

Your Health Education

Diet After Fundoplication Surgery

What is a fundoplication?

A fundoplication is a type of surgery used to treat gastroesophageal reflux disorder (GERD). GERD happens when the muscle at the end of the esophagus is too loose. Food and other stomach contents come up into the esophagus which can be very painful and lead to chronic and severe heartburn. This surgery tightens the junction between the esophagus and stomach. After surgery, the pain and heartburn should improve.

What does life look like after the surgery?

Immediately following surgery, you may have trouble swallowing however this should resolve as swelling at the surgical site improves. Strict adherence to your post-operative diet is crucial to help prevent problems during your recovery.

You will need to adjust what you eat over the next several weeks for maximum healing. You will be on a clear liquid diet for 1-2 days, a full liquid diet for 5-7 days, and a fundoplication soft diet for 2-4 weeks. Please be aware that every patient may respond differently to certain foods. Your doctor will make changes to your diet depending on how you progress after surgery. Some flexibility with the following diet recommendations is permitted if you have good tolerance to most foods during the healing process. However, if you experience any problems with your diet, please let your surgeon know right away.

General Guidelines

- Following a special diet after surgery is necessary for healing.
- Your diet will progress slowly from clear liquids to full liquids to soft foods.
- Eat small frequent meals (6-8 per day). Eat very slowly. Take your time when eating.
- Sit upright while eating and stay upright for 30 minutes after each meal.
- Do not lie down after eating. Sit upright for 2 hours after the last meal or snack of the day.
- Do not use straws, chew gum, or smoke.
- Do not drink carbonated beverages.
- You may experience taste changes for several weeks.
- You may encounter “good days” and “bad days.” Often foods that go down easily one day may give you problems the next. Realize this is part of the healing process.
- Please contact your surgeon immediately if you have any retching or vomiting.

Tips for tolerating your diet

- Avoid items that triggered your reflux in the past.
- Avoid foods that may get stuck above the surgical site like chunks of meat, cheesy potatoes, and white bread.

- Introduce items one at a time to determine tolerance.
 - To avoid chest pain, take small bites and chew for 30 seconds.
 - Try not to vomit, cough, retch, or strain as this can affect your surgical site.
 - Avoid alcohol, spicy foods, extreme temperatures (very hot or very cold), and gas-forming, acid producing foods or foods that slow stomach emptying:
 - Tomato based products
 - Peppermint
 - Black pepper
 - Caffeinated drinks
 - Onions
 - Green peppers
 - Fatty foods
 - Beans
 - Citrus fruits
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Commonly Asked Questions

How do I keep my stomach from stretching?

- Eat small frequent meals (6-8 per day). This will help you consume the majority of the nutrients you need without causing your stomach to feel full or distended.
- Once advanced to solid foods, limit fluids to ½ cup (4 fluid ounces) with meals and one cup (eight fluid ounces) with snacks. You may drink fluids *between* meals as often as you like. Drinking large amounts of fluid *with* meals can stretch your stomach.
- Sit upright while eating and stay upright for 30 minutes after each meal. Gravity can help food move through your digestive tract.
- Do not lie down after eating. Sit upright for 2 hours after your last meal or snack of the day.
- Eat very slowly. Take your time when eating.
- Take small bites and chew your food well to help aid in swallowing and digestion.
- Avoid crusty breads and sticky, gummy foods, such as rolls and doughnuts. These types of foods become sticky and difficult to swallow. Toasted breads tend to be better tolerated.
- Lastly, if you eat sweets, consume them at the end of your meal to avoid a group of symptoms referred to as “dumping syndrome.” This describes the rapid emptying of food from the stomach to the small intestine. Sweetened beverages, candy, and desserts move more rapidly and dump quickly into the intestines. This can cause symptoms of nausea, weakness, cold sweats, cramps, diarrhea, and dizzy spells.

How do I avoid gas?

- Avoid drinking through a straw. Do not chew gum or tobacco. These actions cause you to swallow air, which produces excess gas in your stomach. Chew with your mouth closed.
- Avoid any foods that cause stomach gas and distention. This includes foods like corn, dried beans, peas, lentils, onions, broccoli, cauliflower, and any food from the cabbage family.
- Avoid carbonated drinks, alcohol, citrus, and tomato products.

What is a clear liquid diet?

A clear liquid diet consists of liquids that are easily digested and leave no undigested residue in your intestinal tract. Liquids and foods on the clear liquid diet may be colored so long as you are able to see through them. Foods can be considered liquid if they partly or completely melt to liquid at room temperature. You cannot eat solid food while on a clear liquid diet. Also note that while some carbonated drinks are clear, carbonation is not allowed for the first 6-8 weeks following surgery. Here are a few common examples of clear liquids:

- Juice such as apple, cranberry, or grape
- Cranberry juice
- Broth such as chicken, beef, or vegetable
- Jell-O®
- Popsicles

What is a full liquid diet?

This diet includes anything on the clear liquid diet, plus milk, ice cream, yogurt and liquid nutritional supplements (such as Ensure® or Boost®). Be aware that dairy products may cause diarrhea in some people just after surgery so you may want to avoid milk products. If this is the case you can substitute them with lactose-free beverages, such as soy, rice, or other almond milks. Full liquids foods must be able to pass through a strainer completely without any remaining chunks or bits of food. Other full liquid diet items include:

- Cream of wheat, cream of rice, and grits
- Strained creamed soups (no tomato or broccoli)
- Vanilla and butterscotch pudding
- Sherbet

How do I prevent acid reflux?

While anti-reflux precautions are not necessarily for everyone, you may consider following them to limit your chances of experiencing heartburn. Some foods to avoid include:

- Citrus
- Alcohol
- Caffeine
- Chocolate
- Mint

Fundoplication Soft Diet:

Food Category	Foods to Choose	Foods to Avoid
Beverages	<ul style="list-style-type: none"> • Milk such as 1%, non-fat, or skim, soy, rice, and almond • Decaf tea and coffee • Powdered drink mixes (in moderation) • Non-citrus juices (apple, grape, cranberry, or blends of these) • Fruit nectars • Nutritional drinks including Boost, Ensure, and Carnation Instant Breakfast 	<ul style="list-style-type: none"> • Chocolate milk, cocoa, or other chocolate-flavored snacks • Carbonated drinks • Alcohol • Citrus juices like orange, grapefruit, lemon, and lime • Whole and 2% milk • Caffeinated beverages (if poorly tolerated)
Breads	<ul style="list-style-type: none"> • Pancakes, French toast, and waffles with syrup • Crackers (saltine, butter, soda, graham, Goldfish, and Cheese Nips) • Toasted bread 	<ul style="list-style-type: none"> • untoasted bread, bagels, Kaiser and hard rolls, English muffins • Crackers with nuts, seeds, fresh or diced fruit, or highly seasoned such as garlic or onion-flavored • Sweet rolls, coffee cake, or doughnuts
Cereals	<ul style="list-style-type: none"> • Well-cooked cereals, such as oatmeal and cream of wheat (plain or flavored) • Cold cereal (Cornflakes, Rice Krispies, Cheerios, Special K plain, Rice Chex, and puffed rice) 	<ul style="list-style-type: none"> • Very coarse cereal, such as bran or shredded wheat • Any cereal with fresh or dried fruit, coconut, seeds or nuts
Desserts	<ul style="list-style-type: none"> • Plain cakes, cookies, and cream-filled pies 	<ul style="list-style-type: none"> • Desserts containing chocolate, coconut, nuts,

<p><i>Eat in moderation and do not eat desserts or sweets by themselves</i></p>	<ul style="list-style-type: none"> • Vanilla and butterscotch pudding or custard • Low fat ice cream, ice milk, frozen yogurt and sherbet • Gelatin made from allowed foods • Fruit ices and popsicles 	<p>seeds, fresh or dried fruit, peppermint or spearmint</p> <ul style="list-style-type: none"> • Full fat desserts may cause heartburn
<p>Eggs</p>	<ul style="list-style-type: none"> • Poached, hard boiled, or scrambled 	<ul style="list-style-type: none"> • Fried eggs and highly seasoned eggs (deviled eggs)
<p>Fats <i>Eat in moderation.</i></p>	<ul style="list-style-type: none"> • Butter and margarine • Mayonnaise and vegetable oils • Mildly seasoned cream sauces and gravies • Low fat sour cream and cream cheese 	<ul style="list-style-type: none"> • Highly seasoned salad dressings, cream sauces and gravies • Bacon, bacon fat, ham fat, lard and salt pork • Fried foods • Nuts • Full fat dairy products
<p>Fruits</p>	<ul style="list-style-type: none"> • Fruit juice • Mashed bananas • Any canned or cooked fruit except those listed in the avoid column 	<ul style="list-style-type: none"> • ALL fresh fruits, such as citrus, and pineapple • Canned pineapple • Dried fruits, such as raisins and berries • Fruits with seeds, such as berries, kiwi, and figs
<p>Meat, Fish, Poultry, and Dairy Products</p>	<ul style="list-style-type: none"> • Meats may be ground, minced or chopped to ease swallowing and digestion • Tender, well cooked and moist cuts of chicken and turkey • Ground beef and pulled pork • Veal and lamb • Flaky, cooked fish • Canned tuna • Cottage cheese and ricotta cheeses 	<ul style="list-style-type: none"> • Chunks of meat • Tough meats with a lot of gristle • Fried, highly seasoned, smoked and fatty meat, fish or poultry, such as frankfurters, luncheon meats, sausage, bacon, spareribs, beef brisket, sardines, anchovies, duck, and goose • Chili and other entrees made with pepper or chili pepper

	<ul style="list-style-type: none"> • Mild cheese, such as American, brick, mozzarella, and baby Swiss • Creamy peanut butter • Plain custard or blended fruit yogurt • Moist casseroles, such as macaroni & cheese, and tuna noodle • Grilled or toasted cheese sandwich 	<ul style="list-style-type: none"> • Shellfish • Strongly flavored cheeses, such as sharp cheese, extra sharp cheddar, cheese containing peppers or other seasonings • Crunchy peanut butter • Any yogurt with nuts, seeds, coconut, strawberries or raspberries
Potatoes and Starches	<ul style="list-style-type: none"> • Peeled, mashed or boiled white or sweet potatoes • Oven-baked potatoes without skin • Well-cooked white rice, enriched noodles, barley, spaghetti, macaroni, and other pastas (wait till four weeks to have rice or pasta) 	<ul style="list-style-type: none"> • Fried potatoes, potato skins, and potato chips • Hard and soft taco shells • Fried, brown or wild rice • Cheesy potatoes
Soups	<ul style="list-style-type: none"> • Mildly flavored meat stocks • Cream soups made from allowed foods 	<ul style="list-style-type: none"> • Highly seasoned soups and tomato-based soups, cream soups made with gas producing vegetables, such as broccoli, cauliflower, onion, etc.
Sweets and Snacks <i>Use in moderation and do not eat large amounts of sweets by themselves.</i>	<ul style="list-style-type: none"> • Syrup, honey, jelly, and seedless jam • Plain hard candies and plain candies made with allowed ingredients • Molasses • Marshmallows • Other candy made from allowed ingredients • Thin pretzels 	<ul style="list-style-type: none"> • Jam, marmalade, and preserves • Chocolate in any form • Any candy containing nuts, coconut, seeds, peppermint, spearmint, or dried or fresh fruit • Popcorn, potato chips, tortilla strips • Soft or hard thick pretzels, such as sourdough

Vegetables	<ul style="list-style-type: none"> • Well-cooked soft vegetables without seeds or skins, such as asparagus tips, beets, carrots, greens and wax beans, chopped spinach, tender canned baby peas, squash and pumpkin 	<ul style="list-style-type: none"> • Raw vegetables, tomatoes, tomato juice, tomato sauce and V-8 juice • Gas producing vegetables, such as broccoli, Brussel sprouts, cabbage, cauliflower, onions, corn, cucumber, green peppers, rutabagas, turnips, radishes, and sauerkraut • Dried beans, peas, and lentils
Miscellaneous	<ul style="list-style-type: none"> • Salt and spices in moderation • Mustard and vinegar in moderation 	<ul style="list-style-type: none"> • Fried or highly seasoned foods • Coconut and seeds • Pickles and olives • Chili sauces, ketchup, barbeque sauce, horseradish, black pepper, chili powder, and onion and garlic seasonings • Any other strongly flavored seasoning, condiments, spice or herbs not tolerated

Soft Diet Sample Menu	
Breakfast	<ul style="list-style-type: none"> • ½ cup canned fruit (non-citrus) • ½ to ¾ cup cereal • 1 small pancake • 1 tsp. margarine • 1 tsp. jelly • ½ cup 2% milk • 1 tsp. sugar
Mid-Morning Snack	<ul style="list-style-type: none"> • 2 graham crackers • 1 T creamy peanut butter • 1 tsp. jelly • 1 cup tea
Lunch	<ul style="list-style-type: none"> • ½ cup tuna salad (no raw vegetables) • 3 to 4 saltine crackers • ½ cup canned peaches • ½ cup fruit juice (non-citrus) • 1 tsp. mayonnaise
Mid-Afternoon Snack	<ul style="list-style-type: none"> • 4 saltine crackers • 1 T cream cheese • 1 cup 2% milk
Dinner	<ul style="list-style-type: none"> • 3 oz. roasted chicken (finely ground) with sauce • ½ cup mashed potatoes and gravy • ¼ cup cooked carrots • ½ cup canned pears • 1 tsp. margarine • ½ cup tea • 1 tsp. sugar
Evening Snack	<ul style="list-style-type: none"> • ¼ cup cottage cheese • ½ cup applesauce • ½ cup 2% milk

Adapted from:
Surgical Fundoplication Diet. UCLA Health. Retrieved April 26, 2023, from
<https://www.uclahealth.org/sites/default/files/documents/Nutrition-Fundoplication-Diet.pdf?f=ef21607d>

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