Your Diet After an Esophagectomy

Diana Glauner, RD, CSO, CDN
Outline

- Post-Esophagectomy Diet Guidelines
- Adjusting to Smaller Portion Sizes
- Maximizing Calories & Protein After Surgery
- Diet Guidelines for Preventing a Cancer Recurrence
- Resource List
Post-Esophagectomy Diet Guidelines

- Smaller stomach size
  - 6 or more small meals daily
  - Limit fluids to 4 ounces (1/2 cup) with meals
  - Up to 8 ounces fluid one hour before or after a meal
- Chew foods well
- Eat *slowly* to prevent overfilling
- Preventing reflux
  - Sit upright during meals & for one hour afterwards
  - Last meal 2 hours before bedtime
  - Head of bed elevated to 45 degree angle
  - Avoid clothes tight-fitting around waistline
Post-Esophagectomy Diet cont’d

- Trial & error with...
  - Sweets → possible “dumping syndrome”. Symptoms:
    - Early 20-30 min: nausea, bloating, abdominal pain, diarrhea
    - Late 1-3 hrs: shakiness, sweating, confusion, weakness
    - Soluble fibers in canned fruits, bananas, oatmeal, nuts, peas, legumes (beans) may help
  - Dairy → possible lactose intolerance—gas, bloating, cramping, diarrhea—may be temporary post-op
    - Try lactase tablets or drops; Lactaid® milk, cottage cheese etc.
    - Yogurt, hard cheeses may be better tolerated than milk
Diet Composition After Surgery

- High protein—chicken, fish, eggs, dairy, tofu, nut butters
- Moderate fat
- Choose complex carbohydrates—potato, rice, pasta
- Test tolerance for simple carbohydrates/sweets—sugar, cakes, candies, fruit juices, regular sodas
Other Considerations.

- All or majority of stomach removed? → may need B₁₂ shots, iron or calcium supplementation—check with M.D.
- Poor intake of fruits & vegetables? Consider multivitamin with 100% of RDI for vitamins & minerals—clear with M.D.
- Difficulty swallowing?
  - Tell your doctor
  - Try soft, moist foods—meat loaf & gravy, macaroni & cheese, mashed potatoes, ground, finely diced or pureed foods & liquid nutritional supplements
# Adjusting Your Portion Sizes

**Goal:** Half usual amount per meal 6 times daily

<table>
<thead>
<tr>
<th>Usual Portion</th>
<th>Visual of Usual Portion</th>
<th>Suggested New Portion</th>
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<tbody>
<tr>
<td>3 ounce meat, chicken</td>
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<td>2 ounce meat, chicken</td>
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<tr>
<td>3 ounce fish</td>
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<td>2 ounce fish</td>
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<tr>
<td>1 cup fruit, vegetable or cereal</td>
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<td>½ cup fruit, vegetable or cereal</td>
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<td>1 ounce cheese</td>
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<td>1 to 2 ounces of cheese</td>
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(C) Diana Glauner, RD, CSO, CDN
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<tr>
<th>MEAL</th>
<th>TIME</th>
<th>SAMPLE MENU</th>
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<tbody>
<tr>
<td>Breakfast</td>
<td>7:30 am</td>
<td>½ c. oatmeal, 4 oz. milk/Lactaid®, ½ banana</td>
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<tr>
<td>Fluid Break</td>
<td>9:00 am</td>
<td>4 oz. juice &amp; 4 oz. water</td>
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<td>Snack</td>
<td>10:00 am</td>
<td>6 oz. plain or fruit yogurt</td>
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<td>Fluid Break</td>
<td>11:30 am</td>
<td>8 oz. milk/Lactaid®</td>
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<td>Lunch</td>
<td>12:30 pm</td>
<td>4 oz. chicken soup, ½ tuna salad sandwich</td>
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<td>Fluid Break</td>
<td>2:00 pm</td>
<td>8 oz water</td>
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<tr>
<td>Snack</td>
<td>3:00 pm</td>
<td>3 tbsp. hummus, ¼ pita bread, 4 oz. juice</td>
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<tr>
<td>Fluid Break</td>
<td>4:30 pm</td>
<td>8 oz. tomato juice</td>
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<tr>
<td>Dinner</td>
<td>5:30 pm</td>
<td>2 oz. baked chicken, ½ c. mashed potato, ½ c. cooked carrots, 4 oz. water</td>
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<tr>
<td>Fluid Break</td>
<td>7:00 pm</td>
<td>4 oz. juice &amp; 4 oz. water</td>
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<tr>
<td>Snack</td>
<td>8:00 pm</td>
<td>½ peanut butter sandwich, 4 oz. milk/Lactaid®</td>
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Adapting to Eating Out

- Choose small soup OR beverage instead of both
- Having an appetizer? → take home entrée
- No appetizer? → eat half of entrée and take home the rest
- Dessert → consider having dessert with 4 oz beverage 2 ½ to 3 hours later at home
Maximizing Calories & Protein After Surgery

- Try including these foods.
  - Peanut butter, almond, cashew or soy butters
  - Trail mix
  - Hummus (chick pea dip)
  - Guacamole or avocados
  - Whole milk yogurt, puddings, cheeses
- Avoid low fat & diet products
Maximizing Calories & Protein

- Drink “double milk” (1 quart fluid milk mixed with 1 envelope powdered milk) and/or use in instant mixes in place of water
- Add powdered milk to soups, mashed potatoes, milkshakes, casseroles
- Add butter, margarine, oils, mayonnaise, sour cream, Half ‘n’ Half®, “regular” salad dressings to foods
- Have desserts that contain eggs—custard, pudding, cheesecake
- Blend peanut or other nut butters in with shakes
Maximizing Calories & Protein

- Make your fluids count
  - Don’t fill up on low or zero calorie beverages such as coffee, tea, water, diet sodas
  - Instead try . .
    - Whole milk, Lactaid® milk, “double milk”, or milkshakes or smoothies
    - Fruit juices & nectars--dilute with water as needed
    - Oral supplement drinks
    - Instant breakfast drink powder mixed with whole milk, “double milk” or Lactaid® milk
Maximizing Calories & Protein

- Make meals appealing & easily accessible
  - Serve smaller portions on salad plates
  - Use a variety of food colors & textures
  - Keep snack foods readily available
  - Eat your favorite foods any time of day—e.g. omelet or pancakes for dinner
AICR* Diet Recommendations to Prevent a Cancer Recurrence

- Once weight is stable after treatment...
  - Be lean, but not underweight
  - Avoid sugary drinks & limit energy-dense foods
  - Eat a variety of vegetables, fruits, whole grains, legumes (beans)
  - Limit red meats (beef, pork, lamb) to 18 ounces weekly & avoid processed meats
  - If consumed at all, limit daily alcohol to 1 drink for women, 2 for men—check with M.D. whether permissible!
  - Limit salty foods & foods processed with salt
  - Don’t use supplements to protect against cancer → get nutrients from whole fruits & vegetables instead

*American Institute for Cancer Research
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<tr>
<th>Height (Feet-Inches)</th>
<th>Weight (Pounds)</th>
<th>BMI</th>
<th>Normal</th>
<th>Overweight</th>
<th>Obese</th>
<th>Extreme Obesity</th>
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Adapted from: George Bray, Pennington Biomedical Research Center; Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report, National Institutes of Health, National Heart, Lung, and Blood Institute, September 1998.
Foods that May Help Prevent Esophageal Cancer

- **Strawberries & Raspberries**
  - Rich in ellagic acid, a phytochemical that acts as an antioxidant. In lab studies, it deactivates specific carcinogens & slows reproduction of cancer cells

- **Cruciferous Vegetables**
  - Include broccoli, cauliflower, cabbage, Brussels sprouts, bok choy, kale
  - Contain glucosinolates, crambene, indole-3-carbinol, & isothiocyanates, compounds linked to reduced cancer risk in lab studies

- **Green Tea**
  - Contain polyphenols & a flavonoids called catechins, potent antioxidants which have been shown to reduce cancer risk in those who regularly consume green tea

www.aicr.org
Resources

Esophageal Cancer Awareness Association:
1-866-370-3222
www.ecaware.org

National Cancer Institute:
1-800-4-CANCER
www.cancer.gov

America Cancer Society:
1-800-ACS-2345
www.cancer.org

American Institute for Cancer Research (AICR):
1-800-843-8114
www.aicr.org

Memorial Sloan-Kettering Cancer Center:
212-639-2000
www.mskcc.org

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Resources cont’d

Abramson Cancer Center of the University of Pennsylvania:

www.oncolink.org

American Dietetic Association:

1-800-366-1655 for referral to local Registered Dietitian (RD)

www.eatright.org

U.S. Federal Government:

www.nutrition.gov