Diet and Nutrition After Gastrectomy: Your Plan

In this document, we've broken down a recommended timeline for how and when to reintroduce certain foods and food groups into your diet after a total gastrectomy. Remember that your experience may be different than someone else's, even a close relative, and you should work with your dietitian and health care team to adjust this plan to meet your needs.

This plan is broken down into two main phases. Your dietitian will tell you when to begin introducing foods from phase 2 into your diet. The phase 2 plan outlined below will eventually become your lifelong diet.

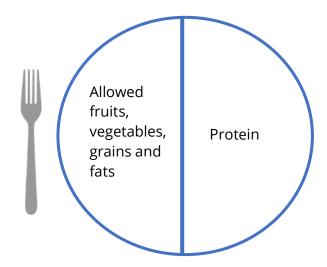
It is important that you focus not only on which foods you choose, but also on how much of those foods you eat and when and how you are eating them. Follow these guidelines and work with your dietitian to avoid unwanted symptoms and to get the nutrition you need to heal.

Phase 1: 6-8 weeks after surgery

This is your body's recovery period. Your body needs foods that are high protein to help you heal and to slow weight loss. Your body also needs foods that are easy to digest as your intestine adjusts to digestion without a stomach.

General Guidelines

- Eat often. You need at least 6-8 small meals each day. These meals may only be about 1-2 ounces each (about the size of a shot glass).
- Remember that you will not feel hungry like you used to, but you need to eat often anyway. Use the tips from "<u>Diet and Nutrition After Gastrectomy: What You</u> <u>Should Know</u>" to help you remember to eat.
- Choose high-calorie, high-protein foods and fluids for these meals to meet your nutritional needs. Make at least half of your plate protein.



- Eat slowly and relax while eating.
- Chew foods completely, into puree form, before swallowing. Choosing soft, well-cooked foods that you can thoroughly chew will help.
- Drink fluids 30 minutes before or 30 minutes after eating, but not during your meals.
- Remain upright after eating to avoid bile reflux.
- Avoid foods high in insoluble fiber and gas-producing foods. These foods cause abdominal cramping or pain, diarrhea and gas pain as your body recovers from surgery.
- Avoid foods and drinks with added sugars.

Added sugar is different from natural sugar. Added sugar means a sweetener is **added** into the food as an ingredient.

- Ingredients that mean "added sugar" include sugar, honey, agave, corn syrup, syrup, fructose, dextrose and maltose.
- Avoid sugar alcohols such as sorbitol, mannitol, erythritol and xylitol. They cause gas, bloating and diarrhea. Sugar alcohols can often be found in foods labeled sugar-free.
- Other artificial sweeteners do not cause dumping syndrome. Examples of include Stevia, sucralose (Splenda), aspartame (Equal) and Saccharin (Sweet 'N Low).

Natural sugar is sugar that naturally exists in your food. For example, fruit, starchy vegetables, milk and unsweetened yogurts have natural sugar (carbohydrate) that was not added and will not be listed as an ingredient. Foods with natural sugars are safe to eat if you eat them with protein.

Use the Nutrition Facts label to find foods with no added sugars.

How to Read Food Labels for Added Sugar

Example One: Unsweetened Yogurt

Use the label to check for added sugar

Muduition	Amount/serving	% Daily Value*	Amount/serving % Dall	y Value*
Nutrition	Total Fat 10g	13%	Total Carbohydrate 8g	3%
Facts	Saturated Fat 1g	5%	Dietary Fiber 4g	14%
Serving size	Trans Fat 0g		Total Sugars 2g	
1 Container (150g)	Cholesterol Omg	0%	Incl. Og Added Sugars	0% 5%
	Sodium 10mg	0%	Protein 11g	5%
Calories 160			% • Iron 2mg 10% • Potas. 87	
	*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet.			

- This yogurt has 0 grams of added sugar.
- This yogurt has 11 grams of protein, which is a good source of protein.
- This yogurt would be a good choice for a post gastrectomy diet.

Example Two: Sweetened Yogurt

Use the label to check for **added sugar**

Madellion	Amount/serving	% Daily Value*	Amount/serving	% Daily Value*
Nutrition	Total Fat 9g	12%	Total Carbohydrat	e 19g 7 %
Facts	Saturated Fat 0.5g	3%	Dietary Fiber 4g	14%
Serving size	Trans Fat 0g		Total Sugars 12g	
1 Container (150g)	Cholesterol Omg	0%	Incl. 10g Added S	Sugars 20 %
	Sodium 10mg	0%	Protein 10g	5%
Calories 180	Vit. D Omcg 0% • Calciu			

- This yogurt has 10 grams of added sugar.
- The added sugar in this food is likely to cause early and/or late dumping syndrome.
- This yogurt would not be a good choice for the post gastrectomy diet.

You may find it helpful to use a food diary or app to record what you are eating and drinking. Record the specific food or drink, the amount, and any symptom you have. You can also take notes when you have symptoms after eating, which may help determine the cause of those symptoms.

Bring your food diary to follow-up appointments after surgery. Your dietitian will be able to help you identify foods and/or patterns that are causing any symptoms.

On the following pages, you'll find a chart that will help guide what you can eat and what you should avoid in each food group as you go through recovery.

Phase 1: Foods to choose and foods to avoid:

Food group	Choose these foods	Avoid these foods
Breads, Starches and Grains	Thin corn tortilla, plain crackers, plain pasta, hot and cold cereals with no added sugar and no more than 2 grams of fiber per serving Eat these foods with protein	Whole grains and high fiber foods with 3 or more grams of fiber per serving such as whole wheat bread, multigrain bread, whole wheat pasta, brown rice and quinoa
	 Examples: Cheerios + unsweetened yogurt Grits + eggs Cream of wheat made with milk Crackers + peanut butter Pasta + meatballs and/or cheese Tortilla + cheese 	Sugar-sweetened breads such as sweet rolls, coffeecake, muffins, breakfast bars, donuts, breads with syrup or sweetened sauces Doughy, tough foods like bagels High fiber cereals such as bran flakes, granola, steel cut oats and other whole grain cereals Sugar sweetened cereals
Fruits	Canned, soft fruits packed in water	Raw fruit with a peel, seeds or
	without added sugar or syrup Soft textured fruit without a peel, skin or seeds such as banana, seedless watermelon, honeydew and unsweetened applesauce	Skin Dried fruits Undiluted fruit juice Fruit canned in sugar or syrup
	Eat these foods with protein	
	Example:Banana + unsweetened nut butter	
Fats & Oils	Oils, avocado, hummus, smooth unsweetened nut butters, margarine or butter, cream, cream cheese, sour cream and mayonnaise	Sweetened cream cheese, honey butter, condiments or salad dressings made with added sugars Fried foods

Food group	Choose these foods	Avoid these foods
Protein	Tender, well-cooked meats, poultry, fish, eggs or soy foods	Meat with casing (sausage, hot dogs)
	Smooth unsweetened nut butters	Fried meat, poultry or fish
	Hummus	Nuts, seeds, lentils, legumes and beans
	Milk (unsweetened), cheese, cottage cheese and unsweetened yogurt	Sweetened milk (strawberry
	*Note: If you find that milk and dairy products cause discomfort, try lactose-	milk, chocolate milk) or sweetened yogurt
	free products, unsweetened soy or unsweetened almond milk instead of regular milk and dairy products.	Sweetened protein drinks such as Ensure®, Ensure Plus®, Boost®, Boost PLUS® and
	High protein drinks without added sugar such as Fairlife Core Power, Premier Protein®, Boost MAX®, Ensure MAX®, Pure Protein®, Protein2O, Ready water, Premier Protein Clear, Gatorade Zero with Protein or other similar products*	Ensure Clear®*
Vegetables	Well-cooked vegetables without tough skin or seeds such as cooked carrots or cooked spinach Potatoes or winter squash without skin Diluted and strained vegetable juice (75% water, 25% juice)	All raw vegetables Beets, broccoli, brussels sprouts, peas, cabbage, cauliflower, corn, potato skins and collard, mustard or turnip greens Vegetables with tough skin or seeds
Fluids, Drinks and	Water	Caffeinated coffee or tea**
Soups	Decaffeinated coffee or tea, sweetened with artificial sweeteners as desired Non-carbonated, sugar–free (diet) drinks without sugar alcohols such as Powerade Zero, Gatorade Zero, Vitamin Water Zero,	Alcoholic beverages Drinks with added sugar Undiluted fruit juices and fruit drinks
	Protein2O, Ready water, Premier Protein Clear, Gatorade Zero with Protein or other	Carbonated drinks

Food group	Choose these foods	Avoid these foods
	similar products* Diluted and strained juice (75% water, 25% juice) Soup made with allowed ingredients Note: Drink 30 minutes before or after solid foods	**Note: Caffeinated fluids can contribute to dehydration. Avoid caffeine until you can drink enough to stay hydrated
Other	Sugar substitutes (stevia, monk fruit, artificial sweeteners) Ground spices or seasonings Unsweetened cocoa	Any food or fluid containing added sugars Sugar alcohols Spices or seasonings with large pieces such as garlic or oregano

Phase 1 Sample Meal Plan with Timing Schedule

Below is a sample meal plan for a day in the first 6-8 weeks after total gastrectomy (phase 1). This example has at least 1500 calories and 100 grams of protein. Your dietitian can help design a meal plan to meet your specific calorie and protein needs.

Time	Food	Fluids	Supplements
7:00 am	None	½ cup decaf tea with protein (milk, milk substitute and/or protein powder)	None
8:15 am	1 scrambled egg with cheese (prepared in oil) ½ slice wheat toast, topped with oil spread, margarine or butter	None	None

Time	Food	Fluids	Supplements
9:30 am	2 oz. cheese and 1 slice avocado on ½ tortilla ½ cup canned fruit in water	None	Calcium citrate 500mg
10:45 am	None	1+ cup water or sugar- free drink (sip slowly over 30+ minutes)	None
12:00 pm	½ cup tuna fish made with added fat (avocado, mayonnaise and/or hummus) on 1 slice wheat bread	None	Bariatric multivitamin
1:15 pm	None	1+ cup low-sugar, high protein drink	None
2:30 pm	34 cup unsweetened Greek yogurt topped with unsweetened apple sauce	None	Calcium citrate 500mg
3:45 pm	None	1+ cup homemade protein drink made with milk, allowed fruit(s), unsweetened nut butter and/or protein powder	None
5:00 pm	2 oz. grilled fish ½ cup cooked carrots (cooked in oil) ¼ cup rice made with oil, margarine or butter	None	Calcium citrate 500mg
6:15 pm	None	1+ cup water or unsweetened fluid (sip slowly over 30+ minutes)	None
7:30 pm	None	1+ cup low-sugar, protein drink	None

Time	Food	Fluids	Supplements
8:45 pm	½ cup cottage cheese	None	None

Phase 2

Once your weight loss slows and you are tolerating phase 1 foods well, you can begin phase 2. Phase 2 will be your lifelong dietary plan for eating without a stomach.

Just like in **phase 1**, remember to:

- Eat at least 6-8 small meals each day
- Eat slowly and relax while eating
- Chew foods completely before swallowing
- Drink liquids or soup 30 minutes before or 30 minutes after eating
 - Limit liquids to ¼-1/2 cup with meals
- Eat protein at every meal and snack
- Avoid added sugars
- Avoid alcohol
- Use a food diary as needed if you experience any discomfort after eating
- Talk to your dietitian about your specific calorie and protein needs and how to meet those needs



Source: https://visualsonline.cancer.gov/details.cfm?imageid=9494

In **phase 2** you can:

- Begin to add higher fiber foods (fresh fruits, vegetables, nuts, beans and whole grains) back into your diet one at a time
 - Reintroduce foods one at a time to make sure that you can digest each new food comfortably
- Include well-tolerated fruit, vegetables, whole grains, beans, nuts and other whole, plant-based foods in your meals every day
 - Make sure you balance higher fiber, lower calorie foods (such as fruits and vegetables) with higher calorie, high-protein foods as needed to avoid losing too much weight

Use the chart on the following pages to help guide what you can eat and what you should avoid in each food group after total gastrectomy.

Phase 2: Foods to choose and foods to limit lifelong after total gastrectomy

Food group	Choose these foods	Limit these foods
Breads, Starches and Grains	Whole grain cereals, breads, starches and grains	Sugar-sweetened breads, starches or grains
	You must eat these foods with a protein. Examples:	Any food that you cannot chew thoroughly
	 English muffin + egg Whole grain crackers + peanut butter Whole grain pasta + meatballs Pretzels + hummus Brown rice + beans Quinoa + chicken Unsweetened cereal + milk or yogurt 	

Food group	Choose these foods	Limit these foods
Protein Sources	All lean meats, poultry, fish and shellfish Nuts, unsweetened nut butters, seeds, lentils, legumes and beans Eggs Milk, cheese, cottage cheese, unsweetened or artificially sweetened yogurt High protein drinks without added sugar Protein bars without added sugar	Any food made with added sugars Any food that you cannot chew thoroughly
Vegetables	All fresh, frozen or canned vegetables as tolerated	Vegetables with added sugar or sweetened sauces
Fruits	All fresh fruits as tolerated You must eat these foods with a protein. Examples:	Dried fruit, fruit in sweetened juice or syrup and undiluted fruit juices
	 Berries + unsweetened yogurt Apples + unsweetened peanut butter Grapes + cheese 	
Fats & Oils	Oils, avocado, hummus, unsweetened nut butters, margarine or butter, cream, cream cheese, sour cream, mayonnaise and full-fat salad dressings Note: Fats & oils are high in calories. Use more if you have trouble maintaining your weight or need to regain weight.	Sweetened cream cheese, honey butter, salad dressings made with honey and other fats made with added sugars

Food group	Choose these foods	Limit these foods
Fluids, Drinks and Soups	Water (mix with flavor enhancer as needed if you have difficulty with water) Milk Artificially sweetened (diet) drinks Coffee, tea Low sugar protein drinks and protein waters (see phase 1 table) Homemade protein drinks Soup, broth Note: Long-term, you may be able to sip fluids with meals, but to promote best absorption, drink larger volumes 30 minutes before or 30 minutes after consuming solid foods.	Sugar sweetened beverages Alcohol Carbonated beverages
Desserts/Sweets	Sugar-free desserts without sugar alcohols Baked goods made without added sugars. You can sweeten baked goods with dates, ripe bananas, unsweetened applesauce or other naturally sweet ingredients. Artificial sweeteners, sugar-free gum, artificially sweetened hard candy, sugar-free syrup, 100% fruit preserves and low sugar jelly Eat these foods with protein or at the end of a meal containing protein.	Any sugar sweetened dessert. Note: Long term, you will likely be able to tolerate small portions of sugar sweetened items if eaten after a meal high in protein but there is still a lifelong risk of early and late dumping syndrome.
Condiments	Salt, pepper, herbs, spices Condiments, marinades and dressings without added sugar	Any condiment that is sugar sweetened. Examples include sweet and sour sauce, honey glazes and BBQ sauce

^{*}Products named serve as examples and do not imply endorsement by NIH. The fact that a certain product is not named does not imply that such product is unsatisfactory.