Post-Esophagectomy Diet

Esophagectomy is a surgery to remove all or part of the esophagus, which is the tube food moves through on its way from the mouth to the stomach. When the esophagus is removed, the stomach is pulled up into the chest and reattached to keep the food passageway intact. This stretching of the stomach takes away the ability to eat large meals, as there is no longer a large "holding area" for food to be digested. Nutrition is an important part of healing and preventing weight loss after surgery. Patients can experience nausea, vomiting, acid reflux, and dumping syndrome. This article will review some ways to decrease these symptoms. Check with your healthcare team for specific recommendations for your case.

After the surgery, the remaining esophagus may not be able to move foods as easily from your mouth to your stomach. Certain foods can block the esophagus or be difficult to swallow. Some people complain of food "sticking", or have midsternal (behind the breast bone) pain. This may be prevented or resolved by sipping fluids when eating solid foods, chewing foods well, eating soft or chopped foods and avoiding tough, gummy, or stringy foods.

You may also get gastroesophageal reflux symptoms, such as heartburn and reflux of stomach contents, causing intolerance to certain foods, especially acidic, fatty, and very hot or very cold foods. Gas and bloating sometimes occur after surgery. Therefore, you may wish to avoid foods that are known to cause gas.

Each person is different and will tolerate different foods. Only you can decide which foods 'agree' with you and which don't. Below are ideas that may help you to manage your symptoms. The most important guide is how you feel after eating a food.

Diet Basics After Esophageal Surgery

- **Foods to Avoid:**
  - Soft Bread/Rolls
  - Tough, fibrous, or grisly meats
  - Foods that cause discomfort
- Soft, moist foods may be more easily tolerated
- Take small bites and chew foods well
- After surgery, you may have decreased stomach capacity and less tolerance to certain foods
- If a food causes you discomfort, wait a week or two then retry the food
- Try eating 6 small, high calorie, high protein meals and snacks throughout the day, rather than 3 larger meals.
- Drink 6-8 eight-ounce glasses of fluids daily
- Stop eating when you start to feel full
- Take a daily multivitamin. A chewable multivitamin is usually well tolerated. Take either one adult or 2 children's chewable vitamins. A calcium supplement may be indicated – ask your surgeon.

Tips to avoid heartburn or reflux

- Avoid tight fitting clothing and frequent bending
- Elevate bed at 6 inches when sleeping
- Limit caffeine intake (coffee, tea and cola drinks).
- Limit fatty foods
- Avoid chocolate
- Avoid acidic foods (tomatoes, vinegar, hot peppers and citrus fruits)
- Avoid spearmint and peppermint
- Avoid carbonated beverages
- Limit or avoid alcohol
- Avoid eating both extremely hot or cold foods
- Sit upright after eating and remain in a sitting position for 45-60 minutes after eating
- Do not eat for 2 hours before bedtime

**Tips for avoiding gas and bloating**
- Foods which may cause gas and bloating: beans, broccoli, Brussels sprouts, cauliflower, cabbage, corn, garlic, lentils, turnips, onions, scallions, peas, sauerkraut, soybeans, apples, avocados, watermelon, cantaloupe, honeydew melon, beer and nuts
- Avoid "air swallowing" activities: using straws, slurping foods, chewing gum and drinking carbonated beverages

**Dumping Syndrome**
Dumping syndrome is another possible concern after esophageal surgery. This happens when undigested food is "dumped" too quickly from the stomach into the small intestine. Symptoms such as nausea, feelings of fullness, and crampy abdominal pain are followed by diarrhea, usually within 15 minutes of a meal. Some individuals may also experience low blood sugar 1 to 2 hours after meals, which may cause weakness, nausea, sweating, hunger, fast heart rate, anxiety, and shaking.

Please note that some of the suggestions for managing dumping syndrome conflict with recommendations provided for decreasing reflux and for ease of swallowing. Use the suggestions that help manage your symptoms.

**Tips to Avoid Dumping Syndrome**
- Drink liquids 30 to 60 minutes before or after meals and limit it to ½ to 1-cup servings. Choose unsweetened liquids (100% fruit juice may be diluted).
- Drink six to eight 8-ounce glasses of non-caffeinated beverages daily. Carbonated beverages should be avoided initially, as they may cause gas and bloating.
- Eat small, frequent meals. If you experience discomfort after eating, decrease your portion sizes or number of foods eaten at one time. Try to eat three small meals and three between-meal snacks. The evening snack should be eaten 2 hours before bedtime.
- Relax at mealtimes, eat slowly and chew your food well.
- All food and drink should be moderate in temperature. Avoid very cold or frozen foods, and very hot foods.
- Initially, you may experience lactose intolerance (the inability to digest milk sugar). Try small amounts of milk to determine tolerance.
- The diet should be moderate in fat (fat slows stomach emptying), high in protein, and low in simple carbohydrates (sugar, sweets).
- If your appetite is poor and weight loss occurs, a liquid supplement may be used.
  - Examples include: Ensure® or Boost®, which contain sugar.
  - If avoiding sugar or sweets, Diet Carnation Instant Breakfast® (which contains milk), Boost Glucose Control® or Glucerna®
- Eat a variety of foods to assure adequate amounts of vitamins, minerals, calories and protein to meet your needs and prevent weight loss. A multivitamin is recommended. Ask your doctor if you require calcium, iron, vitamin B12 or folic acid supplements after surgery.
- Avoid foods that are natural laxatives such as caffeine, prunes and other dried fruits

**Sample Meal Plan**

<table>
<thead>
<tr>
<th>Breakfast</th>
<th>Lunch</th>
<th>Dinner</th>
</tr>
</thead>
</table>

*Information Provided By: www.oncolink.org | © 2019 Trustees of The University of Pennsylvania*
### Midmorning Snack
- ½ Banana
- Cold/Hot Cereal (1/2 cup)
- 1 Slice Toast
- Margarine (1 tsp)
- *Milk (1/2 cup)

### Afternoon Snack
- Hamburger patty (2 oz)
- Toasted hamburger bun
- Sliced tomato & lettuce
- Mayonnaise/Ketchup
- Applesauce (1/2 cup)
- *Milk (1/2 cup)
- *Tea (1/2 cup)

### Bedtime Snack
- Broiled Chicken (3 oz)
- Broccoli (1/2 cup)
- 1 small baked potato
- Margarine (2 tsp)
- Fruit Cocktail (1/2 cup)
- *Tea/Coffee (1/2 cup)

*If experiencing dumping syndrome, liquids should be given 30-60 minutes before or after the meal and limited to ½ to 1-cup servings.

## Food List

This list contains general recommendations as to how well specific foods are tolerated by people after esophagectomy.

<table>
<thead>
<tr>
<th>Generally Well Tolerated</th>
<th>Generally Not Tolerated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beverages</strong></td>
<td>Milk as tolerated, tea, unsweetened or diluted fruit drinks, water</td>
</tr>
</tbody>
</table>
| **Breads & Cereals** | Unsweetened dry cereals, cooked cereals (oatmeal, farina, grits, cream of wheat, cream of rice)  
*Well toasted breads and dense coarse breads/rolls may be tolerated*  
Soft, breads, rolls, bagels, English muffins, thick-crust pizza, soft pretzels  
**Hard pretzels & corn chips may cause discomfort*** |
| **Desserts** | Sugar-free pudding or custard, sugar free gelatin, artificially sweetened frozen yogurt, ice cream, sherbet and ice milk, sugar-free popsicles  
All doughy baked desserts, all sweets and desserts made with sugar, dried fruits, or chocolate* |
| **Fats** | Butter, margarine, salad dressing, vegetable oils, sour cream, cream cheese  
Sweetened salad dressings* |
| **Fruits** | Unsweetened canned fruits and fruit juices, fresh fruits  
All dried fruits, sweetened fruit juice, fruits canned in light or heavy syrup*  
Citrus fruits* |
| **Meats & Meat Substitutes** | Ground or chopped meats, slow cooked tender meats (pot roast and stews), lean, tender meats, fish, poultry, shellfish, eggs, smooth peanut butter, cottage cheese, cheeses, tofu and soy products  
Tough, stringy, or grisly meats. Highly spiced or seasoned meats*  
Fried meats* |
| **Potatoes & Other Starches** | Potatoes, rice, barley, noodles, pasta  
Any to which sugar has been added* |

*If experiencing dumping syndrome, liquids should be given 30-60 minutes before or after the meal and limited to ½ to 1-cup servings.
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Avoidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soups</td>
<td>Soups made with well cooked and tender meats</td>
<td>Soups prepared with heavy cream or high fat ingredients* or tomato based*</td>
</tr>
<tr>
<td>Sweets</td>
<td>Sugar substitutes and sweets made with sugar substitutes</td>
<td>Sugar*, syrup*, honey*, jelly*, jam*, molasses*, marshmallows*</td>
</tr>
<tr>
<td>Vegetables</td>
<td>Cooked fresh or frozen vegetables, canned vegetables or vegetable juices, raw vegetables as tolerated, small pieces may be easier to swallow</td>
<td>Fried vegetables* Tomatoes*</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>Salt, pepper, mildly flavored sauces and gravies, other seasonings as tolerated</td>
<td>Hot peppers*, tomato products*, products made with mint*, acidic foods*, vinegars*</td>
</tr>
</tbody>
</table>

*If no adverse symptoms occur, these foods can be added as tolerated.