

Northern Light Surgical Weight Loss
Diet Progression
“Following the PHASES”

DIET PROGRESSION

Gastric Bypass or Sleeve Gastrectomy

Phase 1

In hospital: day #1 after surgery

Phase 2

2 weeks before and after surgery
(4 weeks total)

Phase 3

Skip this phase

Phase 4

Start at 2 wk follow-up appointment

Phase 5

Start at 6 wk follow-up appointment

Gastric Banding

Phase 1

Sips of water only on the day of surgery

Phase 2

2 weeks before surgery

Phase 3

Post op day #1 until 2 weeks after surgery

Phase 4

Start at 2 wk follow-up appointment

Phase 5

Start at home 1 month after surgery

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.

HOSPITAL DISCHARGE THRU 2-WEEK FOLLOW-UP
For Gastric Bypass & Sleeve Patients
Adjustable Band patients can progress to Phase 3

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 changes 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 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.

Breakfast

8 ounces no added sugar instant breakfast

Breakfast

8 ounces Unjury protein shake

Morning liquids

8 ounces diluted juice
(4ounce juice and 4-ounce water)

Morning liquids

8 ounces crystal light

Lunch

8 ounces healthy request cream soup

Lunch

8 ounces tomato soup (made with milk)

Afternoon liquids

Sugar-free Popsicle's
8 ounces skim or 1% milk

Afternoon liquids

8 ounces of diluted juice
(4 ounces juice and 4 ounces water)

Supper

8 ounces Unjury protein shake

Supper

8 ounces no added sugar instant breakfast

Evening Liquids

Sugar free Popsicle
8-ounces water

Evening Liquids

8 ounces skim w/ no added sugar hot cocoa

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)
Bone Broth
(<https://store.draxe.com/products/bone-broth-protein-pure>)

GLUTEN INTOLERANT OR CELIAC DISEASE

Isopure
Low-fat or Fat free milk
Soy milk (fat free or low-fat)
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)

VS = Vitamin Shoppe,
NLC = Natural Living Center

MILK ALLERGY

Soy milk (low fat)
Almond milk (protein plus only)
Soy protein powders
Rice Protein Powder (GNC, NLC, VS)
Eggfit Protein powder (made from egg white)
PB2 (peanut butter-based protein powder)
Warrior Blend – Raw Vegan Protein Powder
Optimal Protein Powder (Amazon.com)
Bone broth (Dr. Axe)
Orgain Protein Drink (orgain.com)

SOY ALLERGY

Isopure
Eggfit Protein powder (made from egg white)
PB2 (peanut butter-based protein powder)
Almond milk (protein plus only)
Rice Protein Powder (GNC and NLC)
Greek Yogurt or Light Yogurt
Fat Free or low-fat 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)

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)
Syntrax Nectar Naturals
Bone Broth (Dr. Axe)
PB2 or PB fit

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.
5. Stir Unjury mixed with water into dissolved Jell-O. Chill quickly.

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!

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!

Phase 2 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 to 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 of 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 “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 will 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 overindulge 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 you 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 adjust your insulin or oral diabetes medicine regimen.

11. Can I have Tomato Juice/V8 or any other Juices?

No. Juices are generally high in carbohydrate/sugar. Tomato juice is also higher in fiber and acidity and is therefore NOT recommended. Clear juices such as apple, cranberry, grape, etc. are allowed in the “diet” low calorie form (10 calories or less per 8oz is the guideline) or if diluted with water (>50% or more water for dilution).

12. I can't tolerate or I don't like “milky” consistency drinks. Are there any alternatives?

Yes, there are alternatives available for those not tolerating or disliking “milky” consistency drinks.

Some include:

Isopure (available in some stores)

Atkins Protein Lift (available in some stores)

Bone Broth by Dr.Axe (available online only)

Unjury -Chicken Soup flavored made with water (available online only), Unjury –

Strawberry Sorbet made with water (available online only.)

Protein Shot- by Body Fortress or Muscletech (available in some stores)

13. After surgery 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 between meal fluids.

HOSPITAL DISCHARGE THRU 2-WEEK FOLLOW-UP
For Adjustable Gastric Band Patients

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.

- Difficulty 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/fat free)
Peanut butter
String cheese
Ricotta cheese (reduced fat)
Halibut
Salmon

HOSPITAL DISCHARGE THRU 2-WEEK FOLLOW-UP

For Adjustable Gastric Band Patients

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 mealtime, 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

16oz 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 1TB dry milk powder

AM FLUIDS

8 oz skim or 1% Milk

Lunch

1-2oz ham, 1oz 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 4oz 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 1/3cup at a meal (should not exceed this amount). However, some people may not be able to eat the full 1/3cup 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
1TB mashed potato
1TB soft green beans

Afternoon Fluids

8 oz skim milk
8 oz. water

Supper

¼ cup chicken (made with LF gravy)
1TB sweet potato
1TB 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
1TB mashed potato
1TB cooked green beans

Evening Fluids

8-16oz 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!

Food Group	FOODS ALLOWED	FOODS NOT ALLOWED
Beverages *Limit juice to 1 cup daily-may need to dilute it at first	Water, skim or 1% milk, Lactaid, plain soy milk, plain almond milk, no sugar added instant breakfast, tea, coffee, diluted fruit juice	Whole or 2% milk, chocolate milk, milkshakes, eggnog, alcoholic beverages, soda
Bread	None	All bread and cracker products
Cereal	None	All hot and cold cereals and granola
Eggs	Scrambled, poached and egg substitutes	All others
Fats	Tub margarine, butter spray, low-fat cream cheese, low-fat mayonnaise or salad dressing	Lard, cream, full fat mayonnaise, stick margarine, butter
Fruits	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.	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.
Meat, fish poultry, cheese and meat alternatives	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.	Fried meats, fried fish, bacon, duck, salami, smoked meats and sausages, hot dogs, tough meat, meat with gristle, bologna, harvest burgers

Food Group	FOODS ALLOWED	FOODS NOT ALLOWED
Potatoes and substitutes (begin at 2 weeks post-op)	White potato, sweet potato, mashed potato (without skin)	Fried or highly seasoned potatoes, potato chips, pretzels, snack chips, popcorn, chow mien noodles
Soups and sauces (Best as a between meal liquid due to limited protein content)	Vegetable or broth-based soups, broth, bouillon, or egg drop soup	Gas producing soups such as bean chili, lentil, onion, split pea. Alfredo and Marinara sauces.
Vegetables	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.	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.
Miscellaneous	Vinegar, all herbs and spices, artificial sweeteners, salt, pepper, lemon juice, vanilla extract and other flavorings	All nuts, seeds, and sugar. <u>IN LIMITED QUANTITIES</u> cocktail sauce, chili sauce, horseradish, Tabasco or hot sauce, mustard, BBQ sauce, olives, pickles, relish

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:

Ounces	Milliliters	Cups	Tablespoons
1 ounce	30 cc.	1/8 cup	2 TB.
2 ounces	60 cc.	¼ cup	4 TB.
3 ounces	90cc	1/3c	6 TB
4 oz.	120 cc.	½ cup	8 TB.
8 oz.	240 cc.	1 cup	16 TB.

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 it 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 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 $\frac{3}{4}$ 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.

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

PHASE 5

HIGH PROTEIN REGULAR DIET

Sample Meal Plan

Portion size: 1/3 to 1/2 cup total food at each of your 3 meals per day

Breakfast:

1/2 slice whole wheat toast
1oz low fat cheese
1oz deli ham
1/8c apple sauce

Breakfast

1/2 slice whole wheat toast
1/4c egg
1/8c fruit

Morning Fluids:

8 oz. skim milk
12 oz water

Morning Fluids:

8oz skim milk with SF Hot Cocoa Mix
12oz water

Lunch:

3 small whole wheat crackers
2oz cheese (made with skim milk)
1/8c or 2TB Peaches (packed in pear juice)

Lunch:

1/2 slice wheat bread
2oz shaved turkey meat
1/8c carrots

Afternoon Fluids:

8 oz. diluted juice
16 oz. water

Afternoon Fluids:

16oz water with lemon slices
8oz skim milk

Supper:

2 oz. cooked roast beef
1/8 cup mashed potato
1/8-cup green beans

Supper:

1/8c-cooked pasta (whole wheat)
1/8c tomato sauce
2oz or 1/4c cooked hamburger

Evening Fluids:

8 oz. skim milk
12oz water

Evening Fluids:

16oz water

*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.

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 1/2 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 cannot skip exercising in the winter which lasts too long here. We now know that weightlifting 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 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 vicious 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 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 (207.973.8881)

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 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** (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)

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.



Fairlife Core Power

Price: \$5.48 per 8 oz 4-pack

Price per serving: \$1.37

Protein per serving: 24 grams

Flavors: Vanilla, Chocolate, Strawberry, Banana, Strawberry Banana

Where to buy: Wal-Mart (online/in-store), BJ's, Target, Amazon



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 Cappuccino

Where to buy: Wal-Mart (online/in-stores), Target, Hannaford, Walgreens, Amazon



Atkins Advantage and Atkins' 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

Northern Light Surgical Weight Loss

905 Union Street

Bangor, Maine 04401

Phone: 207.973.6383 Fax: 207.973.7364

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 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 several 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 do 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 (Triscuits)
 - 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:

30grams 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 few 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:

¾ cup Turkey Chili*
½-1 cup mixed salad greens
1-2 Tablespoon low fat salad dressing

Turkey Chili

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

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
1/2cup	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	Breadcrumbs, 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

Ingredients

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

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, 1ounce 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 pepper
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 powder, 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 halves per portion

Example 6

Breakfast

Mix:

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:

5-6 each	Triscut Crackers
3 ounces	Chicken, flavored and pre-packaged and cooked
¼ cup	Salsa
1-ounce	Cheese

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, nonfat 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 tablespoons	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 saucepan 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 grape, 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

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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

Northern Light Surgical Weight Loss Vitamin & Mineral Guide

This is a general guide. Based on your lab results and individual needs, you may require a different plan

Vitamin/ Mineral	Gastric Bypass	Sleeve Gastrectomy	Adjustable Band	Suggestions
Multivitamin & Mineral (MVI)	<p><u>TWO</u> children's multivitamin/mineral chewable/day OR <u>TWO</u> women's multivitamin/mineral/day OR <u>TWO</u> Bariatric formulated multivitamin/mineral/day</p>	<p><u>TWO</u> children's multivitamin/mineral chewable/day OR <u>TWO</u> women's multivitamin/mineral/day OR <u>TWO</u> Bariatric formulated multivitamin/mineral/day</p>	<p><u>ONE</u> children multivitamin/mineral chewable/day OR <u>ONE</u> women's multivitamin/mineral /day OR <u>ONE</u> Bariatric formulated multivitamin/mineral/day</p>	<ul style="list-style-type: none"> Do not to take on an empty stomach. Do not take with tea, coffee or cola Separate from thyroid medication by 1 hour. Separate from Calcium supplement for best absorption Gummy vitamins are NOT suitable
Vitamin B12	500 micrograms (mcg) daily in a pill, liquid, or sublingual form	500 micrograms (mcg) daily in a pill, liquid, or sublingual form	500 micrograms (mcg) daily in a pill, liquid, or sublingual form	<ul style="list-style-type: none"> Continue taking oral B12 supplement daily if having B12 IM injections.
Vitamin B-complex (providing Vitamin B1 or Thiamin)	12-50 mg of Vitamin B1 in 1-2 B-complex tabs	12-50 mg of Vitamin B1 in 1-2 B-complex tabs	12-50 mg of Vitamin B1 in 1-2 B-complex tabs	<ul style="list-style-type: none"> This vitamin recommendation is new (starting in 2017)
Vitamin D	2000 IU	2000 IU	2000 IU	<ul style="list-style-type: none"> Vitamin D3 is found over the counter Those on vitamin D2 by prescription, if prescription finished, begin taking over the counter vitamin D3 2000IU daily Amount in multivitamin and calcium/vitamin D is supplement not enough
Calcium with Vitamin D	<p>Calcium and Vitamin D (together in one pill or chew)</p> <p>*one pill/chew should have 500-600mg Calcium and 400 IU of Vitamin D</p> <p>Take 1 pill/chew twice daily</p>	<p>Calcium and Vitamin D (together in one pill or chew)</p> <p>*one pill/chew should have 500-600mg Calcium and 400 IU of Vitamin D</p> <p>Take 1 pill/chew twice daily</p>	<p>Calcium and Vitamin D (together in one pill or chew)</p> <p>*one pill/chew should have 500-600mg Calcium and 400 IU of Vitamin D</p> <p>Take 1 pill/chew twice daily</p>	<ul style="list-style-type: none"> Calcium Carbonate is better tolerated with food Do not take with tea, coffee or cola. If you are on additional iron separate these by 2 hours for best absorption Avoid taking Tums as a calcium supplement Calcium Citrate may be better tolerated if taken outside of meals than calcium carbonate Take separately from thyroid medication by 1 hour

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:

- 2nd calcium/vitamin supplement
- Vitamin B complex containing thiamin

Northern Light Surgical Weight Loss Vitamin & Mineral Guide

For Celebrate Multi Complete 36 or Celebrate MC R 45

This is a general guide. Based on your lab results and individual needs, you may require a different plan.

Vitamin/ Mineral	Gastric Bypass	Sleeve Gastrectomy	Adjustable Band	Suggestions
Multivitamin & Mineral (MVI)	<u>Celebrate Mc 36:</u> <u>In chewable form</u> TWO per day <u>OR</u> <u>In capsule form:</u> THREE per day <u>OR</u> <u>Celebrate MC R 45:</u> <u>ONE per day</u> <u>(either chewable or capsule)</u>	<u>Celebrate Mc 36:</u> <u>In chewable form</u> TWO per day <u>OR</u> <u>In capsule form:</u> THREE per day <u>OR</u> <u>Celebrate MC R 45:</u> <u>ONE per day</u> <u>(either chewable or capsule)</u>	<u>Celebrate Mc 36:</u> <u>In chewable form</u> TWO per day <u>OR</u> <u>In capsule form:</u> THREE per day <u>OR</u> <u>Celebrate MC R 45:</u> <u>ONE per day</u> <u>(either chewable or capsule)</u>	<ul style="list-style-type: none"> Do not take on an empty stomach. Do not take with tea, coffee or cola Separate from thyroid medication for 1 hour Separate from calcium supplement for best absorption.
Vitamin B12	Not needed unless prescribed by care team	Not needed unless prescribed by care team	Not needed unless prescribed by care team	
Vitamin B-complex (providing Vitamin B1 or Thiamin)	Not needed unless prescribed by care team	Not needed unless prescribed by care team	Not needed unless prescribed by care team	
Vitamin D	Not needed unless prescribed by care team	Not needed unless prescribed by care team	Not needed unless prescribed by care team	
Calcium with Vitamin D	Calcium and Vitamin D (together in one pill or chew) *one pill/chew should have 500-600 mg Calcium and 400 IU of vitamin D Take 1 pill/chew twice daily	Calcium and Vitamin D (together in one pill or chew) *one pill/chew should have 500-600 mg Calcium and 400 IU of vitamin D Take 1 pill/chew twice daily	Calcium and Vitamin D (together in one pill or chew) *one pill/chew should have 500-600 mg Calcium and 400 IU of vitamin D Take 1 pill/chew twice daily	<ul style="list-style-type: none"> Calcium carbonate is better tolerated with food Do not take with tea, coffee or cola If you are on additional iron separate these by 2 hours for best absorption. Avoid taking Tums as a calcium supplement Calcium Citrate may be better tolerated if taken outside of meals than calcium carbonate Take separately from thyroid medication by 1 hour.

Suggested Timing for Taking Vitamin and Mineral Supplements

Breakfast:

- Take multivitamin(s)
- Vitamin D (not needed if using Celebrate vitamins)

Lunchtime

- 1 of your 2 recommended calcium/D supplements
- B-12 (not needed if using Celebrate vitamins)

Supper:

- 2nd calcium/vitamin D supplement
- Vitamin B complex containing thiamin (not needed if using Celebrate vitamins)

Nutrition After Weight Loss Surgery



Presented by:

Valerie Curtis, MS, RD, LD, bariatric dietitian

Northern Light Surgical Weight Loss

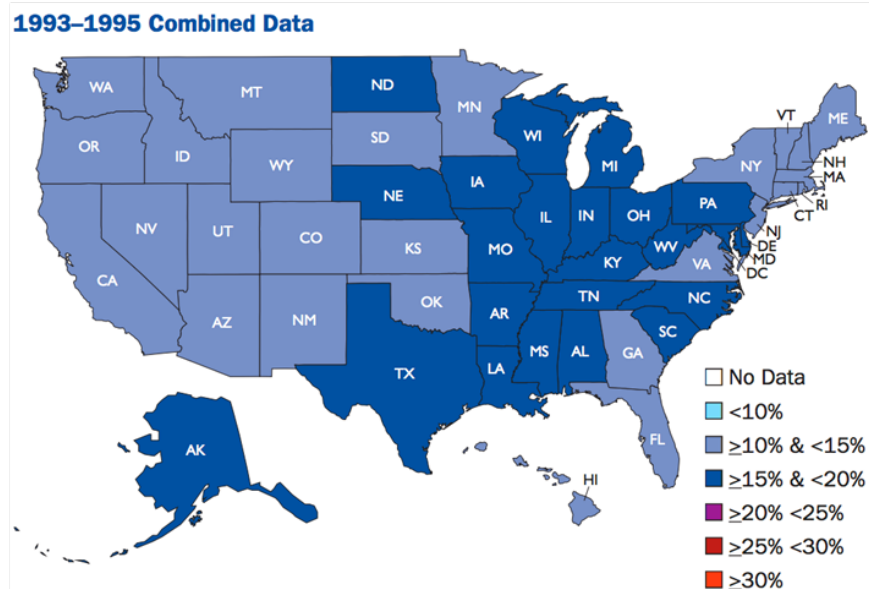
Chapter 1

Obesity Trends and Psychological Concerns

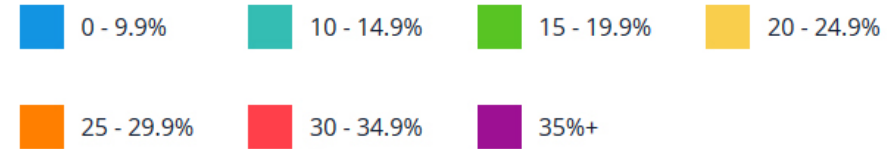


Obesity Trends - Based on BMI of 30 or Greater

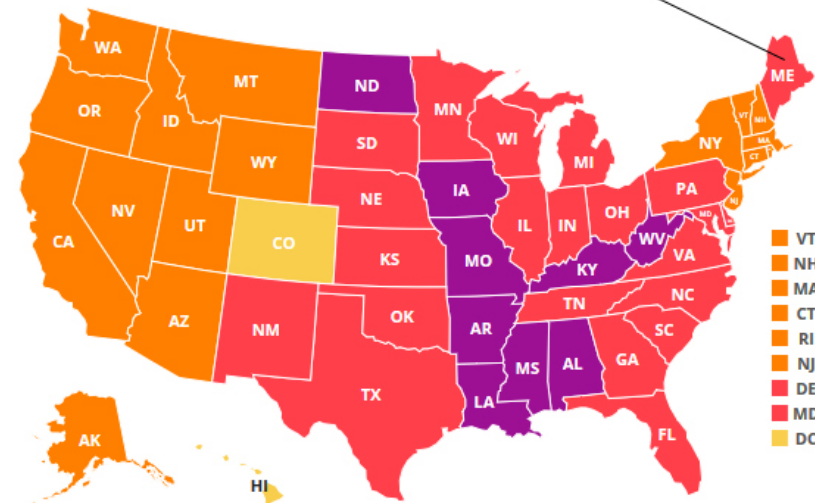
1995



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



2018



Obesity Trends - Based on BMI of 30 or Greater



1990 – **10.9%**

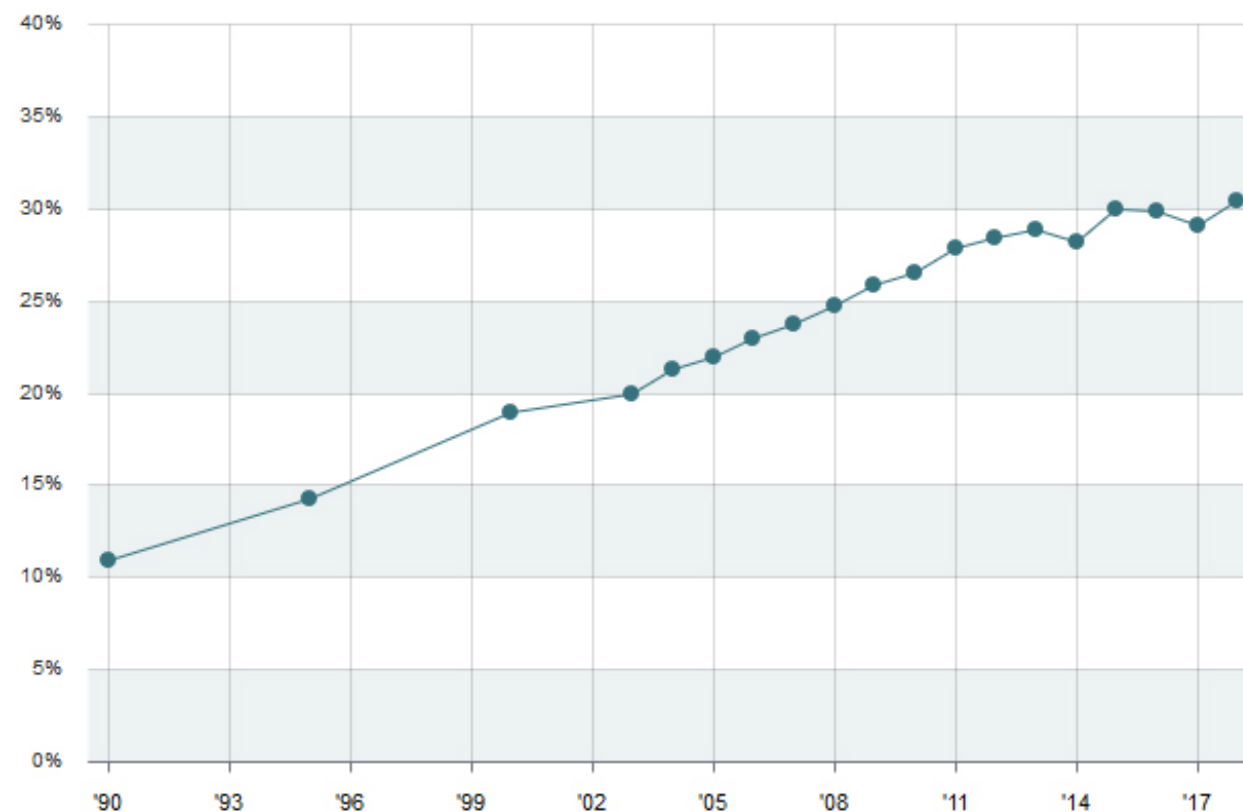
2000 – **18.9%**

2010 – **26.5%**

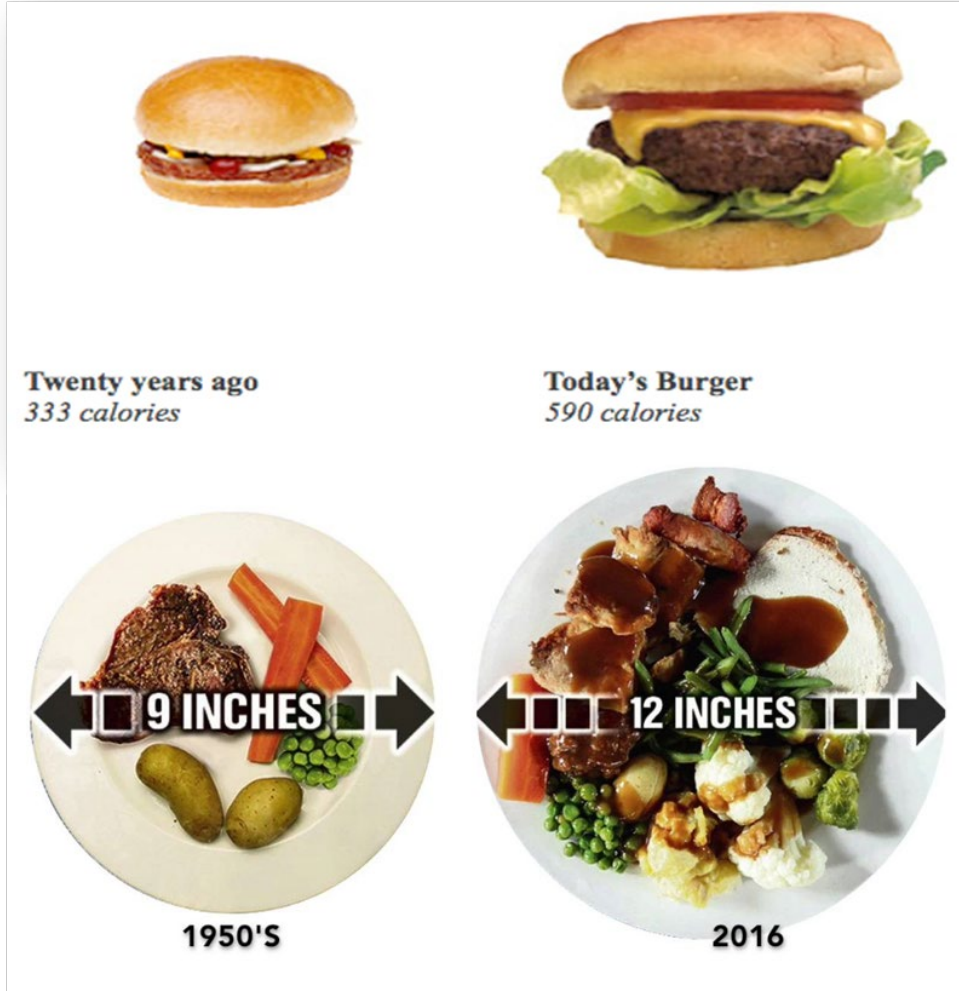
2016 – **29.9%**

2018 – 30.4%

Adult Obesity in Maine 1990-2018



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



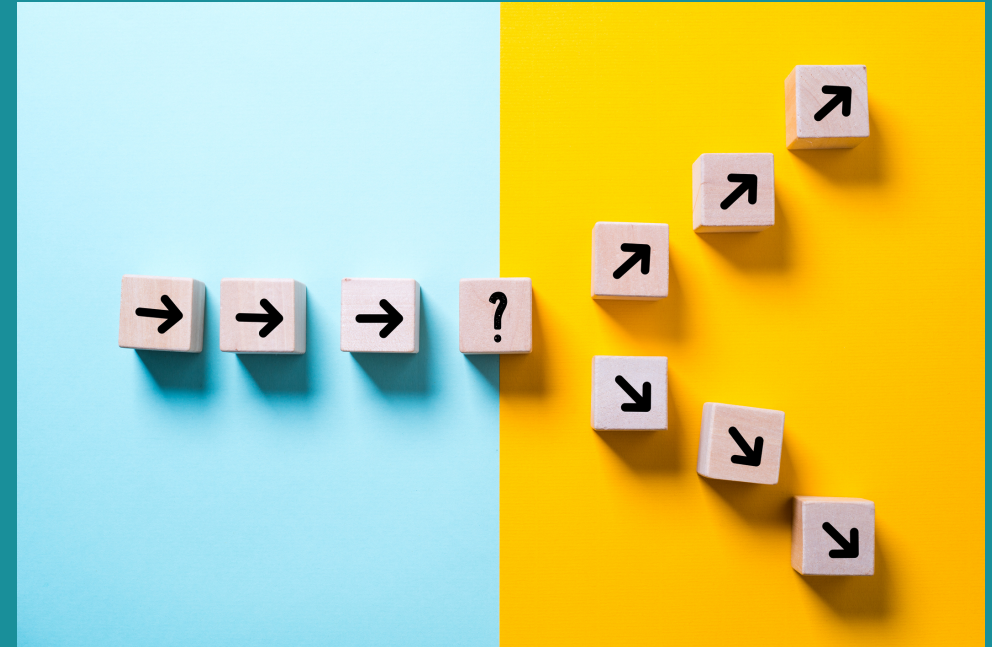
Psychological/Emotional Concerns

- 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

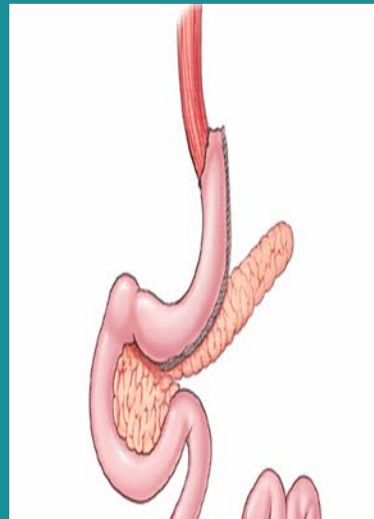
Comparing Surgical Weight Loss Procedures



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

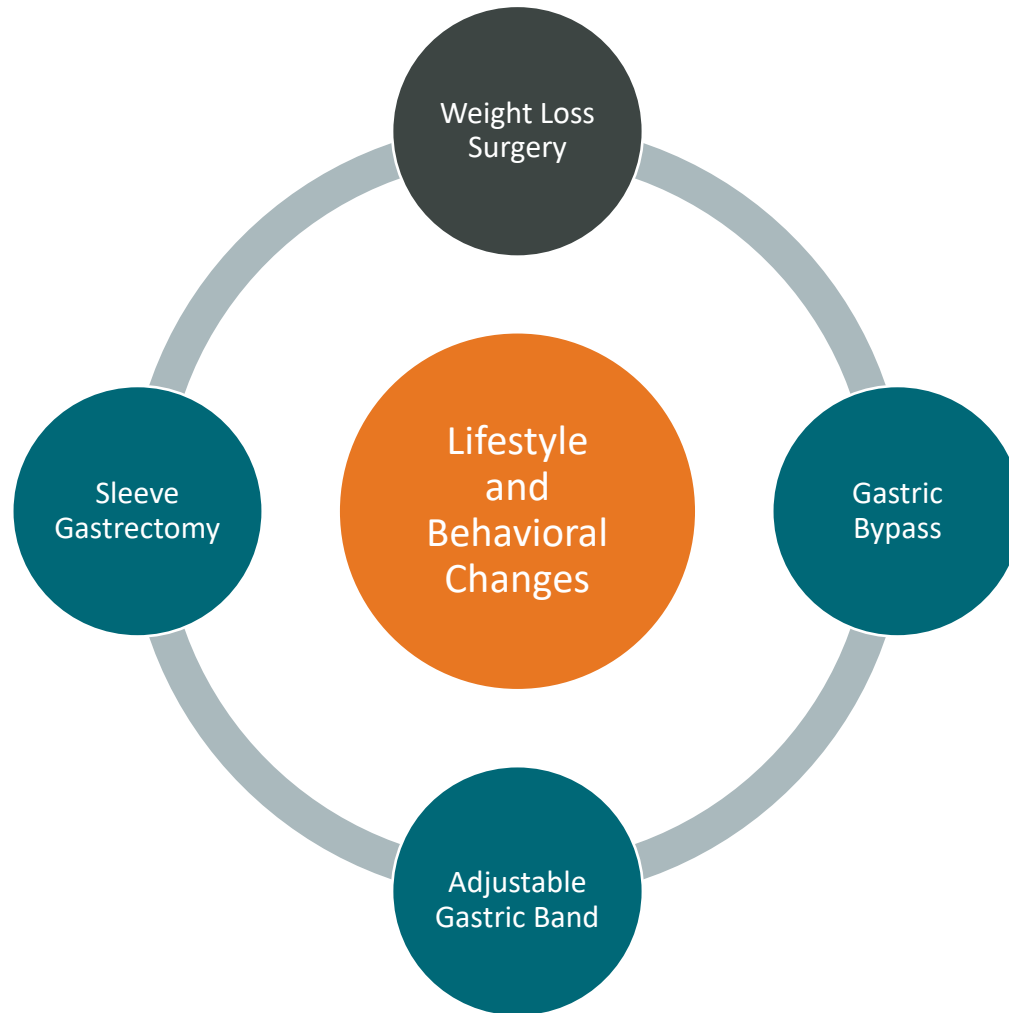
Adjustable Gastric Band

- 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.

Chapter 3

Dietary and Behavior Changes



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



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 ½ hour before meal, ½ 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.

Are there some liquids to avoid?

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.

Are there some liquids to avoid?

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 Horton's).
- 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.

Liquids We Recommend

Water

- Tap, flavored, Fruit20, non-carbonated water

Milk and nondairy milk

- Skim or 1%, Lactaid, NutrishB, 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 Lite, Hint, Propel

Sugar-free Jello

Sugar-free popsicles – 15 calories per popsicle

Ask your dietitian about the appropriateness of other beverages.

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, Atkin's drinks, PB2, or PBFit.

Protein powder

- 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.



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**.)

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.

Powder/Liquid 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
- Atkin's shake
- Advant Edge (EAS) Carb Control
- Unjury protein powder (www.unjury.com)
- Homemade low sugar custard
- Isopure-zero carb protein drink

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

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.

Chapter 4

Vitamin Supplements



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 – 3 per day

Celebrate Restrictive 45

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

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

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

Vitamin and Mineral Supplements

We recommend starting this before surgery:

Calcium with Vitamin D:

- Each calcium supplement should contain 500-600 mg calcium and 400 IU vitamin D per pill/chew.
- Take one calcium supplement at two different points in the day.
- The iron in your multivitamin can compete for absorption with your calcium. For that reason, separate your calcium and multivitamin supplement by at least two hours.
- Examples: Caltrate, Citracal, Viactiv chews, and generic versions.

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

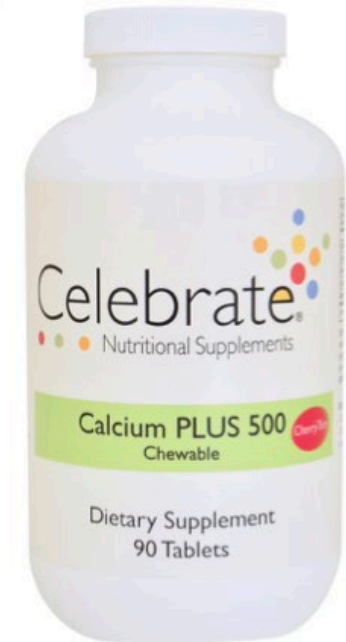
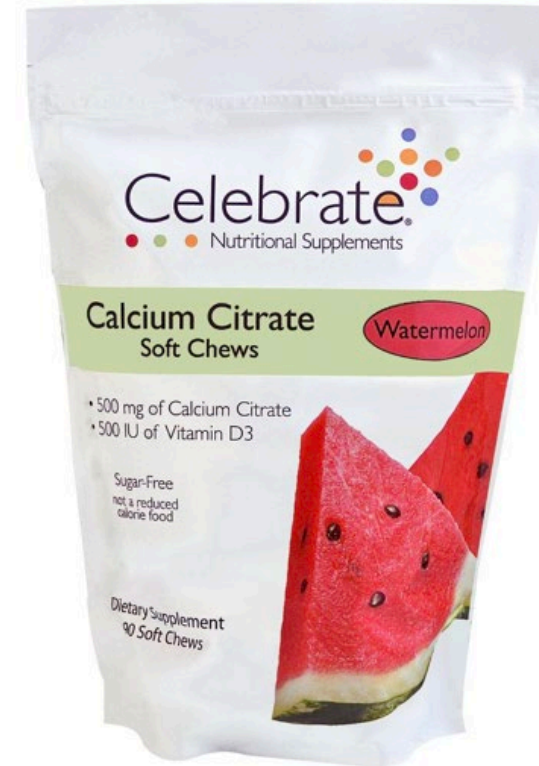
For the first 2 weeks after surgery, your multivitamin needs to be chewable.

Complete Multivitamin Examples



No gummy vitamins; they have no iron!

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

Vitamin/Mineral	Serving Size	Chewable?	Flavors	Additional Supplements Needed	Total Daily Supplements
Celebrate Multi Complete 36 Chew	2	Y	Forest Berry, Orange, Mango-Peach	2 Calcium/D daily	4
Celebrate Multi Complete 36 Capsule	3	N	n/a	2 Calcium/D daily	5
Celebrate MC Restrictive 45 Chew or Pill	1	Y	Tropical Twist	2 Calcium/D daily	3
Women's One-a-Day	2	N	n/a	2 Calcium/D daily; B Complex daily; 500 mcg Vit B 12 daily; 2000 IU Vit D daily	7
Flintstone's	2	Y	Orange, Grape, Cherry	2 Calcium/D daily; B Complex daily; 500 mcg Vit B 12 daily; 2000 IU Vit D daily	7

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



Other symptoms may include:

- Fast heart rate
- Sweating
- Nausea
- Vomiting
- Diarrhea

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

Hypoglycemia

Low blood sugar symptoms:

- Dizzy
- Shaky
- Sweaty
- Weak
- Confused
- Usually well-managed with appropriate diet

Excess carbohydrates or simple sugar intake results in body producing more insulin than is needed.

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 tooth 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/fluoride mouthwash after meals (swish and spit!)
- Consider more frequent dental cleanings (3-4x yearly), especially if you are already prone to developing cavities

Chapter 6

Next Steps and Preparing for Surgery



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

Body Mass Index (BMI)

35-41.9:

Weight maintenance focus

42-49.9:

Must lose 5% excess body weight

50-65:

Must lose 10% excess body weight

60+:

Additional help will likely be needed
and is available to decrease surgical risk

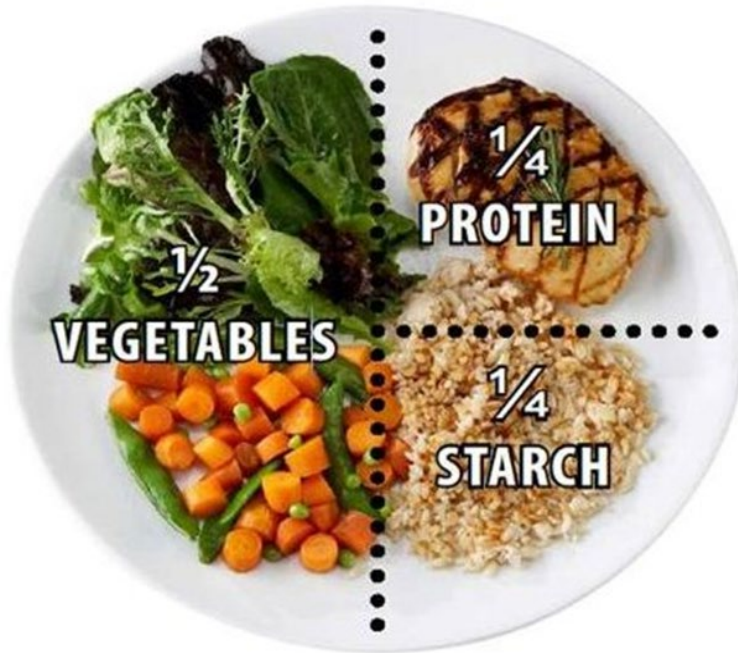
A dietitian will help you calculate excess body weight or you can call us for help,
207-973-6383.

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.

Plate Method for Healthy Eating



How to determine appropriate portion size:

- Let a 9-inch plate be your guide
- Fill $\frac{1}{2}$ of the plate with a non-starchy vegetables
- Fill $\frac{1}{4}$ of the plate with a low-fat protein (3 oz cooked)
- Fill $\frac{1}{4}$ of the plate with a starchy vegetable or a whole-grain ($\frac{1}{2}$ cup)
- Avoid high-calorie condiments

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/quizzes 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 available 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.

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.

How to Maintain Long Term Weight Loss

Ingredients for success

- Come to all of your appointments (before and after surgery)
- Be open to suggestions
- Eat protein first
- Don't skip meals
- No grazing
- No high calorie beverages (juice, soda, alcohol)
- Eat slowly
- No more high calorie and high fat foods (fried, sweets)
- Ask for help when needed
- Daily physical activity
- Make lifelong behavior changes

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.