

Life Skills for Bariatric Surgery



Weight Management Center

(302) 623-3475

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Syllabus

Life Skills is a 3-session course that helps to prepare you for life after bariatric surgery. Life Skills is led by a registered dietitian, a psychologist and an exercise physiologist.

Successful Completion of Life Skills is required in order to be approved for surgery.

Week	Topic	Homework
<p>Week 1 Registered Dietitian</p>	<ul style="list-style-type: none"> • Introduction. • Program requirements. • Balanced eating guidelines. • Post-surgery nutrition guidelines. • Nutrition Quiz – return quiz answers with your class form. 	<p>Return form to instructor by RedCap within the time requested.</p>
<p>Week 2 Health Psychologist and Exercise physiologist</p>	<ul style="list-style-type: none"> • Staying on Track After Surgery: <ul style="list-style-type: none"> • Motivation, mindfulness, strategies for success, maintaining momentum. • Exercise after surgery. <ul style="list-style-type: none"> • Creating a walking program. • Resistance training. 	<p>Return form to instructor by RedCap within the time requested.</p>
<p>Week 3 Registered Dietitian</p>	<ul style="list-style-type: none"> • Completing the program and What to expect at the hospital. • Plan 1-day liquid and 1-day pureed menus that will meet your needs after surgery. 	<p>Return form to instructor by RedCap within the time requested.</p>

Participant Pledge

I will complete all of the following in order to be eligible for Bariatric Surgery:

- Attend all three Life Skills sessions.
- Complete 1-day Full Liquid Menu and a 1-day Pureed Menu that meet my nutritional needs after surgery.
- Correctly answer at least 8 of the 10 questions on the final test.

If I am having trouble meeting any of the goals, I will take responsibility for getting help to make any necessary changes. This might include:

- Contacting my dietitian and asking for suggestions for meeting the goals.
- Scheduling an appointment with my dietitian if I need to discuss individual issues in detail. The scheduling phone number is 302-623-3475, x2.

I understand that the following steps are recommended to help with weight loss during the class and to begin preparing myself for life after surgery:

- Start a regular exercise program **ONLY AFTER RECEIVING MEDICAL CLEARANCE** from my primary care doctor and specialists.
- Stop eating foods that are sweetened with sugar.
- Check weight weekly.

To indicate understanding of these requirements, send the form back to the instructor by RedCap after class 1.

Section 1: Nutrition

Health Habits Now

Start practicing these healthy habits now:

1. Include protein with all meals and snacks.
2. Eat at regular times throughout the day. Try for 3 small meals and 3 snacks.
3. Drink 6 - 8 cups (48 to 64 oz.) of water daily.
4. Aim for 5 servings of fruits and vegetables each day (serving sizes below.)
5. Have 2 cups of skim or 1% milk or light yogurt or start taking calcium supplements daily.
6. Start taking a multivitamin daily.
7. Time your meals - make sure that you are slowing down.
8. Limit slider foods:
 - Salty, crunchy snacks such as pretzels and crackers.
 - Ice cream and other frozen desserts, sugar-sweetened beverages.
9. If approved by your doctor, walk 20 minutes per day for at least 2 weeks prior to surgery. This can decrease your risk during surgery.

Start practicing any of the post-surgery guidelines that you think will be most difficult for you.

Servings of Fruits and Vegetables

Vegetable Group

1/2 cup cooked vegetables
1/2 cup marinara sauce 1/2
cup raw vegetables
1 cup of lettuce
1/2 cup vegetable or tomato juice

Fruit Group

1 fresh medium piece
1 cup of berries, melon cubes or papaya
1/2 cup canned fruit (in juice, *not syrup*)
1/2 mango or banana
2 Tbsp. of raisins
1/4 cup of other dried fruit 15

Protein

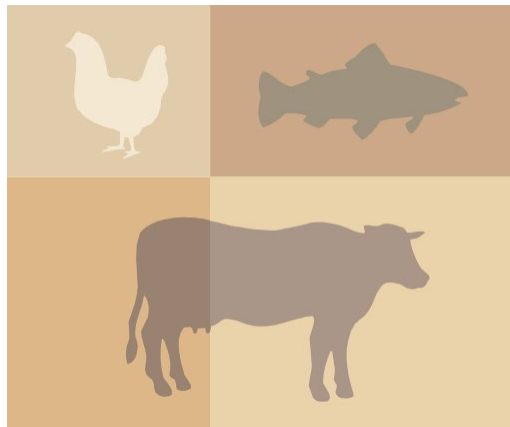
Include a good source of protein with each meal. It will help you to feel full and will protect muscle while losing weight. Protein is essential before and after surgery.

After surgery you will need a minimum of 70 grams of protein per day.

The following foods are good sources of protein.

Each serving provides 7 grams of protein.

- ◆ 1 cup Skim or 1% milk or soy milk
- ◆ 7 oz. light or low-carb yogurt
- ◆ 3 oz. plain or light Greek yogurt
- ◆ 1/4 cup low-fat cottage or ricotta cheese
- ◆ 1 oz. light or low-fat cheese (= 1 individually wrapped stick, or 1/4 cup shredded)
- ◆ 1 oz. lean beef, pork, or poultry
- ◆ 1 oz. fish, seafood
- ◆ 1/4 cup tuna
- ◆ 2 Tbsp. peanut butter (high in fat - limit to 2 Tbsp or less per day)
- ◆ 1 Eggs, 2 egg whites or 1/4 cup egg substitute
- ◆ 1/2 cup beans - kidney beans, pinto beans, chickpeas, refried beans
- ◆ 1/4 cup tofu or shelled edamame



Eating Guidelines After Weight Loss Surgery

Follow the guidelines below for good health, to prevent vomiting and complications, and promote healing and weight loss.

1. Eat or drink a protein source 3 - 6 times per day.
2. Separate food from drinks by at least 30 minutes.
3. Sip calorie-free, caffeine-free, non-carbonated drinks between meals.
 - ◆ 48 - 64 oz. per day.
 - ◆ Do NOT drink with a straw or use a "sports cap".
 - ◆ Do NOT drink fruit juice - too many empty calories.
4. No more than 2 (8 oz.) cups of decaffeinated coffee or tea per day.
5. Avoid gum - It can block the stomach outlet if swallowed.
6. Avoid sugar - provides empty calories and causes dumping syndrome (gastric bypass).
7. Avoid alcohol.
8. Each meal should take about 15-30 minutes to eat.
 - ◆ Stop eating or drinking as soon as you feel full.
9. Take chewable multivitamins, vitamin B₁₂ and chewable calcium daily.
10. Include protein at each meal and snack (see page 6 for a list of protein foods.)
11. Priorities for month 1 are meeting your fluid and protein needs and taking multivitamins, vitamin B₁₂ and chewable calcium + vitamin D.
 - ◆ After the first month, balance meals with lean protein, low fat dairy, fruits, vegetables, whole grain starches and small amounts of healthy fats.



Beverages

You will need to drink enough fluid every day to prevent dehydration and having to go back into the hospital.

REQUIREMENTS:

- ◆ Drink 48 - 64 oz. (6 - 8 cups) of calorie-free, caffeine-free, non-carbonated fluid each day.
- ◆ You can drink more than this each day – this is just the minimum.
- ◆ Protein drinks, milk and sugar-free Jell-O count toward your daily fluid requirement.

GUIDELINES:

- ◆ Avoid drinking with meals! Stop drinking at least 30 minutes before meals and do not drink for 30 minutes following a meal.

This will:

- Improve satisfaction and fullness to help you avoid overeating.
 - Help prevent nausea and vomiting.
 - Allow you to eat enough nutritious food at mealtimes.
-
- ◆ Drink slowly - fluids should be sipped (start with 8 oz. over 30 minutes.)
 - ◆ DO NOT use a straw or "sports cap" on a water bottle. This can cause pain and puts too much pressure on the new stomach.
 - ◆ No fruit juice, sugar-sweetened beverages, or meal replacement drinks (too many calories).
 - ◆ **No caffeine:** You can have a total of 2 - 8 oz. cups **decaffeinated** coffee or tea each day.
 - Caffeine increases stomach acid production and can cause irritation to the lining of the stomach, gastritis and ulcers. It also blocks mineral absorption.



About Sweeteners

Added Sugar:

- Provides empty calories

Naturally occurring sugars:

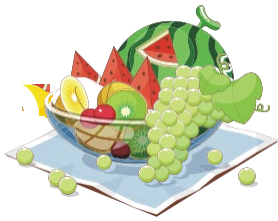
- Milk, yogurt and fruit - The sugar in these is natural and is allowed on your diet.

Sugar substitutes

- These provide no calories and can be used.
- Equal, Splenda, Sweet n' Low, Sugar Twin, Truvia and other brands.

Sugar Alcohols:

- These provide calories and can cause bloating and diarrhea.
- Are often found in foods called "sugar-free" such as candy or protein bars.
- Sugar alcohols are listed on the nutrition label just below *Sugars*. (*Isomalt, mannitol, sorbitol, xylitol, maltitol and others.*)



Label Reading Guidelines:

- Sugar content is listed on the nutrition facts label under "Total Carbohydrates".
- Added Sugars and Sugar alcohols: Choose foods that have less than 6 grams of sugar + sugar alcohol per serving to avoid unpleasant side effects and excess calories.
- Naturally occurring sugars found in fruit (fructose) and milk (lactose): Choose those with no more than 15 grams of sugar per serving.

Nutrition Facts		
Serving Size: 7 pieces		
Amount Per Serving		
Calories	150	Calories from Fat 54
% Daily Value*		
Total Fat	6 g	9%
Saturated Fat	2 g	10%
Trans Fat		
Cholesterol	10 mg	3%
Sodium	0 mg	0%
Potassium		
Total Carbohydrate	33 g	11%
Dietary Fiber	2 g	0%
Sugars	0 g	
Sugar Alcohols	33 g	
Protein	0 g	

Although this food is "sugar-free" it contains too much sugar alcohol.

About Alcohol

Alcohol should be avoided after surgery.

Why you should not drink after surgery:

1. Can quickly cause a dangerous level of intoxication.
2. Can quickly cause liver damage.
3. Does not produce a feeling of fullness and can lead to excess calories.
4. Risk of "Transfer of Addictions." Prior to surgery, many people use food for comfort. After surgery, when a person cannot turn to food, they might look for other outlets to handle stress. Alcohol could be one of the things used to deal with emotions, and can quickly become an addiction, even if you were not a drinker before surgery.
5. Drinking alcohol after Bariatric surgery may increase your risk for ulcers.



Vitamin and Mineral Needs for Weight Loss Surgery

Guidelines:

1. Vitamins should be chewable, crushed or capsule.
2. Divide your vitamins and minerals up throughout the day to help with absorption.
 - Separate any iron and calcium + Vitamin D by at least 4 hours.
 - Take no more than 600 mg of calcium at one time.
3. If vitamins make you nauseous, take them at the start of a meal.

When?

- Start taking a multivitamin right away to be well nourished for surgery.
- You will start your post-surgery vitamins and minerals within 2 weeks after your surgery.

Where?

- Christiana Care's Wilmington Hospital Outpatient Pharmacy carries OPTISOURCE Bariatric vitamins
- There are many brands of Bariatric vitamins that can be purchased at retail pharmacies, Walmart, Amazon, GNC, grocery stores in addition to other on-line options
- There is also a Vitamin Patch that you can purchase if having difficulty getting in your vitamins. However, that may be more expensive.



Vitamin and Mineral Suggestions

Chewable/Capsule Multivitamins and Minerals			
Brand	Flavor	Must take additional:	Dose
Nestle Health Sciences OPTISOURCE Post-Bariatric Surgery Formula	Citrus	Nothing	4 tabs /day (2 in the morning and 2 at night)
Bariatric Fusion Complete chewable vitamin & mineral supplement	Berry, Orange Cream, Tropical, Cherry, Strawberry	Nothing	4 tabs /day (2 in the morning and 2 at night)
Bariatric Advantage Multivitamins Complete Multi-Formula	Orange, Berry or Vanilla	Calcium	1 - 2 tabs /day
Flintstones Complete - NOT gummies (contains iron)	Mixed Fruit	Calcium, vitamin B ₁₂	2 - 3 tabs /day
Centrum Adult Chewable – NOT gummies (contains iron)	Orange	Calcium, vitamin B ₁₂	2 tabs /day
<i>*Option for BariActive vitamins with B12 nasal spray if covered by your insurance. Medicare/Medicaid does not cover.</i>			

Chewable Calcium Citrate with Vitamin D			
Daily Recommendation	Brand	Flavor	Amount /dose
1200 –1800 mg per day (some of this can come from food)	Twin Lab	Citrus	5 tabs = 1000 mg
	Bariatric Advantage Chews	Mint, Cherry, Cinnamon, Chocolate	2 chews = 1000 mg
	Bariatric Advantage Chewy Bites	Chocolate, Caramel, Raspberry, Lemon	2 to 4 chews = 1000 mg
	Celebrate Calcium PLUS 500	Cherry Tart, Orange Burst, Berries & Cream	2 tabs = 1000 mg

Sublingual Vitamin B₁₂				
Daily Recommendation	Brand	Flavor	Amount /dose	Dose
500 mcg	Bariatric Advantage	Peppermint	1000 mcg	1/every other day
	Trader Joe's	Fruit	1000 mcg	1/every other day
	Twin Lab B ₁₂ Dots	Cherry	500 mcg	1/day
	GNC	Cherry	1000 mcg	1/every other day

Protein Needs After Weight Loss Surgery

Getting enough protein each day is important for good health.

- Protein has many jobs including:
 - ♦ Helps you heal from surgery.
 - ♦ Prevents hair loss.
 - ♦ Prevents infection.
 - ♦ Helps maintain muscle mass.
 - ♦ Helps keep your metabolism running.

Weight loss surgery patients who do not meet their protein needs are likely to have protein malnutrition with hair loss, brittle fingernails, pale, dry skin and fatigue.

REQUIREMENTS: Find your height range on the chart. Remember the corresponding protein gram number. This is your protein goal after you come home from surgery.

Protein Needs After Gastric Bypass & Sleeve Surgery are Based on your height	
If your height is between:	Your daily protein needs:
4' 10" and 5' 2"	70 grams
5' 3" and 5' 7"	80 grams
5' 8" and 5' 11"	90 grams
6' and 6' 4"	100 grams

Protein Needs After BPDDS	
Females	90 grams/day
Males	100 grams/day

Protein Needs After Gastric Banding Surgery	
Females	70 grams/day
Males	80 grams/day

Where is the Protein?

Reading labels is important in choosing the right foods. Protein content can be found at the bottom of the label, just below sugar.

Nutrition Facts	
Serving Size 1 cup (228g)	
Servings Per Container 2	
Amount Per Serving	
Calories 250	Calories from Fat 110
% Daily Value*	
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 3g	
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%

High Quality Protein Sources

Chicken or turkey

- ◆ Breast - baked, grilled, poached
- ◆ Ground (93% lean) - meatballs, meat loaf
- ◆ Canned - chicken salad (light mayo)
- ◆ Deli meat, thin slices or shaved

Fish (remove bones)

- ◆ Filets - baked, boiled, poached, grilled
- ◆ Shrimp/baby shrimp
- ◆ Crab meat - imitation or real
- ◆ Canned salmon (in water)
- ◆ Canned tuna (in water)
- ◆ Other canned fish (with no bones, in water)

Beef (extra lean)

- ◆ Ground - meatballs, meat loaf

Pork

- ◆ Deli meat - thin sliced, shaved ham
- ◆ Moist pork tenderloin

Eggs or egg substitute

- ◆ Scrambled eggs
- ◆ Egg salad (light mayo)
- ◆ Deviled eggs (light mayo)
- ◆ Hard/soft boiled eggs

Low-fat dairy products

- ◆ Milk - skim or 1%
- ◆ Yogurt - plain, no sugar added, light
- ◆ Greek yogurt - 0% fat, sugar substitute
- ◆ Low-fat cheeses
 - cottage cheese (low-fat)
 - ricotta cheese (low-fat)
 - string cheese (part-skim)
 - 2% cheese
 - Other low-fat/non-fat cheeses

Legumes

- ◆ Peanut butter - creamy (high in fat)
- ◆ Dried, cooked beans or lentils
- ◆ Canned beans
- ◆ Hummus (high in fat)
- ◆ Vegetarian or fat-free refried beans
- ◆ Tofu, edamame, veggie burgers
- ◆ Soy milk

- ◆ 1 oz. of meat, chicken, fish or cheese contains about 7 grams of protein.
- ◆ 1 oz. of meat is the size of a tube of lipstick.



Choosing a Protein Supplement

For most people, protein from food will not be enough to meet their needs at first. Supplements can be used as meal replacements or snacks to get enough protein.

REQUIREMENTS:

Use as needed after surgery to meet your daily protein goal.

GUIDELINES:

Choose the right supplement with:

- At least 15 grams of protein per serving.
- 6 grams or less of sugar + sugar alcohol per serving.
- Ideally, whey or whey protein isolate.
- 5 grams of fat or less per serving.
- Can be protein powder or ready to drink (RTD).

Using Protein Supplements

Adding Flavor to Protein Supplements

You will need to drink 1 - 2 servings of a protein supplement each day for 6 to 12 months after surgery to meet your protein needs. Try these tips to add some variety.

Add any of the following to vary flavor:

- ◆ Vanilla or almond extract.
- ◆ Spices such as cinnamon or nutmeg.
- ◆ Sugar-free cocoa powder.
- ◆ Instant, decaffeinated coffee.
- ◆ Sugar-free Kool-Aid or Crystal Light powders.
- ◆ Sugar-free pudding or Jell-O powder.

Try these for a change of texture:

- ◆ Freeze your protein supplement and eat it with a spoon.
- ◆ Add fruit flavored or unflavored protein powders when preparing sugar-free Jell-O.
- ◆ Add ice and blend in blender to make a slushy treat.
- ◆ Add frozen fruit and blend in blender to add fiber and taste (on pureed or regular phases only.)

Choosing a Protein Supplement

Brand Name	Flavor	Prot gm	Preparation	Availability
Powder Shake Mix				
Unjury	Unflavored, chocolate, vanilla, strawberry, chicken soup	20 gm/ scoop	Mix with milk or water; add unflavored to soups, other foods.	Christiana Care, www.unjury.com
Health Wise	Variety of shakes, soups, cereals, and other beverages.	15 gm/ packet	Mix with milk or water.	Christiana Care
Body Fortress	Chocolate, vanilla, strawberry, cookies n' crème, chocolate peanut butter	26 gm/ scoop	Mix with milk or water.	WalMart, ShopRite, Target
GNC Pro Performance® 100% Soy	Chocolate, vanilla	25 gm/ scoop	Mix with milk or water.	GNC
Jay Robb Egg White Protein	Unflavored, chocolate, vanilla, strawberry	24 gm/ scoop	Mix with milk or water.	Vitamin Shoppe, amazon.com
Zero Carb Isopure	Chocolate, vanilla, strawberry, banana, unflavored	25 gm/ scoop	Mix with milk or water.	GNC, Vitamin Shoppe, amazon.com
Syntrax Nectar (clear)	Apple, Caribbean, Crystal Sky, Lemonade, Fuzzy Navel and others	23 gm/ scoop	Mix with water.	GNC, Vitamin Shoppe, Walmart, amazon.com
Syntrax Matrix	Banana, Cookies & Cream, Chocolate, Vanilla, Peanut Butter Cookie, and others	23 gm/ scoop	Mix with milk or water.	GNC, Vitamin Shoppe, Walmart, amazon.com
Ready-to-Drink (RTD)				
Premier Protein Shakes	Chocolate, vanilla, strawberries and cream, caramel, banana	30 gm/ 11 oz	RTD	BJ's, Costco, Sam's Club, Walmart, grocery stores, amazon.com, Walgreens, premierprotein.com
Premier Clear Protein Drink	Mango, Raspberry, Tropical Fruit	20 gm/ 16.9 oz.	RTD	Sam's Club, Walmart, Giant, amazon.com, premierprotein.com
Zero Carb Isopure (clear)	Varied fruit flavors	40 gm/ 20 oz	RTD	GNC, Vitamin Shoppe

Diet Progression After Weight Loss Surgery

After surgery, you will need to progress slowly through food textures. Begin with clear liquids and then full liquids. Then slowly introduce soft and more solid textures. Advancing too soon can result in nausea and vomiting.

Clear liquids - 2 days

When? Your **first 2 days at home** after surgery.

Rules: No carbonation, no straws, no caffeine!

Must be able to see through liquid.

A note about clear liquids - Liquids such as milk, milk-type drinks and shake-type drinks are not allowed during the clear liquid phase of the diet.

Water	Light V8 Splash or Fusion	Wyler's Light Drink Mix
Isopure Drinks - Clear	Light sports drinks - Zero calorie only!	Sugar-free Lemonade
Sugar-free Kool-Aid or Tang	Sugar-Free Jell-O or fruit popsicles	Broth - regular or protein fortified
Unjury Chicken Broth or Strawberry Sorbet (made with water)	Crystal Light - with or without unflavored protein powder	Dasani, Fruit ₂ O or Aquafina Flavored Water with 0 calories
Syntrax Nectar fruit flavors mixed with water	Premier Clear Protein drink	Health Wise Drink - Fruit flavors mixed with water

Full liquids - 2 weeks

When? For the remainder of the **first 2 weeks after surgery**.

Rules: No carbonation, straws or caffeine! Includes all clear liquids plus the liquids below.

- Milk, or high protein milk substitute such as soy milk, Silk Protein Nutmilk or Ripple Pea Protein Milk.
- Protein shakes mixed with milk or milk substitute.
- Cream soups strained or pureed.

*Milk substitutes: Almond milk, coconut milk, cashew milk and most other milk substitutes do not contain as much protein as milk. If you choose to use these, make sure they are fortified with calcium and vitamin D and have no-added sugar, and ideally mix a protein powder into them.

Diet Progression After Weight Loss Surgery

Pureed Foods - 2 weeks

When? Weeks 3 & 4

- Pureed foods are the consistency of applesauce. You can use baby food or puree your own foods.
- Eat or drink 3 - 6 times a day.
- Meal size is about ¼ cup to ½ cup.
- Take 15 - 30 minutes to eat your meal.
- Do not drink with meals.
- Protein shakes can count as a meal and fluid.
- Aim for several small meals with sips of fluids in between.

Soft Solids - 4 weeks

When? Weeks 5 - 8

- You are now ready to add foods that have more texture. Chew foods well to prevent swallowing any chunks.
- Include foods from all food groups daily.
- See the chart on page 20 for food suggestions.

Firm Foods to Regular Diet

When? The rest of your life!

- Add ground meat, raw vegetables, fruit with soft skin.
- No bread for 6 months. After 6 months, try 1/2 slice toasted.
- Include foods from all food groups daily.
- See the chart on page 29 for food suggestions.
- Eventually, eat 3 small balanced meals and 1 snack, and meet your fluid needs daily.

Diet Progression After Weight Loss Surgery

Tips for Pureed Foods

Pureed Diet - Weeks 3 & 4:

Baby food is a convenient choice during the pureed stage of the diet, but you can also make your own pureed foods at home. Follow the suggestions below to make flavorful pureed items.

General guidelines for pureeing food:

- ◆ Always cook meats, starches, vegetables and hard fruits before pureeing.
- ◆ Add liquid as needed to smoothly puree the food.
- ◆ Puree in a blender or food processor until the food is similar in texture to applesauce.
- ◆ Add seasoning as desired.

Tips for specific foods:

Meat

- ◆ Suggested liquids: low-sodium broth, skim or 1% milk, low-fat creamed soups, low-fat/fat-free gravy, plain yogurt (Greek or Light) or vegetable juice.
- ◆ Puree to a smooth consistency. You can strain your food to remove any lumps which could get caught in your stomach outlet.

Starches

- ◆ Add a hot liquid to your hot starch and puree before it has cooled.
- ◆ Rice and some noodles tend to get "gummy" or don't puree to a smooth consistency. Avoid these during the pureed stage.

Vegetables

- ◆ Remove seeds and tough skin before cooking.
- ◆ If canned vegetables are used, try low-sodium canned vegetables and rinse with fresh water prior to pureeing to remove excess salt.

Fruits

- ◆ Remove tough skins and large seeds before pureeing.
- ◆ Canned fruits puree well. Look for those canned in juice or with no-sugar-added.

To prepare foods ahead of time: Cook and puree. Let cool and pour food mixture into clean ice cube trays. Freeze food, pop out of the trays, place into freezer bags and label the bag with the food and the date. Each cube is approximately 1/2 - 1 oz. in size. You can pull out the amount you need, thaw and reheat for a quick, portion-controlled meal.

Food Suggestions for Diet Progression

Food Type	Phase 1: (first 2 weeks) Clear & Full Liquids	Phase 2: (Weeks 3 & 4) Pureed foods	Phase 3: (Weeks 5 - 8) Soft solid Foods	Phase 4: Firmer foods, Regular Diet
Meats, fish, poultry, eggs	Broth	Pureed chicken, turkey, fish, crab, shrimp, eggs, or baby food (no pork or beef), canned tuna or salmon mashed with light mayonnaise, mashed tofu	Moist chicken and turkey (no skin), fish & shellfish, tofu, scrambled eggs, lean deli meats, creamy peanut butter	Chicken, turkey, veal, pork tenderloin, ground meat, fish & shellfish, meat substitute (soy, tofu), lentils, beans
Dairy	Skim, 1% milk, low carb milk, low fat soy milk, strained low fat cream soups, light yogurt drinks (no fruit pieces)	Low fat cottage cheese, fat-free or part-skim ricotta cheese, light yogurt, Greek yogurt, low-fat shredded cheese (mixed into hot food)	Low fat cottage cheese and cheese slices, part-skim ricotta cheese, light yogurt	Low fat cottage cheese, part-skim ricotta cheese, light yogurt, low fat cheese cubes/slices
Vegetables	Vegetable juice	Cooked, pureed vegetables	Soft cooked vegetables	Raw and cooked vegetables
Fruit	None	Pureed canned fruits (drained), unsweetened applesauce, mashed bananas, baby food fruits	Canned (drained), fresh fruit (no skin), unsweetened applesauce	Fruits with soft skin, canned fruit (in juice)
Starch		Pureed mashed potatoes, pureed or baby oatmeal, cream of wheat, low fat refried beans	Soft cooked noodles, potatoes, cooked cereal	Crackers, toast (after 6 months), unsweetened cooked or ready to eat cereals, noodles, potatoes
Other	Decaf tea/coffee, water, protein shakes, non-carbonated calorie-free liquids, sugar-free Jell-O or popsicles	Decaf tea/coffee, water, protein shakes, non-carbonated calorie-free liquids, sugar-free Jell-O or popsicles	Decaf tea/coffee, water, protein shakes, non-carbonated calorie-free liquids, sugar-free Jell-O or popsicles	Decaf tea/coffee, water, protein shakes, non-carbonated calorie-free liquids, sugar-free Jell-O or popsicles

Sample Regular Menu for After Weight Loss Surgery

The following meal plan is a healthy goal to aim for and achieve within the first year after surgery. You will not be able to follow this plan exactly immediately after surgery. Use it as a guideline to make your choices and plan your goals as you progress.

Meal	Time	Food	Food Group Svgs.	Oz. Fluid	Grams protein
Breakfast	<i>7:30 – 8 a.m.</i>	5.3 oz. light Greek yogurt	<i>1 dairy</i>	0	12
		½ cup light canned fruit (drained)	<i>1 fruit</i>	0	0
Beverage	<i>9 – 10 a.m.</i>	16 oz. Crystal Light w/½ scoop unflavored Unjury	<i>1 protein</i>	16	10
Beverage	<i>11 - 11:30 a.m.</i>	8 oz. skim milk	<i>1 dairy</i>	8	8
Lunch	<i>12:30 -1:00 pm</i>	1 cup lettuce with 1 Tbsp. light dressing	<i>1 veg & 1 fat</i>	0	0
		2 oz. grilled chicken	<i>2 protein</i>	0	14
		4 small whole grain crackers	<i>1 starch</i>	0	0
Beverage	<i>2 - 3 p.m.</i>	12 oz. water		12	0
Snack	<i>3:30 – 3:45 p.m.</i>	1 small peach	<i>1 fruit</i>	0	0
Beverage	<i>5 - 6 p.m.</i>	16 oz. Propel		16	0
Dinner	<i>7 – 7:30 p.m.</i>	2 oz. baked salmon	<i>2 protein</i>	0	14
		½ cup steamed green beans	<i>1 veg</i>	0	0
		⅓ cup mashed sweet potato	<i>1 starch</i>	0	0
		1 Tbsp. light margarine	<i>1 fat</i>	0	0
Snack	<i>9 – 9:30 p.m.</i>	1 HealthWise hot cocoa in 8 oz. skim milk	<i>1 dairy & 2 protein</i>	8	23
Totals				60	81
Starch✓✓ Vegetables✓✓ Fruit✓✓ Dairy✓✓✓ Protein✓✓✓✓✓✓ Fat✓✓					

Healthy Eating Guidelines After Weight Loss Surgery

The following meal plan is a healthy goal to aim for and achieve within the first year after surgery. You will not be able to follow this plan exactly immediately after surgery. Use it as a guideline to make your choices and plan your goals as you progress.

Once you achieve your weight goal, aim for a minimum of 70 g protein per day!

<i>One serving equals:</i>		<i>Servings per day</i>
Starch/Bread Group		4 servings
1/2 cup cooked cereal 1 slice bread (after 6 months) 3/4 cup dry cereal 1/2 cup potatoes, peas, winter squash, sweet potatoes, lentils, beans	1/3 cup cooked pasta 1/2 bagel (after 6 months) 4-6 crackers (low fat)	
Vegetable Group		3 servings
1/2 cup cooked vegetables 1/2 cup raw vegetables 1 cup lettuce	4 oz. vegetable or tomato juice 1/2 cup marinara sauce	
Fruit Group		2 servings
1 fresh small fruit 1/2 cup canned fruit (in juice) 15 grapes	1 cup berries or melon 1/2 banana	
Dairy Group		2 servings
1 cup skim or 1% milk 1 oz. low-fat cheese	1 cup light or plain yogurt 1/3 cup non-fat milk powder	
Protein Group		6 servings
1 oz. lean meat 1 oz. poultry or fish 1/2 cup lentils or beans 1 oz. low fat cheese	1/4 cup cottage cheese or tuna 1 egg or 1/4 cup egg-beaters* 2 Tbsp. creamy peanut butter (high fat and calorie choice)	
Fat Group		3 servings
1 1/2 tbsp light cream cheese 2 tbsp light salad dressing 1 tsp olive oil, canola oil, margarine or mayonnaise	1 tbsp. light margarine	

Possible Digestive Symptoms

Common diet related symptoms after bariatric surgery are:

1. Dehydration
2. Constipation
3. Vomiting
4. Dumping Syndrome

Vomiting

To pre-vent vomiting, eat slowly, chew food well and wait 30 minutes after eating to drink.

Vomiting can be caused by:

- ◆ Eating too fast.
- ◆ Eating too much.
- ◆ Drinking with your meals.

Constipation

When you're eating habits change so do your bowel habits. Constipation is characterized by difficulty emptying the bowel and hard stools. It can be common following bariatric surgery

These tips can help:

- ◆ Drink plenty of water, at least 48 - 64 oz./day.
- ◆ Try pureed oatmeal, baby food prunes or pears.
- ◆ Can add fiber supplements like Metamucil or Benefiber after surgery
- ◆ After 8 weeks, add high fiber foods - shredded wheat, bran, raw fruits and vegetables, and beans.
- ◆ Exercise daily to stay regular.

Dehydration

Thirst is a symptom letting you know that your body needs more fluid and that you need to drink more. Pay attention to your thirst and sip fluids between meals and snacks. Always keep fluids with you even while traveling or walking if possible.

Not meeting your fluid needs over time can lead to severe dehydration.

Symptoms include confusion, disorientation and black-outs and can require you to be hospitalized.

Call your surgeon's office if you feel like you may be dehydrated.

Dumping Syndrome

***Specific for those who have undergone Gastric bypass**

Symptoms Include:

- Nausea
- Vomiting
- Severe Cramping
- Diarrhea
- Sweating
- Light-headedness
- Heart palpitations

Early phase of dumping:

- ◆ Small sugar molecules are “dumped” into the small intestine.
- ◆ Fluid shifts toward the high concentration of molecules to dilute them.
- ◆ As fluid is pulled into the small intestine, hormone and nerve responses are activated causing rapid heart- beat and sweating.
- ◆ Vomiting or diarrhea may follow as the body tries to rid itself of the excess fluid in the small intestine.

Late phase of dumping:

- ◆ Related to blood sugar level.
- ◆ Sugar is rapidly absorbed into the blood stream.
- ◆ The pancreas releases insulin to lower blood sugar.
- ◆ Blood sugar can drop rapidly, symptoms can include weakness, fatigue, feeling light-headed, cranky, etc.
- ◆ Symptoms can set up a cycle of overeating.

Things to Avoid:

- ◆ **All food and drinks sweetened with sugar.**
- ◆ Eating and drinking at same time.
- ◆ Drinking fruit juice, regular Ensure, Boost or Slimfast.
- ◆ All sports drinks, except for sugar-free options.
- ◆ Regular sodas or other drinks with sugar.
- ◆ Candy, cookies, cake, pudding etc. made with sugar.
- ◆ High fat foods.

Section 2: Health Psychology

Staying on Track After Bariatric Surgery

Motivation

Why am I even trying?

Every person has unique reasons for wanting to lose weight, but there are many common concerns leading to the choice of bariatric surgery for weight loss:

- ◆ Concerns about current or future health problems, wanting to decrease the number of medications taken regularly.
- ◆ Physical discomfort related to weight such as back or joint pain, shortness of breath.
- ◆ Wanting to look better, buy clothes more easily.
- ◆ Wanting to be more active, improve physical fitness.
- ◆ Wanting to live longer for children or grandchildren.
- ◆ Setting a good example for children so they won't develop similar problems.

Staying on track when there are temptations around will be easier if you can remind yourself of the important reasons why you decided to have bariatric surgery in the first place.

Think about what strategies you might use to keep yourself "anchored" to your motivation so that you can maintain healthy eating habits and get regular physical activity.

What are your reasons? Write them below:



Mindfulness/Monitoring

Being **mindful** just means **paying attention** in a deliberate way. It is a way to monitor your current eating habits and identify areas that may be obstacles to successful weight loss. One good tool to **monitor** you're eating behaviors is using a **food diary**. Using a food diary to track food intake helps to increase awareness of your eating patterns. The more you are aware of your own habits, the easier it will be to work on changing them through **mindful eating**.

Mindful Eating Tips:

1. Eat slowly and notice the physical characteristics of food so that you can really enjoy it. Think of "*eating like at a gourmet restaurant*". If you slow down and savor the food that you are eating, you may well find that you are satisfied with a smaller quantity.
2. Notice if there are situations when you are *eating on autopilot* - such as in front of the TV, on the phone, in the car, at your computer. Are you really hungry? Are you enjoying the food? Or is this just "mindless eating?"
3. Notice if you are eating *just because it's there* - for example, food brought in to work, such as donuts or cookies. If you find yourself reaching for this, ask yourself, "How hungry am I right now? Is this a good choice?"
4. **Notice your level of hunger** and notice how that decreases as you are eating. On a scale of 1 to 10, where 1 is extremely hungry and 10 is uncomfortably full, what would be a good level of fullness for you to stop eating? Most of us don't want to experience a "10" level - would 7 be right for you? 8? 6? Only you can decide what feels right, but first you need to start paying closer attention.

Mastering New Strategies

People sometimes feel that they lack willpower when they are trying to change their eating habits and lose weight. There's no effortless willpower that magically changes you! If you notice the situations that tend to trigger eating for you, then you can learn strategies for dealing with them more effectively.

Think about your typical eating triggers. They might include:

- | | | |
|------------------------------------------------------------------------------------|---|---------------------------------|
| Relieving stress or relaxing | ⇒ | Comfort foods, emotional eating |
| Socializing with friends and family | ⇒ | Celebrations or a night out |
| Showing hospitality or appreciation | ⇒ | Hosting a family get together |
| Rewarding yourself for a job well done or maybe for making it through a rough day! | | |

It is important to identify **alternative behaviors** to eating in these situations if you want to be successful in your weight loss efforts.

Instead of eating, you might:

- ◆ Call a friend.
- ◆ Go for a walk or exercise.
- ◆ Do some relaxing activities.
- ◆ Distract yourself by doing something else such as reading, crafts, or other fun hobbies.
- ◆ Wait 10 minutes before eating to see if the craving passes.

Listening to your inner voice

We all have certain habits when it comes to how we talk to ourselves about food and eating. Can you notice what messages you are giving yourself?

- ◆ I have no willpower and food controls me.
- ◆ I'm *starving!* I need to eat NOW.
- ◆ I should always finish everything on my plate.
- ◆ I must have a snack when I watch TV.
- ◆ I can't afford to buy healthy food.
- ◆ I don't have time to exercise.

If any of these statements sound familiar, maybe you should start noticing how you talk to yourself about food. You may be setting yourself up for failure if you have a negative attitude about changing your habits. It's time to **"Talk back" to yourself!**

Mastering New Strategies

Listening to your inner voice (continued):

If you don't already "talk back" to yourself, you can learn to. How can you respond to that voice in a way that is more realistic and healthier?

I'm starving! I better stop at the drive-through on the way home.

Talk back: "I'm pretty hungry, but it's not that desperate. I will be okay until I get home and can fix something healthier."

I should always finish all the food on my plate.

Talk back: "I don't like wasting, so I should be careful about the amount of food I put on my plate. It's more important to stop eating when I don't feel hungry anymore."

If I'm going to exercise, I should do it every day.

Talk back: "Something is better than nothing. Maybe I could start with 3 days a week."

Being realistic about your goals:

Take some time to think about what you can likely accomplish with weight loss and what it will take to get to that goal. Your lowest **achievable** weight is not necessarily the same as your lowest **maintainable** weight. A maintainable weight is one that you can likely sustain over time while still following a sensible diet and exercise plan for the rest of your life.

Set yourself up for success!

Supporting your progress:

Notice and celebrate your accomplishments but do it in a manner that supports your continued success. For example:

Give yourself credit when you reach a weight goal (include interim goals on the way to your ultimate goal).

Use non-food rewards for yourself, such as buying a new outfit, going on a trip or something that you have wanted for a while. Remember that rewarding yourself with food can undo your current progress!

Keep in mind that maintaining a healthy weight is a **lifelong process**, not an event with a beginning and an end.

Maintaining Momentum

Once you have started making healthy lifestyle changes, focus on how to maintain these new habits in order to reach your goals. This is not a diet that is “over” at a certain time, but rather healthy changes to continue for life.

Notice the benefits:

Pay attention to the things that your healthy lifestyle is doing for you.

Are you feeling and looking better? List some things that your weight loss has done (or will do) for you.

1. _____
2. _____
3. _____

Have you reached any of your interim goals (e.g., losing the first 10 lbs.)? Make sure to find a way to reward yourself for your progress that doesn't include food rewards. Use this success to motivate yourself to keep going!

Positive Reinforcement:

Focus on the benefits of your weight loss and healthy lifestyle. Are you climbing the stairs more easily? Are your clothes getting baggy? Have you gone off any medications or reduced the dose?

Use **positive observations** to fuel your drive to keep following the bariatric guidelines for diet and exercise. Notice and appreciate all that your body does for you and treat it well so that it can continue to serve you for many years to come.

Weight Loss Surgery Support Groups:

Participate in support groups is a great way to stay motivated and up-to-date on new recommendations. It is helpful to be able to talk to other people who know what you are going through and can help support your efforts to stay on track. Support groups give you a chance to share your concerns, frustrations and your success with others.

Remember: Long-term follow-up with the health care providers on the bariatric team is crucial to achieving success and maintaining that good outcome over time. At a minimum, bariatric surgery patients should see their bariatric team every year.

Section 3: Exercise

Benefits of Exercise

Research shows...

Physical activity is the single most important behavior for long-term success in weight loss. Those who are more physically active **lose more weight** and **maintain weight loss** more often than non-active individuals.

(www.nwcr.ws/)

Benefits of Exercise:

- ◆ Lowers blood pressure.
- ◆ Improves cholesterol.
- ◆ Increases lean body mass.
- ◆ Controls weight.
- ◆ Lowers heart rate.
- ◆ Reduces risk of certain cancers.
- ◆ Helps depression/anxiety — improves your mood!



Once you are cleared by your surgeon for physical activity/exercise, you should consider starting slowly and gradually working up to a more vigorous exercise routine.

Exercise Intensity:

Exercise at a light to moderate level of exertion; you should be able to talk while exercising. If you are so short of breath that you cannot talk, slow down.

Target Heart Rate Ranges:

20-29 years old: Target Heart Rate = 120-160 bpm

30-39 years old: Target Heart Rate = 115-150 bpm

40-49 years old: Target Heart Rate = 110-145 bpm

50-59 years old: Target Heart Rate = 100-135 bpm

60-69 years old: Target Heart Rate = 95-130 bpm

70-79 years old: Target Heart Rate = 90-120 bpm

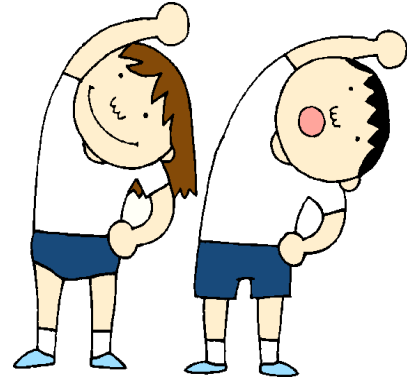
Exercising After Weight Loss Surgery

Key components of an exercise program:

1. Warm-up.
2. Aerobic Exercise.
3. Strength Training.
4. Cool down/stretching.

1. Warm-up

Warming up helps the body transition from rest to exercise by warming up the muscles which reduces the risk of injury. It also prepares the heart for increased activity. A good warm-up is essentially a slow version of the activity you are about to do for approximately 5 minutes. **You should not skip the warm-up.** If you do not take the time to properly warm up, you could injure yourself and not be able to exercise enough to meet your goals.



2. Aerobic Exercise (follows the F.I.T.T principle)

Start with 5-10 minutes of walking every day. Each week add about 5 minutes to your walking time.
GOAL: Work up to 30-60 minutes of walking every day

F = Frequency: 3-7 days per week

I = Intensity: How hard to exercise and target heart rate

T = Time: 30 - 60 minutes

T = Type: Aerobic exercise

- a. Bicycling
- b. Walking
- c. Swimming
- d. Pool aerobic program
- e. Low impact aerobic

Keep Active All Day: Count Your STEPS:

Try and do more activity throughout the day. Counting STEPS is a great way to measure that and challenge yourself.

A good goal is to walk 10,000 steps per day.

First determine how many steps you take each day. Try to increase your steps by 200-300 steps per day. Set your own goals.

Fit bits, pedometers, phones and watches can help you measure how many steps you walk.

3. Strength Training (Resistance Training)

You can begin Weight training 4-6 weeks after surgery- with your physician's approval

Benefits of Strength Training

- Avoid muscle loss –
Adults who do not strength train, lose between 5-7 pounds of muscle every decade (Evans & Rosenberg 1992).
- Increases bone density
- Increases strength and tone of muscles
- Reduces injury - by increasing strength of muscles, ligaments and tendons.
- Increases insulin sensitivity
- Increases functional abilities

How to strength train

- Number of exercises: 6-12 including movements from all major muscle groups: legs, back, chest, shoulders, arms, and abdomen
- Number of sets: 1-3 sets
- Number of repetitions: 10-15 reps
- Number of training sessions per week: 2-3 times/week; every other day
- Make sure you lift the weight through a full range of motion and that you do it in a slow, controlled manner (no jerking).
- **Do Not Hold Your Breath**
- Progressively increase weights, sets or repetition as you become more fit and strong so that you continually challenge your muscles and continue to improve strength and tone.
- Always warm-up before working out
- Watch for symptoms of over-training (listen to your body)
 - overly tired/exhaustion
 - chronic joint and/or muscle pain

The amount of weight lifted should be heavy enough so that you feel that the muscle has been worked by the time you are finished.

Tip for weight training:

Monday/Wednesday-work on legs, back and chest

Tuesday/Thursday-work on shoulders, arms and abdomen



4. Cool down/stretching

Stretching is an essential aspect of any safe, well-balanced fitness program. However, it is often left out due to lack of time or because the benefits are not readily apparent.

Stretching Guidelines:

- Stretching is not the same as warming up.
- Stretch after completing warm-up and/ or workout.
- Static stretching (means no bouncing).
- Hold stretch for 30 seconds (repeat 2- 3x).
- Always stretch opposing muscle groups.
- Stretch major muscle groups regularly.

Benefits of stretching

- Increased flexibility
- Decreased chance of injury
- Improves balance
- Prevention and rehabilitation of back injuries
- Relaxation

Make exercise a life-style change!

There are many things that you can do in order to get physical activity every day. Choose activities that you like to do and that you will stick to doing. Activities that you do every day can count toward physical activity. Bottom line is to get up and get moving! Here are some examples:

- Walk
- Take the stairs
- Play games with the kids
- Dance
- Stand or walk while on the phone
- Hike
- Clean the house (work hard and fast)
- Garden
- Park farther away
- Join an exercise group

A few more thoughts...

Concentrate on achieving healthy habits and a positive lifestyle change - (i.e. improved cholesterol, decreased blood pressure, improved blood sugars).

Exercise does not have to be done all at one time. You can break it up into 10-15 minute blocks throughout the day (or whatever amount of time you can fit in).

Use the buddy system - exercise with a friend or partner to help keep you on track. Listen to music while exercising and keep an exercise log to help track your progress.

Exercise safely (make sure you warm-up, cool down and stretch).

My exercise goals

Use this work sheet to develop a plan for exercising after your gastric surgery.

1. Do you currently exercise? Yes No
2. If yes, how often are you exercising and what do you do? If no, what is keeping you from exercising?

3. Do you have a pedometer that you currently use? Yes No
4. If yes, how many steps are you taking each day? If no, would you be willing to purchase one and wear it to track daily activity?

5. Do you currently have a gym membership? Yes No

6. If yes, how often are you going to the gym? _____

7. Are you willing to commit to exercising at least 3 x per week? Yes No

8. If not, what would you be willing to do?

9. When is the best time for you to incorporate physical activity into your day?

10. Do you have someone to exercise with? Who? What can you do?

11. Write 2 exercise and physical activity goals for after surgery.

1. _____

2. _____

Common Questions

What is the best way to handle gas, burping, gurgling etc.?

- Activity helps the bowels expel gas, so regular walking after surgery is encouraged. Walking also helps to reduce the risk for other complications.
- Try chewable or sublingual (taken under the tongue) Gas-X or Phazyme.
- Sip fluids slowly in a seated position. Wait at least 30 minutes to lie down after eating or drinking.

I am having a lot of bowel movements every day. What is normal?

- Loose stools are common the first few weeks after surgery, as the consistency of your food has changed.
- To prevent dehydration, make sure you are drinking adequate fluid to make up for losses in diarrhea by tracking the ounces you drink. Also, be aware of signs of dehydration: Extreme thirst, less frequent urination, dark-colored urine, fatigue, dizziness, confusion, headache and muscle cramps.
- If you are having more than 3-4 loose bowel movements a day, having explosive accidents or you notice the symptoms of dehydration, contact your surgeon.

I am having recurring nausea. Is this normal? When should I call the surgeon to notify them of this problem?

- Some nausea is normal. If you can tolerate fluids and remain hydrated, this symptom should pass soon after surgery.
- To help prevent nausea: Sip fluids slowly, do not gulp and do not overfill your stomach.
- If you are vomiting frequently and cannot stay hydrated, notify your surgeon.

My urine is dark and smells bad. Is this normal?

- This could indicate a urinary tract infection or dehydration.
- Make sure you are drinking 48 to 64 ounces of fluid daily, and report this to your surgeon if it does not improve or worsens.

I feel so tired since I had my surgery. What can I do?

- Regular short walks throughout the day can help with fatigue and help improve sleep.
- Meeting fluid and protein goals and taking vitamins and minerals daily can also help relieve fatigue.

I weighed myself after I was discharged, and I gained weight in the hospital. Is there something wrong with my surgery?

- Weight gain while in the hospital is due to IV fluids. Regular walking will help to get rid of this within a couple of days.
- *If you have swelling around your ankles and/or new onset of shortness of breath, notify your surgeon.*
- Make sure you see the surgeon for a post-surgery appointment *within 2 weeks of your surgery date.*