carbohydrate can stimulate an increase in appetite, allowing one to have early hunger, increasing the volume of food consumed in a day.

Preventing dumping syndrome. Both early and late dumping syndrome indicates that the food choice selected is not optimal. Consumption of food that promotes dumping will not promote long term success. To prevent dumping and to promote long term success, avoid the following:

- Candies, candy bar, chocolate, cookies, doughnuts, jellies, pastries, sherbet, syrup
- High calorie beverages including: milkshakes, soda, juice, lemonade
- Butter, cream, cream cheese, dips, shortening
- Whole milk, ice cream, sugared yogurts, whole fat cheese
- Fried foods, croissants, high fat crackers, chips
- Bacon, sausage, hot dogs, high fat luncheon meats.

**Pain in Shoulder or Upper Chest Area**
If this pain occurs when eating, stop. Try to eat again later when the pain has resolved.
**Dehydration**
This may result if you have not taken in enough liquids or if you have persistent nausea, vomiting, diarrhea, or fever. Aim for 6+ cups (48 oz.) of fluid to prevent dehydration. Take fluids between meals only. Avoid carbonation. If you are on a solid meal plan (anything after PHASE 3), consider substituting one meal a day with a liquid high protein beverage (from PHASE 2) until issues resolve and fluid intake becomes easier.

**Constipation**
After weight loss surgery it is common for patients to move their bowels less often due to the reduced amount of food that is eaten. Typical bowel patterns include daily or every other day. Moving your bowels less often than this or having hard stools that are difficult to pass is considered constipation.

Here are some tips to deal with constipation:
- Increase your fluid intake. Attempt to get in 6-8 cups of liquid every day. All liquids count.
- Increase your exercise- daily exercise promotes more rapid elimination.
- Increase your fiber intake. If you are 2 weeks or beyond after surgery you should have added fruits and vegetables back into your diet. Once you are 6 weeks or beyond after surgery, you can add small amounts of high fiber grains such as 100% whole wheat bread, higher fiber cereal, or legumes into your diet. Remember to chew thoroughly.
- Adding a fiber supplement such as clear, non-thickening Metamucil. This calorie free powder can be added to liquids and does not thicken or flavor the beverage. You can add 2 teaspoons of powder to 1 cup of liquid twice a day.
- Colace – an over the counter stool softener
- Contact Surgeon before taking any laxatives.

**Diarrhea**
This may occur shortly after the surgery as your stomach and intestine gets used to the new flow of food. It may also be caused by foods that are poorly tolerated, such as sweets, fried foods and occasionally dairy products. Make sure to get adequate fluids to prevent dehydration if this is a problem.

**Lactose Intolerance**
This may occur after surgery if your body loses its ability to digest the lactose (sugary) part of milk. Symptoms include pain, bloating, gas and diarrhea. Avoid dairy products for three days to see if the symptoms subside. Substituting lactose-free milk or calcium fortified soy milk would be recommended. Discuss this with your dietitian.

**Stretching of the Stomach Pouch**
There is some risk of stomach stretching. The risk of this occurring is reduced by not eating large amounts of food at one time.
Weight Gain or No Further Weight Loss
Long-term changes with respect to eating and lifestyle habits must be made in order for weight loss to be successful. Weight loss usually occurs over the first 18 months after surgery. Avoid unnecessary high calorie food and drinks. Also, regular physical activity may help if your weight loss has stopped before the 18-month period.

There is great potential for nutritional inadequacy following weight loss surgery.

- Food choices and caloric intake is limited
- It may be difficult to meet daily protein needs (dairy, meat, fish, poultry, legumes)
- Milk intolerance can cause or worsen diarrhea
- Dumping syndrome (Gastric Bypass and sometimes Sleeve)
- Vitamin and mineral deficiencies such as Calcium, Vitamin D, Vitamin B-12, Folate, Iron, Magnesium, and Zinc.

Foods to avoid or that may cause distress

**High fat foods:** Fried foods, hamburger, and meats with gristle
**High fiber foods:** Legumes, peas, celery, corn, cabbage, citrus fruits, whole grain breads & cereals, bran, coconut, dried fruits
**Foods hard to chew or swallow:** Tough meats, raw vegetables, seeds, skin, granola, popcorn, nuts and untoasted bread
**Highly sweetened foods:** Cakes, cookies, pies, sugar, honey, molasses, frozen goodies, regular soda, doughnuts and other sweets
**Constipation**

Constipation can be caused by inactivity, dehydration, low fiber intake, and pain medication. Be sure to drink the recommended eight, 8oz glasses of water daily and stay active to help prevent constipation. If you are drinking the 64 ounces of fluid per day, once allowed by your surgeon and dietitian, you may try adding more fiber to your diet.

**Managing Constipation:**

**On day 1 and 2 after discharge:**
- Try Benefiber® and a stool softener

**If you have not had a bowel movement on day 3 after discharge:**
- Try Milk of Mag once or twice a day

**If you have not had a bowel movement on day 4 after discharge:**
- Continue Milk of Mag once or twice a day and try one Dulcolax suppository

**If you have not had a bowel movement on day 5 after discharge:**

*Call the nurses at Northern Light Surgical Weight Loss (973-8881)*
<table>
<thead>
<tr>
<th>Very Lean (0-1g Fat)</th>
<th>Lean (3g Fat)</th>
<th>Medium Fat (5g Fat)</th>
<th>High Fat (8g Fat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories: 35</td>
<td>Calories: 55</td>
<td>Calories: 75</td>
<td>Calories 100+</td>
</tr>
<tr>
<td>• Chicken or turkey</td>
<td>• Beef, choice or select lean cuts trimmed of fat: round, sirloin, flank steak, beef tenderloin, Roast (rib, chuck, rump), Steak (T-bone, porterhouse, cubed), ground round.</td>
<td>• Beef: ground beef, corned beef, short ribs, prime grades of trimmed of fat: prime rib</td>
<td>• Pork: spareribs, ground pork, sausage.</td>
</tr>
<tr>
<td>(white meat, no skin)</td>
<td>• Pork tenderloin, center loin chops, lean ham, Canadian bacon.</td>
<td>• Pork: top loin, chop, Boston butt, cutlets</td>
<td>• Cheese</td>
</tr>
<tr>
<td>• Fish: cod, haddock, founder, trout, halibut (not fried)</td>
<td>• Lamb: Roast, chop, leg</td>
<td>• Lamb: Rib roast, ground</td>
<td>• Processed deli meat: bologna, pimento loaf, salami, sausage (bratwurst, Italian, knockwurst, polish)</td>
</tr>
<tr>
<td>• Tuna canned in water</td>
<td>• Chicken or turkey (dark meat no skin), or (white meat, with skin), 98% ground turkey</td>
<td>• Veal</td>
<td>• Hot dogs</td>
</tr>
<tr>
<td>• Shellfish: clams, crab, lobster, shrimp, imitation shellfish</td>
<td>• Domestic duck or goose (well drained of fat, no skin)</td>
<td>• Chicken (dark meat with skin), ground turkey or chicken, fried chicken.</td>
<td>• Bacon</td>
</tr>
<tr>
<td>• Game: duck, pheasant (no skin), venison, buffalo, ostrich</td>
<td>• Fish: Herring (creamed or smoked), oysters, salmon, catfish, sardines</td>
<td>• Fried fish, or seafood.</td>
<td>• Peanut butter and other nut butters</td>
</tr>
<tr>
<td>• Fat free or low-fat cottage cheese</td>
<td>• Tuna canned in oil</td>
<td>• Cheese: feta, mozzarella, ricotta</td>
<td></td>
</tr>
<tr>
<td>• Lean deli ham or turkey</td>
<td>• Game: Goose (no skin), rabbit</td>
<td>• Eggs</td>
<td></td>
</tr>
<tr>
<td>• Egg whites, egg substitute</td>
<td>• Low fat cheese</td>
<td>• Tempeh, tofu</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Lean hot dogs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Lean deli meat: turkey pastrami</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Light tofu</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Foods contain both protein and carbohydrate**

- Milk (ideally skim, or 1%), Yogurt (light, fat free)
- Legumes (black beans, chickpeas, etc)
Whey Protein Powders

Look for 15-20 grams of sugar or less per serving

**Unjury**
Price: $22.95 per 17-serving container
Price per serving: $1.35
Protein per serving: 20 grams
Flavors: Chocolate Classic, Chocolate Splendor, Vanilla, Strawberry, Chicken Soup, Unflavored
Where to buy: [www.unjury.com](http://www.unjury.com) or by calling 1-800-517-5111

**Body Fortress Super Advanced 100% Whey Isolate**
Price: $18.98 per 17-serving container
Price per serving: $1.12
Protein per serving: 30 grams
Flavor(s): Vanilla Crème, Chocolate
Where to buy: Wal-Mart (online/in-stores), Hannaford

**Syntrax Nectar**
Price: $30-$59.95 per 32-serving container
Price per serving: $0.93- $1.87
Protein per serving: 23 grams
Flavors: 11 fruit juice flavors (apple, tropical, lemonade, iced tea, etc), Chocolate, Vanilla, Strawberry, Cappuccino, Unflavored
Where to buy: [Online](http://www.sio3.com), Amazon, Vitamin Shoppe

**Carnation Breakfast Essentials: Light Start**
Price: $5 per 8 serving box
Price per serving: $0.63
Protein per serving: 5 grams (must make with milk)
Flavors: Chocolate, Vanilla, Strawberry
Where to buy: Wal-Mart, Hannaford, Online (Amazon)

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**Have an allergy or intolerance?**
Your Registered Dietitian can work with you one-on-one to help select a protein option that is right for you! There are varieties available that are lactose-free, gluten-free, dairy-free, vegan, “raw”, and free of artificial sweeteners. Let us know how we can help!
Ready-to-Drink Protein

For busy days and meal planning on-the-go. Look for 15-20 grams of sugar or less per drink.

**EAS AdvantEDGE Carb Control**
Price: $5.49 per 4-pack
Price per serving: $1.37
Protein per serving: 17 grams
Flavors: French Vanilla, Strawberry Cream, Chocolate Fudge, Rich Dark Chocolate
Where to buy: Wal-Mart (online/in-store), Hannaford, Target

**Slim-Fast High Protein**
Price: ~$6.99 per 4 pack
Price per serving: $1.73
Protein per serving: 20 grams
Flavors: Creamy Chocolate, Vanilla Cream, Strawberry, Caramel Latte, Mocha Cappucino
Where to buy: Wal-Mart (online/in-stores), Target, Hannaford, Walgreens, Amazon

**Atkins Advantage and Atkin's PLUS Protein**
Price: $5.99-6.99 per 4-pack
Price per serving: $1.49-$1.75
Protein per serving: 15 grams (Advantage), 30 grams (PLUS Protein)
Flavors: Café Caramel, Mocha Latte, Dark Chocolate Royal
Where to buy: Wal-Mart (online/in-stores), Target, Hannaford

**Pure Protein**
Price: $7.88 per 4-pack
Price per serving: $1.97
Protein per serving: 23 grams
Flavors: Vanilla Crème, Frosty Chocolate
Where to buy: Wal-Mart (online/in-stores), Target

**Muscle Milk Light and Muscle Milk Pro Series (11 oz)**
Price: $5.98-7.99 per 4-pack
Price per serving: $1.50-1.99
Protein per serving: 20 grams (Light), 32 grams (Pro Series)
Flavors: Chocolate, Vanilla Crème
Where to buy: Wal-Mart (online/in-store), Hannaford, Target

**Rockin’ Refuel (Muscle Builder or Lean Builder)**
Price: 2 for $3.00
Price per serving: $1.50
Protein per serving: 20 gram (Lean Builder) 30 grams (Muscle Builder)
Flavors: Chocolate, Vanilla
Where to buy: Shaw’s

**Premier Protein**
Price: $7.99/4pk
Price per serving: $1.99
Protein per serving: 30 grams
Flavors: Vanilla, Chocolate, Strawberries & Cream, Banana Cream, Caramel, Cookies & Cream, Peach
Where to buy: Walgreens (in stores/online), Hannaford, Target, Sam’s Club, Amazon

Updated 10/2018
Northern Light

Surgical Weight Loss
905 Union Street
Bangor, Maine 04401
Phone: 973-6383   Fax 973-7364

A General Plan to Prevent
Low Blood Sugars
This book has been developed to provide some general guidance to meal planning and basic education to those who have had surgical weight loss and are having low blood sugars. Meeting with your Bariatric dietitian will be an essential part of your plan as they can make individual suggestions to improve your health.

Generally speaking, how and what you eat are the first line of defense in order to prevent episodes of low blood sugars (commonly known as HYPOGLYCEMIA). There are rare cases in which low blood sugars after surgical weight loss will need further medical attention. Your surgical weight loss team will help to assess this need.

**Key Points:**

1. What are symptoms of Low Blood Sugar (Hypoglycemia).
   - Feeling nervous or jittery
   - Cold, clammy, wet skin and/or excessive sweating not caused by exercise
   - A rapid heartbeat
   - Numbness or tingling of the fingertips or lips
   - Trembling
   - Mood changes, such as irritability, anxiety, restlessness, or anger
   - Confusion, difficulty in thinking, or inability to concentrate
   - Blurred vision, dizziness, or headache
   - Weakness
   - Lack of energy
   - Poor coordination
   - Difficulty walking or talking, such as staggering or slurred speech
   - Fatigue, lethargy, or drowsiness
2. Before treating or acting on any of the above symptoms, it is important to test your blood sugar to verify a low. Some of the above symptoms can be related to a number of other conditions including (but not limited to) low blood pressure, anxiety, depression, high blood sugars. Therefore treating these symptoms with food without verifying that your blood sugar is low can cause weight gain if the symptoms are not related to a low blood sugar. It will be important to get a blood sugar meter to test your blood sugar. Many times your surgical weight loss dietitian can provide you with a meter, show you how to use it, and make recommendations when to test your blood sugar. You will have to connect with your primary care provider to get a prescription for test strips and lancets.

3. Treatment of a low blood sugar: Although simple sugars such as candy, candy bars, glucose gel, and juice are common treatments for low blood sugars, these should be used as a LAST RESORT. These types of food will raise blood sugar but in a patient who has had surgical weight loss these foods can create issues with “rebound low blood sugar.” That means, these foods will raise the blood sugar but could result in another low 1-2 hours later. This can create a viscous cycle of WEIGHT GAIN! If possible, treat lows with the following items:
   - Handful of pretzels
   - Plain graham cracker
   - Whole grain cereal
   - 1 cup skim or 1% milk
   - Light yogurt

4. What is happening:
   A. After gastric bypass surgery your body is sensitive to the carbohydrate (sugar) you put into your body. If your blood sugar rises too quickly your body will work very hard to prevent a rapid rise by secreting insulin to lower your blood sugar. The re-routing of the anatomy after gastric bypass creates some imbalances in the regulation in the amount of insulin secreted (i.e. too much) as a result causing low blood sugars.

   B. Many times people may feel like they are having a low blood sugar after consuming foods with a lot of carbohydrate but their blood sugar will be normal. It is possible that they are feeling a “transitional effect” of the blood sugar quickly rising and falling. This rapid rise and fall can make people feel like they are experiencing a low but the blood sugar is normal. **The goal is to prevent the quick rise in blood sugar, by making dietary modifications.**
What Should I Eat?

Carbohydrates break down into sugar. Carbohydrates are found in 4 food groups:

- Starch (pasta, rice, bread, crackers)
- Fruit (dried, juice, fresh or canned)
- Dairy (milk, yogurt)
- Sweets

You need to have carbohydrates to fuel your body (brain and muscles), however too much of healthy carbohydrates (complex- whole grain bread/pasta, oatmeal, fruit ) or just a small amount of unhealthy carbohydrates (simple-cake, cookie, pie) can create issues with low blood sugars after gastric bypass surgery. The primary goal is to eat a reasonable amount of healthy (high fiber) carbohydrate at a meal. Both protein and fiber will slow the digestion of the carbohydrate thus the blood sugars will not raise as high or as fast. It is best to consume a source of protein at most meals. Simply put, a healthy balanced diet will be the best treatment to manage low blood sugars after surgery. Occasionally you will find a specific food that may cause a low blood sugar for you when you follow a healthy plan.

WARNING: If you not adhere to a balanced diet you should plan to have a low blood sugars. Low blood sugars are dangerous and can have very serious consequences including but not limited to problems with operating motorized equipment.
The Meal Plan:
- 3 meals each day
- Snacks are not a requirement but can be incorporated if they are healthy, high in fiber and calorie controlled in order to prevent weight gain. Some criteria to consider when making a snack choice:
  - Ideally no more than 15 grams of complex carbohydrate
  - When possible incorporate a source of protein
  - Choose foods that offer fiber
  - Limit snack to less than 120 calories

- Snack Examples:
  - 2 brown rice cakes
  - 1 Tablespoon peanut butter
  - 4 whole wheat crackers (Triscuts)
  - 2 Tablespoons Hummus or 1 ounce of cheese
  - 1 small apple, sliced
  - 1 Tablespoon peanut butter
  - ½ cup cottage cheese
  - ¼ cup blueberries

Breakfast:
30 grams of whole grain carbohydrate
1-2 ounce of protein (if possible)
*Add Benefiber to meals to increase Fiber

Lunch & Dinner:
30 grams of whole grain carbohydrate/meal
2-3 ounces of protein (at lunch and dinner)
½ cup – 1 cup of non-starchy vegetable
*Add Benefiber to meals to increase Fiber

Other Dietary Considerations:
AVOID
- Unbalanced carbohydrate meals (meals that lack protein and have a number of simple carbohydrates) like stir-fry with white rice, white bagels, jelly, fruit salad, yogurt for a meal.
- Simple Sugars: Soda, juice, candy, ice cream, cake
- Non-decaffeinated coffee, tea, soda and alcohol
Example 1

**Breakfast:**
½ cup oatmeal
1 small apple cut up into oatmeal
1/4c-1/2 cup skim or 1% milk
1-2 ounce(s) nuts

**Lunch:**
1 whole wheat mini pita pocket
2 ounces lean deli ham
1 ounce low fat cheese
1 Tablespoon low fat mayo
½-1 cup salad greens
1-2 Tablespoons light salad dressing

**Dinner:**
3/4 cup Turkey Chili*
½-1 cup mixed salad greens
1-2 Tablespoon low fat salad dressing
# Turkey Chili

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 tablespoon</td>
<td>olive oil</td>
</tr>
<tr>
<td>1 large</td>
<td>onion finely chopped</td>
</tr>
<tr>
<td>1 each</td>
<td>green pepper, chopped</td>
</tr>
<tr>
<td>1/2 stick</td>
<td>celery, chopped</td>
</tr>
<tr>
<td>2 each</td>
<td>garlic cloves, minced</td>
</tr>
<tr>
<td>3/4 pound</td>
<td>99% fat-free ground turkey</td>
</tr>
<tr>
<td>2 tablespoons</td>
<td>chili powder</td>
</tr>
<tr>
<td>2 teaspoon</td>
<td>ground cumin</td>
</tr>
<tr>
<td>1/2 teaspoon</td>
<td>oregano</td>
</tr>
<tr>
<td>1/2 teaspoon</td>
<td>ground coriander</td>
</tr>
<tr>
<td>1 14½-ounce can</td>
<td>crushed tomatoes</td>
</tr>
<tr>
<td>1 8-ounce can</td>
<td>tomato sauce, no salt added</td>
</tr>
<tr>
<td>1 15-ounce can</td>
<td>black beans, rinsed and drained</td>
</tr>
</tbody>
</table>

Heat oil in a large pot. Add onion, celery, chopped pepper and garlic. Cook for 5 minutes or until onions are translucent. Crumble the turkey into the pan, breaking it apart with a wooden spoon.

Cook for about 5 minutes or until no longer pink. Stir in chili powder, cumin, coriander and oregano. Add in tomatoes and tomato sauce, and simmer for 10 minutes, stirring occasionally. Add beans, mix well and cook on low heat for a further 5-10 minutes.
Example 2

**Breakfast:**
1 medium egg (hard boiled, scrambled, over easy)
½ medium banana
1 slice whole wheat toast (2 grams of fiber or more)

**Lunch:**
1 cup Light and Healthy Pasta Salad*
2-3 sliced tomato and cucumber

**Dinner:**
3-4oz Lemon Herb Haddock*
½ - 1 cup green beans
½ cup mashed potato
Light and Healthy Pasta Salad

Serves 4

Ingredients:
- 4 cups Whole wheat rotini pasta
- ¼ cup Shredded carrots
- 1/2 cup Green pepper, diced
- ½ cup Plum tomato, diced
- 4 ounces Turkey or ham, diced
- 4 ounces Reduced fat provolone cheese, diced
- 1 cup Broccoli, chopped
- 2 ounces Sliced black olives, drained
- ¼ cup Red wine vinegar
- 2 Tablespoon Lemon juice
- 1 Tablespoon Yellow mustard
- 2 Tablespoon Fresh parsley, chopped
- 1 teaspoon Black pepper, ground
- 1 teaspoon Salt

Directions:
1. Cook the pasta drain and cool. Add pasta to large bowl
2. Add cut up vegetables to the pasta and toss
3. In separate bowl add the olive oil, vinegar, lemon juice, mustard, pepper and salt, whisk together and pour over the pasta salad. Toss well before serving.
4. Sprinkle the pasta salad with chopped parsley and serve chilled

Lemon Herbed Haddock

Serves 4 (3 ounce servings)

Ingredients:
- 12 ounces Haddock Filet
- 1 each Lemon, juice of
- ½ each Lime, juice of
- 1 Tablespoon Olive oil
- 1 teaspoon Salt
- 1 Tablespoon Fresh dill, minced
- 1 teaspoon Garlic, minced
- 1 teaspoon Black pepper

Directions:
1. Rinse haddock and pat dry with paper towels
2. Pre-heat oven to 400F
3. Mix remaining ingredients in a small casserole dish or pan
4. Place haddock face down in the marinade and let sit for 10-20 minutes while refrigerating
5. Place the fish on a sheet pan and pour remaining marinade over the haddock.
6. Cook at 400F for 20 minutes. The fish can also be grilled, about 10-12 minutes or until fish is cooked.
   If additional browning is desired, broil for the final 3-4 minutes of cooking.
Example 3

**Breakfast:**
- 8oz light yogurt
- 1/2c all bran cereal
- 2TB Walnuts

**Lunch:**
- Chef salad made with:
  - ½ cup romaine lettuce, mixed fresh vegetables
  - 1oz lean sliced ham
  - 1oz low-fat cheese
  - 1oz lean turkey
  - 1-2 Tablespoon low fat dressing
  - 1/3 cup beans

- 1 small fruit

**Dinner:**
- 3 ounces Turkey meatloaf*
- ½ cup -1 cup steamed broccoli
- 1 small baked potato
Turkey Meatloaf

Serves 4-6

Ingredients

- 16 ounces Ground Turkey, lean
- 1 cup Bread crumbs, plain
- 2 each Egg whites
- 1 Tablespoon Parmesan cheese
- 1 teaspoon Garlic, minced
- 1 Tablespoon Italian seasoning
- ½ teaspoon Salt
- 1 teaspoon Pepper
- 1 teaspoon Chili powder

Directions:

1. Preheat oven to 400F
2. Combine all ingredients in a large bowl and mix well
3. Lightly spray a loaf pan with PAM spray. Add the meatloaf mixture to the loaf pan, smooth out the top.
4. Cover the meatloaf with aluminum foil and bake for 45 minutes. Remove foil and continue baking 15 minutes or until an internal temperature is reached of 165 F.
5. Remove from oven and let rest for 5-10 minutes, serve 3 ounce slices, top with gravy if desired.

Light Gravy Recipe

Serves 4-6

Ingredients

- 6 ounces Chicken stock, low-fat, low sodium
- ½ cup Half and half, fat free
- ½ teaspoon Rosemary
- ½ teaspoon Thyme
- ½ teaspoon Pepper
- To taste Salt
- 2 Tablespoons Cornstarch
- 2 Tablespoons Cold water

Directions:

1. Add the chicken stock, half and half, rosemary, pepper and thyme to a small pot, bring to a simmer.
2. Mix the cornstarch and cold water in a small bowl to make a slurry.
3. Slowly whisk in the cornstarch slurry, stop when desired thickness is reached. Let simmer for 3 minutes and remove from heat, stir occasionally. Do not let the gravy come to a full boil.
4. Season with salt to taste and serve.
Example 4

**Breakfast:**
1 small whole wheat bagel
1 ounce light cheese or 1-2 Tablespoon peanut butter

**Lunch:**
Grilled Cheese made with:
1-2 pieces whole wheat bread
2 oz low-fat cheese
1 tsp margarine

½ cup carrot sticks with
1 TB low fat ranch dressing

**Dinner:**
Chicken Vegetable Quesadillas*
Small salad
# Chicken Vegetable Quesadillas

Serves 4  

<table>
<thead>
<tr>
<th>Ingredients</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4 each</td>
<td>Large whole wheat tortillas</td>
</tr>
<tr>
<td>1 each</td>
<td>4 ounce chicken breast, sliced thin</td>
</tr>
<tr>
<td>1/3 each</td>
<td>Green pepper, diced</td>
</tr>
<tr>
<td>1/3 each</td>
<td>Red pepper, diced</td>
</tr>
<tr>
<td>1/3 each</td>
<td>White onion, sliced thin</td>
</tr>
<tr>
<td>1 teaspoon</td>
<td>garlic, minced</td>
</tr>
<tr>
<td>8 ounces</td>
<td>Low fat shredded cheese</td>
</tr>
<tr>
<td>2 teaspoon</td>
<td>Olive oil</td>
</tr>
<tr>
<td>1 Tablespoon</td>
<td>Cilantro, chopped</td>
</tr>
<tr>
<td>1 teaspoon</td>
<td>Pepper</td>
</tr>
<tr>
<td>Optional</td>
<td>Salt</td>
</tr>
<tr>
<td>2 teaspoon</td>
<td>Chili powder</td>
</tr>
</tbody>
</table>

**Directions:**

1. Preheat oven to 400F  
2. Toss the raw chicken with the chili powder and half of the salt and pepper, sauté using 1 teaspoon of olive oil on medium high until cooked. About 6 minutes  
3. Toss the cut veggies with remaining pepper and salt and sauté in the remaining olive oil for about 5-8 minutes until tender.  
4. Place 2 tortillas on sheet pan. Cover the tortilla with shredded cheese, equally divide the sautéed chicken, vegetables and cilantro and spread on each tortilla.  
5. Top the four tortillas with the remaining cheese and place the last 2 tortillas on top of the bottom four.  
6. lightly press down on the top of the tortilla and bake for 8-10 minutes or until cheese is melted and tortillas are crispy  
7. Cut the quesadilla in half and serve, reminder: ½ quesadilla per portion. Serve with salsa and/or low fat sour cream if desired.
Example 5

**Breakfast**
½ cup low fat granola
2 Tablespoons chopped walnuts
¼ cup light yogurt

**Lunch**
Lean roast beef sandwich made with:
1-2 slice whole wheat bread
1-2 ounces lean roast beef, 1 ounce light cheese
½ - 1 cup cooked spinach (easy to cook in microwave)

**Dinner**
Turkey and rice stuffed peppers*
Turkey and Rice Stuffed Peppers

Serves 4

Ingredients:
2 Tablespoons Olive oil
4 each Green peppers
2 ¾ cups Brown rice, cooked
8 ounces Ground turkey, lean
½ cup Onion, diced
1 clove Garlic
4 ounce can Tomatoes, diced with liquid
4 ounces Light cheddar, jack cheese mix, shredded
2 Tablespoons Chili powder
½ teaspoon Salt
½ teaspoon Tabasco sauce

Directions:
1. Coat the pan with olive oil, brown the ground turkey and cook the onion and garlic in a sauté pan over medium high heat.
2. Mix the cooked turkey, onion and garlic mixture with the cooked rice, canned tomatoes, chili poser, Tabasco sauce and salt.
3. Place the meat and rice mixture equally in each pepper half. Top each pepper with equal amounts of shredded cheese.
4. Bake at 350F for 25 minutes or until pepper begins to soften.
5. Serve 2 halve per portion
Example 6

**Breakfast**
Mix together:
1/2 cup low fat granola
2 Tablespoons chopped walnuts
¼ cup low fat vanilla yogurt

**Lunch**
6 Whole wheat cracker delight*
½ - 1 cup salad greens
1-2 Tablespoons light dressing

**Dinner**
3 ounce lean steak
1/3 cup brown rice
½ cup steamed broccoli
Triscut Cracker Delight

Serves 1  
**Ingredients:**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Ingredient</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-6 each</td>
<td>Triscut Crackers</td>
</tr>
<tr>
<td>3 ounces</td>
<td>Chicken, flavored and pre-packaged and cooked</td>
</tr>
<tr>
<td>¼ cup</td>
<td>Salsa</td>
</tr>
<tr>
<td>1 ounce</td>
<td>Cheese</td>
</tr>
</tbody>
</table>

**Directions:**

1. Place Triscut Cracker on microwaveable plate  
2. Place chicken on Triscut Crackers  
3. Top with a light layer of salsa  
4. Sprinkle cheese on top  
5. Microwave cracker until cheese melts  
6. Enjoy!
Example 7

**Breakfast:**
1-2 piece whole wheat toast
1-2 ounce low-fat cheese (melted on toast)
7-8 small grapes

**Lunch:**
Ham sandwich, made with
1-2 slices whole wheat bread
2 ounces lean ham
1 teaspoon light mayonnaise
½ cup -1 cup Small tossed salad
1 Tablespoon light dressing

**Dinner:**
¾ cup Homemade and Healthy Hamburger Helper*
½ cup asparagus
Homemade and Healthy Hamburger Helper

Serves 4

Ingredients:
1 ½ cups   Elbow whole wheat macaroni, uncooked
10 ounces  Lean ground beef (90% lean)
2 ½ cups   Hot water
1 ½ cups   Fat free half and half
1 cup      Low fat shredded cheddar cheese
2 Tablespoon Corn starch
1 Tablespoon Water
½ Teaspoon  Salt
1 Teaspoon   Pepper
1 Teaspoon   Garlic Powder
½ cup      Green pepper, diced
½ cup      Onion, diced

Directions:
1. Brown the ground beef and cook the peppers and onions in a large skillet or 5 quart pot on medium high heat
2. Stir in the hot water, non fat half and half, salt, pepper, garlic powder, sugar and macaroni, Mix all ingredients well.
3. Reduce the heat and allow the liquid to simmer. Stir occasionally until pasta is tender, about 12 minutes. Add more water if needed during the cooking process.
4. Mix the cornstarch and the cold water together in small bowl, whisk in the cornstarch mixture and simmer for a few minutes until the sauce becomes thick.
5. Add the cheese and mix in until melted. Turn off the heat and allow it to cool 5 minutes before serving. It will begin to thicken. Serve with a salad or fresh vegetables.
Example 8

**Breakfast:**
1/2 cup All Bran Yogurt Breakfast Pudding*

**Lunch:**
Lean Cuisine
Add an extra ½ cup of vegetable

**Dinner:**
Chicken Stir-fry*
All Bran Yogurt Breakfast Pudding  
(From Feb. 2007, The Skinny)

4 ounces  Dannon light and fit, vanilla Yogurt  
½ cup  All-Bran with extra fiber  
½ cup  Blueberries  
2 tablespoon  Unflavored Unjury or dried skim milk powder  
1 tablespoon  Splenda  
½ teaspoon  vanilla extract  
½ teaspoon  almond extract

Directions:

Place All-bran in a sandwich bag, and crush with a rolling pin. Combine the yogurt, cereal, Unjury, Splenda, vanilla, and almond extract and mix well. Keep tightly covered in refrigerator.

Chicken Stir Fry

Ingredients:

2 each  6oz Chicken breasts, sliced thin  
1 each  Red pepper, chopped  
1 cup  Bok choy, chopped  
1 8 oz can  Baby corn, drained  
2 oz  Water chestnuts, drained  
½ each  Onion, diced  
1 clove  Garlic, minced  
1/3 cup  Low sodium soy sauce  
1 cup  Low sodium chicken stock  
½ each  Hot pepper, minced  
1Tbs  Sugar, granulated  
1 Tbsp.  Canola oil  
2 tbsp.  Cornstarch

Directions

1. Add ½ of the soy sauce, garlic, and hot pepper to the uncooked chicken and marinate for 5 minutes.  
2. Add the remaining soy sauce, sugar, and chicken stock to a sauce pan and simmer.  
3. Sauté the chicken on high for 4 minutes stirring constantly, add the vegetables and cook for another 6-8 minutes until vegetables are tender. Remove from heat.  
4. Put the cornstarch in a small bowl and add a ¼ cup of cold water. Whisk until a white liquid is formed.  
5. Whisk the cornstarch liquid into the simmering chicken stock mixture and let simmer while stirring for about 2 minutes. The sauce will begin to thicken.  
6. Add the sauce to the sautéed chicken and vegetables and toss well. Simmer for 2 minutes and serve over cooked rice.
Example 9

**Breakfast:**
½ cup whole grain cereal
2 Tablespoon chopped walnuts
8 ounce skim or 1 % milk

**Lunch:**
Sensational chicken salad wrap*
Whole wheat wrap
1/2 cup -1 cup raw vegetables
1 Tablespoon light Ranch dressing

**Dinner:**
Lemon Herbed Haddock*
1/3 cup brown rice
½-1cup broccoli
Sensational Chicken Salad

**Ingredients:**
- 2 each 4 oz chicken breast, boiled or baked
- 2 tbsp. Chopped walnuts
- 4 tbsp. Light mayo
- 30 each Red grapes, halved
- ¼ cup Red onion, diced
- ¼ cup Celery, diced
- 1 tsp Mustard
- ½ tsp Black pepper
- ½ tsp Salt

**Method of Preparation:**
1. Bake or boil chicken breast, cool with cold water and chop fine, place in a mixing bowl.
2. Add diced onion, celery, walnuts, and grapes, mix well.
3. Add remaining ingredients and toss until all ingredients are incorporated.
4. Serve on a whole wheat tortilla, whole wheat roll or whole wheat bread.

Lemon Herb Haddock

**Ingredients:**
- 12 oz Haddock filet
- 1 each Lemon, juice of
- ½ each Lime, juice of
- 1 tbsp. Olive oil
- 1 tsp Salt
- 1 tbsp. Fresh dill, minced
- 1 tsp Garlic, minced
- 1 tsp Black pepper

**Method of Preparation:**
1. Rinse haddock and pat dry with paper towels.
2. Preheat oven to 400 F
3. Mix remaining ingredients in a small casserole dish or pan.
4. Place haddock face down in the marinade and let sit for 10-20 minutes and refrigerate.
5. Place the fish on a sheet pan and pour remaining marinade over the haddock.
6. Cook at 400 F for 20 minutes. The fish can also be grilled, about 10-12 minutes or until fish is cooked. If additional browning is desired broil for the final 3-4 minutes of the cooking time.
Contributors

Prepared by:
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Reviewed by:
Amanda Poulin RD, CDE
Tama Fitzpatrick RD
Lynn Bolduc MS, RD

Note: This book was developed as a guide. The meals were created to help meet your needs to prevent low blood sugars after weight loss surgery. Due to the individual healthcare needs of persons that have had surgical weight loss and low blood sugars with or without healthcare concerns, please consult your physician to determine whether the menus in this booklet are suitable for your individual needs. Eastern Maine Medical Center is not responsible for adverse effects caused by the improper use of the information provided in this booklet.

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Surgical Weight Loss Program
Eastern Maine Medical Center
905 Union Street, Suite 11
Bangor, Maine 04401
Obesity Trends - Based on BMI of 30 or Greater

1995

The US obesity rate is predicted to be 51% by the year 2030.

2018

Factors Contributing to Obesity - Portions Sizes

Portions have significantly increased over the last 20 years.

Factors Contributing to Obesity – Poor Eating Habits

- Skipping meals
- Fast foods / convenience foods
- Lack of fruits/vegetables
- Excess simple starches
- End-of-day eating
**Factors Contributing to Obesity - Lack of Physical Activity**

- Time
- Sedentary jobs
- Not making it a priority

The CDC recommends 150 min/week (2.5 hours) of moderate intensity aerobic activity (brisk walking) and 2+ days/week of strength training.

The National Weight Control Registry finds 90% of those who are successful with permanent weight loss exercise about 60 minutes/day.

**Other Factors Contributing to Obesity**

- Emotional Eating
  - Stress, sadness, boredom
- Self-Medicating
  - Using food as a band-aid
  - Using food for protection
- Fun and Relaxation
  - Celebrations
  - Social events

Sometimes people eat in response to things other than actual physical hunger.

**Psychological/Emotional Concerns**

- Loss of food as a coping strategy leading to emotional flooding/depression/anxiety
- Negative self-image/body image
- Perfectionism

**Psychological/Emotional Concerns**

- Learn new social skills
- Learn new stress management skills
- Learn assertiveness skills
- Put self first on priority list
- Manage others' expectations of your success/failure
- Prepare for changes in relationships

**Chapter 2
Comparing Surgical Weight Loss Procedures**

- Gastric Bypass
- Sleeve Gastrectomy
- Adjustable Gastric Band
**Surgery Comparisons**

**Gastric Bypass**
- Offers three tools – restriction, hormone efforts, malabsorption
- Best weight loss of all the procedures

**Adjustable Gastric Band**
- Offers one tool – restriction
- Slower and less weight loss than Gastric Bypass and Sleeve

**Sleeve Gastrectomy**
- Offers two tools – restriction and hormone efforts
- Weight loss better than Band but below Gastric Bypass

---

**Choosing the Right Surgery**

- Surgery is a tool to help you with weight maintenance.
- There are many factors used to determine the best kind of surgery for you, and you will work closely with your surgeon to make that decision.

---

**Eating After Weight Loss Surgery**

- Eat slowly - food/drink will empty very slowly
  - 1/3 cup of food should last for 30 minutes
  - 1 oz. of food / 10-15 minutes
  - Your feeling of fullness may change
  - Weigh and measure your food. A food scale is useful

Chew, chew, chew
- Food needs to be a liquid consistency before you swallow

Good posture
- Sit upright at table (not on couch/in bed)
- Remain upright for 30-40 minutes after eating

---

**Chapter 3**

**Dietary and Behavior Changes**

---

**Eating After Weight Loss Surgery**

- Practice mindful eating
  - When you are eating, you are only eating
  - Do not multi-task
  - Do not watch TV or use the internet
  - Do not eat while driving or working
  - Make the meal an event to enjoy
  - Use all five senses while eating

---

**Meals Without Liquids**

- No liquids with meals, ever again:
  - Avoid liquids ¼ hour before meal, ¼ hour after meal, and with meals.

Why we need to avoid liquids at meal times:
- Fill up your stomach (pouch) and not allow for adequate nutrition/protein.
- Drinking liquids too soon after your meal may cause your stomach to empty more quickly. This could lead to hunger and unnecessary snacking.
Are there some liquids to avoid?

Carbonation
- Bubbles in soda and seltzer water can expand the stomach pouch, leading to eating larger volumes.
- Dark sodas can leech calcium from the bones and increase risk for osteoporosis.

No alcohol: Our program requirement is that you abstain from alcohol.
- Alcohol provides empty calories, and no nutritional value. (7 calories/gram)
- Risky behavior
  - Even small amounts can quickly put you over the legal limit after surgery.
  - Alcohol increases the risk of developing alcohol use disorders. The risk increases 2-10 years after surgery.
  - Drinking alcohol may cause you to have low or dangerous blood sugars.
  - Alcohol may increase the likelihood of making poor food choices.

Avoid using straws
Using straws puts too much air in your pouch, which may lead to discomfort.

Avoid caffeinated beverages
- Gradually wean until completely off.
- Two weeks after surgery – may begin drinking in moderation if well hydrated (coffee/tea – black preferred).
- Caffeine is a stimulant and a diuretic (increases urination).
- An acid-based chemical from the coffee bean can be an irritant to the stomach pouch.

Avoid sweetened beverages
- Juice (We allow 1 cup per day of diluted juice – ½ cup water and ½ cup juice).
- Smoothies, coffee drinks with high fat and sugar content (Dunkin, Starbucks, Tim Hortons’).
- Energy drinks – Monster, Red Bull, etc.
- Milkshakes, malts, frappes (made with ice cream).
- Ensure, Boost, Glucerna, Special K protein drinks (high carbohydrate and/or fat supplements).
- Sweet tea, iced tea, lemonade, fruit drinks (Sobe, Snapple, Vitamin Water).
- On nutrition labels, look for sugar, high fructose corn syrup, etc.

Ask your dietitian about the appropriateness of other beverages.

Liquids We Recommend

Water
- Tap, flavored, Fruit2O, non-carbonated water

Milk and nondairy milk
- Skim or 1%, Lactaid, Nutrisilk, plain soy
- Almond, cashew, rice (unsweetened only) are lower in protein but can be mixed with protein powder

Diet drinks/enhanced water
- Non-carbonated with less than 10 calories/8 oz
- Mio, Crystal Light, Hirt, Propel

Sugar-free Jello
Sugar-free popsicles – 15 calories per popsicle

Tips for Consuming Adequate Fluid

Goal: 6-8 cups/day or 48-64 oz per day
- Sip, Sip, Sip….ALL DAY
- Plan ahead for work or road trips
- Keep fluid by the bedside at night
- Goal of 4-6 cups of fluid/day minimum for the first 2 weeks
- Dehydration is a very common reason for readmission to the hospital

Why We Eat Protein First

- Preserves your muscle mass
- Promotes healing
- Optimizes weight loss
- Promotes metabolism healthy
- Enhances the feeling of fullness
- Slows hair loss
Sources of Protein

Chicken, beef, pork, fish, shellfish, cheese, eggs, tofu, milk, yogurt
- Choose lean/low fat protein sources (round or loin cuts).

Protein drinks/powder with no sugar added
- Carnation Breakfast Essentials, EAS Carb Control, Atkins' drinks, PB2, or PB Fit.
- Choose powder made with whey protein instead of soy or isolate protein.
- Whey protein is a more complete protein.
- Look for powders with minimum 15-20 grams protein per scoop.

Phase 2 Diet

Most patients follow the liquid protein diet for two weeks before and after surgery on this diet.

Protein goals:
- 60-80 grams/day while on Phase 2.
- Meals:
  - Should contain 20-30 grams protein per meal.
  - These drinks or soups will likely be a minimum of 8 ounces. Sip these slowly.
- Between meals:
  - You can drink noncarbonated, noncaffeinated, sugar-free fluids.
  - You may add 4 oz of a high-protein drink or 4-6 oz milk or sugar free yogurt between meals for hunger or additional protein.

Phase 2 – Recommended protein drinks

- Skim, 1%, Lactaid milk
- Carnation Breakfast Essentials Light Start
- Strained, condensed cream soup (Healthy Request) made with milk only
- Soy milk (plain only)
- Light yogurt/Greek yogurt
- High Protein Slim Fast (Advanced Nutrition)
- Premier Protein Shake
- Muscle Milk and Muscle Milk Light
- Atkins' shake
- Advant Edge (EAS) Carb Control
- Unjury protein powder (www.unjury.com)
- Homemade low sugar custard
- Isopure-aero carb protein drink

While following Phase 2, no fruit or pudding is allowed due to the high carbohydrate content.

Gastric Bypass and Gastric Sleeve Diet After Surgery

Phase 1: In the hospital, you will begin by drinking small sips of water.
Phase 2: Before you leave the hospital, you will get one high protein drink to ensure your stomach tolerates it. You will remain on this diet until your two week postop follow up.
Phase 4: Your diet advances to soft protein and soft fruit and veggies at your two week follow up with your surgeon/dietitian.
Phase 5: Your diet advances to high protein high fiber at your six week surgeon/dietitian visit.

(Gastric band patients will go home on soft proteins, which is considered Phase 3.)

Powder/Liquid Protein

Phase 2- Sample Meal Plan

Breakfast: 8 oz. skim/lactaid milk with Carnation Breakfast Essentials Light Start
Morning Fluids: 16 oz. water
Lunch: Strawberry flavored Unjury with water
Afternoon Fluids: 8 oz. water and 8 oz. Crystal Light
Evening Meal: 8 oz. strained cream soup with milk and 1 scoop protein powder
Evening Fluids: 12 oz. water and 4-6 oz. Greek yogurt
Phase 4 and Phase 5

- Your bariatric dietitian will let you know when you will advance to Phase 4 and 5.
- Do not advance yourself to these phases until your dietitian alerts you to do so.
- You will discuss advancing to the next phases at your scheduled two and six week follow ups.
- Contact your bariatric dietitian between visits with any questions.

Vitamin and Mineral Supplements

**We recommend starting this before surgery:**

Multivitamin complete with minerals (should contain 18 mg iron per pill):

Options include:

- Women’s One-a-Day (or generic version) 2 daily
- Flintstone’s Complete 2 daily

Celebrate Multi-Complete 36:

- Chewable – 2 per day
- Capsule – 1 per day

Celebrate Restorative 45:

- Chewable – 1 per day
- Capsule – 1 per day

Celebrate bariatric vitamins can be purchased online or at a Northern Light Pharmacy.

Vitamins/mineral supplements are often better tolerated if taken with a meal, rather than on an empty stomach.

Vitamin and Mineral Supplements

**Suggested timing for taking vitamin/mineral supplements**

**Breakfast:** Take multivitamin(s)

**Lunchtime:** Take one of the two recommended calcium/D supplements

**Supper:** Take second calcium/vitamin D supplement

For the first 2 weeks after surgery, your multivitamin needs to be chewable.

Vitamin and Mineral Supplements

**Complete Multivitamin Examples**

No gummy vitamins; they have no iron!
Nausea/vomiting
• Constipation/Diarrhea
• Dumping Potential

Calcium/Vitamin D Examples

Additional Vitamin Supplements You May Need After Surgery
• B Complex with 12-50 milligrams (mg) of thiamin (vitamin B1) daily
• Vitamin B12: 500 micrograms (mcg) daily
• Vitamin D: 2000 IU daily if not already taking prescription dose (50,000 IU once weekly)
• Iron
• Additional supplements may be needed and will be discussed after surgery
• Menstruating women have higher iron needs.

*These extra supplements are not needed if you are using the Celebrate multivitamins.

Options for Vitamin/Mineral Supplements

<table>
<thead>
<tr>
<th>Vitamin/Mineral</th>
<th>Brand/Type</th>
<th>Amount</th>
<th>Flavors</th>
<th>Additional Supplement Needed</th>
<th>Total Daily Supplement</th>
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</thead>
<tbody>
<tr>
<td>Celebrate Multi Complete 36 Chew</td>
<td>2/2</td>
<td>2x2</td>
<td>Orange, Berry, Orange, Peach</td>
<td>2 Calcium/D daily</td>
<td>4</td>
</tr>
<tr>
<td>Celebrate Multi Complete 36 Capsule</td>
<td>1/1</td>
<td>1x1</td>
<td>Calcium/Vitamin</td>
<td>2 Calcium/D daily</td>
<td>5</td>
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<tr>
<td>Celebrate MC Restrictive 45 Chew or Pill</td>
<td>1/1</td>
<td>1x1</td>
<td>Tropical Punch</td>
<td>2 Calcium/D daily</td>
<td>3</td>
</tr>
<tr>
<td>Women’s One-a-Day</td>
<td>2/2</td>
<td>2x2</td>
<td>Calcium/Vitamin</td>
<td>2 Calcium/D daily</td>
<td>7</td>
</tr>
<tr>
<td>Flintstone’s</td>
<td>2/2</td>
<td>2x2</td>
<td>Calcium/Vitamin</td>
<td>2 Calcium/D daily</td>
<td>7</td>
</tr>
</tbody>
</table>

Chapter 5 Nutrition Complications

Potential Nutrition Complications
• Dumping syndrome
• Constipation/Diarrhea
• Nausea/vomiting
• Due to ketosis (the use of fat for energy)
• Dry mouth/metallic taste in mouth
• No desire to eat and/or aversion from food
• Weakness
• Dehydration
• Hypoglycemia (low blood sugar)
• Dental cavities

Dumping Syndrome
Early onset: 0-40 minutes after eating a sweet or fatty food
• Nausea
• Diarrhea
• Cold sweats
• Abdominal cramps
• Bloating
• Shortness of breath

Late onset: 2-3 hours after fatty or sugary meal
• Low blood sugars
• Sweating
• Rapid heart beat
• Dizziness
• Weakness

Do not assume dumping will occur after eating high fat and/or high sugar foods and/or meals.
Visual Representation of Early Dumping

1. Fatty or sugary food leaves the stomach quickly

2. Intestines swell causing cramps and pain

Potential Nutrition Complications

- Dumping syndrome
- Constipation/diarrhea
- Nausea/vomiting
  Due to ketosis (the use of fat for energy)
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- No desire to eat and/or aversion from food
- Weakness
- Dehydration
- Hypoglycemia (low blood sugar)
- Dental cavities

Hypoglycemia

Low blood sugar symptoms:
- Dizzy
- Shaky
- Sweaty
- Weak
- Confused
- Usually well-managed with appropriate diet

Managing low blood sugar:
- Check blood sugar to capture lows
- Combine carbohydrate with protein intake
- Avoid simple carbs and sugars as they can result in a blood sugar increase, followed by rapid blood sugar decrease (leading to low blood sugar)

Dental Cavities

The risk of developing cavities after weight loss surgery can increase for a few reasons:
- Food particles may come into contact with your teeth more frequently
- Food particles may not be cleared from the teeth surface as often as before surgery
- Deficiency in nutrients that are important for dental health

What you can do to lower your risk of cavities after surgery:
- Brush and floss more frequently
- Use high fluoride toothpaste
- Rinse mouth with water/flouride mouthwash after meals (wash and spit)
- Consider more frequent dental cleanings (3-4x yearly), especially if you are already prone to developing cavities

What should I do to prepare for surgery?

- Weight loss (If you are taking a prescription weight loss medication, please stop.)
- Start taking vitamins
- Abstain from alcohol
- Give up all carbonated drinks
- Reduce or eliminate caffeine intake
- Clean out cupboards and refrigerator
- Increase your physical activity
- Control diabetes (goal of hemoglobin A1C of 8 or less)
- Attend at least one support group - now offered in-person and online.
### Required Weight Loss

<table>
<thead>
<tr>
<th>Body Mass Index (BMI)</th>
<th>Dietary Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>35-41.9:</td>
<td>Weight maintenance focus</td>
</tr>
<tr>
<td>42-49.9:</td>
<td>Must lose 5% excess body weight</td>
</tr>
<tr>
<td>50-65:</td>
<td>Must lose 10% excess body weight</td>
</tr>
<tr>
<td>60+:</td>
<td>Additional help will likely be needed and is available to decrease surgical risk</td>
</tr>
</tbody>
</table>

A dietitian will help you calculate excess body weight or you can call us for help, 207-973-6383.

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### Marijuana Use

Use of edibles or topicals is tolerated, but not recommended.
- Marijuana in the form of candies, cookies, brownies, and other high calorie baked goods will not be conducive to weight loss.
- Be aware of the calorie content of edibles and choose lower calorie options as often as possible.

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### Plate Method for Healthy Eating

How to determine appropriate portion size:
- Let a 9-inch plate be your guide
- Fill ½ of the plate with a non-starchy vegetables
- Fill ¼ of the plate with a low-fat protein (3 oz cooked)
- Fill ¼ of the plate with a starchy vegetable or a whole-grain (¼ cup)
- Avoid high-calorie condiments

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### What should I do for the next visit with the dietitian?

- Purchase multivitamin and calcium and bring these supplements with you to your next dietitian meeting.
- Complete homework/quiz as assigned.
- Show weight loss towards designated goal. Positive lifestyle changes (healthy eating/daily activity) will promote weight loss.
- Review the Northern Light Surgical Weight Loss Education Manual provided at your first visit, in-person support group, or online.
- You can bring one support person, as long as they are not in the pre-op program.
- Watch the online Physical Therapy Class at northernlighthealth.org/SWL-Physical-Therapy.

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### Ask for a Tour of Your Local Supermarket

In Bangor, Maine, our patients have free resources through Hannaford to connect more closely with a dietitian:
- Tours available that explain how to use guiding stars for healthy shopping.
- Classes are available by appointment:
  - Fun, interactive, cover numerous topics.
  - Often include handouts, foods samples, and recipes.
- To sign up, email Caitlin.Ratten@hannaford.com, call 207-942-0100, or stop by the Hannaford Customer Service Desk at the Union Street or Broadway locations.
- Check your local supermarket for additional resources.

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### How to Maintain Long Term Weight Loss

**Ingredients for success**
- Eat slowly
- No more high calorie and high fat foods (fried, sweets)
- Ask for help when needed
- Daily physical activity
- Make lifelong behavior changes

**Examples of meals**
- Chicken or fish with steamed or sautéed vegetables
- Whole grain pasta or brown rice with a small serving of lean protein and vegetables
- Oatmeal with fruit and a small serving of low-fat cheese

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Thank you!

- In order to get credit for watching this nutrition video, please take the exam in the next chapter.
- Bring any questions to your first appointment with your dietitian.
- If you have any immediate questions, please call our program at 207-973-6383.
- Thank you for joining us! We look forward to supporting you throughout your weight loss journey.