

MRN: Patient Name:  (Patient Label)
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## Changing from Tube Feeding to Oral Diet after Esophageal Surgery

### INTRODUCTION

Once your thoracic surgeon has cleared you to start an oral diet, please follow these guidelines along with assistance from your nurse practitioner and dietitian.

Day	Instructions
<b>1-2</b>	Oral: Drink clear liquids.
<b>3-4</b>	Oral: Consume blenderized foods.
<b>5-6</b>	Oral: Eat soft foods, eating 4-6 small meals throughout the <b>daytime</b> .
<b>7</b>	Oral: Eat soft foods, eating 4-6 small meals throughout the <b>daytime</b> . Frequent snacking between meals is encouraged.

## How to Manage Your Tube Feeding as You Start Eating

As you start eating and are able to increase your food intake, you can start reducing your tube feeding amount and time. This table can help you navigate through this process.

Amount of Meals Eaten	Tube Feeding Adjustments
Less than 50% of meals	Continue your current tube feeding regimen.
50% of most meals	Reduce your tube feeding time by half. <i>Example: If you run your tube feeding 16 hours per day, you can reduce it to 8 hours per day.</i>
50-75% of most meals	Reduce your tube feeding time by a third. <i>Example: If you run your tube feeding 12 hours per day, you can reduce it to 4 hours per day.</i>
75% or more of most of your meals	Stop tube feeding and use oral nutrition supplements as needed.

**Remember that oral nutrition supplements also count!** If you are able to drink an oral nutrition supplement that is at least 250-300 calories and has at least 12 grams of protein per carton or bottle, you will be able to decrease your tube feeding time. For every can or bottle you drink, you can remove one can of tube feeding formula.

Remember, changing from tube feeding to oral feeding is different for everyone and you may need more time to adjust.

### Things to Consider

1. If you are underweight or have poor nutritional status, then you might need to continue both oral and tube feedings.
2. If you are still receiving chemotherapy, then it is best to continue tube feeds and keep the feeding tube in case you become dehydrated.
3. If you have diabetes, then it is critically important to adjust diabetes medications and especially insulin during the change from tube feeding to oral feeding to avoid low blood sugar. Close blood sugar monitoring is very important if you are a diabetic.
4. If you notice weight loss of 3% of your bodyweight, please contact us. For example:
  - If you weigh 100 pounds, 3% of your body weight would be 3 pounds.
  - If you weigh 150 pounds, 3% of the body weight would be 4 ½ pounds.
  - If you weigh 180 pounds, 3% of your body weight would be 5 ½ pounds.

## STAGE 1 – CLEAR LIQUIDS

Clear liquids are used as an initial step to reintroduce foods after your esophageal surgery. Clear liquid diets consist of liquids that are transparent (you can see through them). A clear liquid diet alone does not provide enough nutrients to meet your body’s nutrition needs, so it should be used less than 1-2 days or with tube feeding.

Foods Recommended	Foods NOT Recommended
<ul style="list-style-type: none"> <li>• Water / ice chips</li> <li>• Translucent fruit juices without pulp, such as apple, cranberry, grape</li> <li>• Crystal Light®</li> <li>• Broth or bouillon</li> <li>• Gelatin</li> <li>• Fruit ice, sorbet and popsicles</li> <li>• Tea or coffee (sweetener and lemon ok for hot beverages, no dairy)</li> <li>• Hard candies</li> <li>• Salt for flavor</li> <li>• Soda (lemon-lime soda or ginger ale)</li> </ul>	<p>All others not listed in foods recommended.</p>

### Additional Suggestions

- This diet does not include dairy and dairy substitute items (soy, rice, almond, etc.) because they are not clear (you cannot see through them).
- You can take oral nutrition supplements such as Ensure Clear® or Boost Breeze® with other clear liquids or between meals.

### Sample Menu

<b>Breakfast</b>	4 ounces cranberry juice 12 ounces chicken broth 4 ounces orange gelatin Water, ice 8 ounces coffee
<b>Mid-Morning Snack</b>	8 ounces of Ensure Clear® or Boost Breeze®
<b>Lunch</b>	4 ounces grape juice 12 ounces beef broth Water, ice 1 popsicle 8 ounces tea
<b>Mid-Afternoon Snack</b>	8 ounces of Ensure Clear® or Boost Breeze®
<b>Dinner</b>	4 ounces apple juice 12 ounces of vegetarian broth 8 ounces crystal light Water, ice 1 lemon sorbet 8 ounces tea
<b>After-Dinner Snack</b>	4 ounces grape juice 1 fruit ice

## STAGE 2 – BLENDERIZED DIET

The blenderized diet includes mostly liquids (including milk) and some foods with small amounts of fiber. The blenderized diet can provide many of the nutrients your body needs, but it may not provide enough vitamins, minerals, fiber, protein or calories.

This diet should only be used temporarily during your recovery until it is safe for you to eat regular foods. Your registered dietitian can help establish a nutritionally-balanced, blenderized meal plan, if needed. Most food can be converted to a blenderized consistency while adding calories/protein.

### How to Thin by Food Type

<b>Meats, fish, poultry, pork</b>	Blend with broth, water, milk/milk substitute, tomato sauce, creamy soup, or gravy. <b>The consistency must be drinkable through a straw and it should be free of solids that require chewing or are difficult to swallow.</b>
<b>Vegetables</b>	Blend with water, tomato juice, broth, and strain. Ready-to-use substitute: strained baby food vegetables.
<b>Starches (potato, pasta, beans)</b>	Blend with soup, broth, milk/milk substitute, water, gravy. Ready-to-use substitute: Hot cereals (Cream of Wheat/Rice®, grits).
<b>Fruits</b>	Blend with fruit juices, milk/milk substitute, and strain. Read-to-use substitute: strained baby food fruit.

### How to Increase Calories/Protein on Blenderized Diet

- Prepare cereals with whole milk/milk substitute, or commercial protein drinks.
- Blend butter or oil with starches, meats or vegetables for extra calories.
- Blend foods with broth instead of water for additional calories.
- Blend fruit with fruit juices instead of water for additional calories.
- Fortify most foods with unflavored protein powder, such as pea-based or brown-rice based protein powder.
- Drink nutritional shakes in 6-8 ounce servings in-between meals to make sure you're taking in enough calories. You can make fortified shakes for yourself or buy them ready-made at a store.
- A high-protein shake should contain at least 8-10 grams of protein per serving. If you are preparing the shake at home, you can increase the amount of protein by adding protein powder or dry milk powder, soymilk, yogurt, or low-fat milk.

Food Group	Foods Recommended	Foods to Avoid During This Stage
<b>Breads, cereals, grains</b>	<ul style="list-style-type: none"> <li>• Thinned hot cereals like Cream of Wheat/Rice®</li> </ul>	<ul style="list-style-type: none"> <li>• All grain foods including whole grains, processed grains such as pasta, rice, cold cereals, bread, snacks and sweets that are flour based (cakes, cookies)</li> </ul>
<b>Vegetables</b>	<ul style="list-style-type: none"> <li>• Vegetable juice with or without pulp (well blended)</li> <li>• Thinned, pureed vegetable soups</li> </ul>	<ul style="list-style-type: none"> <li>• Whole, frozen, fresh, canned vegetables</li> </ul>
<b>Fruits</b>	<ul style="list-style-type: none"> <li>• Translucent fruit juices without pulp (apple, cranberry, grape)</li> </ul>	<ul style="list-style-type: none"> <li>• Whole, frozen, fresh, canned fruits</li> </ul>
<b>Plant-based protein sources</b>	<ul style="list-style-type: none"> <li>• Pureed tofu, beans thinned with broth or other liquids</li> <li>• Nut-based milk, oat milk, or coconut milk yogurt</li> </ul>	<ul style="list-style-type: none"> <li>• Nuts and nut butters</li> <li>• All meat substitutes (such as soy, firm/whole tofu)</li> <li>• All cold cuts (such as salami, ham)</li> </ul>
<b>Meats and other animal-based protein sources</b>	<ul style="list-style-type: none"> <li>• Pureed meats or poultry thinned with broth or other liquids</li> <li>• Eggs or egg substitutes</li> <li>• Soft cheeses</li> <li>• Greek yogurt</li> </ul>	<ul style="list-style-type: none"> <li>• Beef and pork (all cuts)</li> <li>• Chicken and turkey (all cuts)</li> <li>• Fish (all types)</li> <li>• Eggs (all types)</li> <li>• Hard cheese</li> <li>• Yogurt with fruit chunks</li> </ul>
<b>Oils</b>	<ul style="list-style-type: none"> <li>• Almond oil, avocado oil, canola oil, cashew oil, corn oil, grapeseed oil, olive oil, safflower oil, sesame oil, soybean oil, sunflower oil</li> <li>• Butter, soft tub margarine that does not contain trans-fat (melted or blended into foods)</li> </ul>	<ul style="list-style-type: none"> <li>• Lard, oils with trans-fat</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>• Seasonings, ground spices and smooth condiments as tolerated</li> <li>• Gravies and sauces, tartar sauce</li> </ul>	<ul style="list-style-type: none"> <li>• Condiments with chunks, pieces</li> </ul>
<b>Beverages</b>	All	None

## Sample Menu

<b>Breakfast</b>	<b><i>Mix well in a blender and then strain</i></b> 1 cup cooked oatmeal 1 cup 2% milk or milk substitute 1 teaspoon cinnamon 1 teaspoon brown sugar 1 teaspoon of oil or coconut milk (optional for additional calories)
<b>Mid-Morning Snack</b>	<b><i>Mix well in a blender and then strain</i></b> “Egg nog” made with 1 cup liquid pasteurized eggs (such as Egg Beaters®) 1 very ripe banana, mashed 1 cup whole milk or milk substitute 1 teaspoon vanilla 1 teaspoon nutmeg
<b>Lunch</b>	<b><i>Mix well in a blender and then strain</i></b> 2 cups your choice of cream soup ¼ cup tender-cooked chicken or 2 scoops protein powder of your choice ½ cup mashed potatoes ½ cup cooked vegetables
<b>Mid-Afternoon Snack</b>	12 ounces ready-made liquid supplement, such as Carnation Breakfast Essentials®, Boost®/Ensure®, Orgain® or other similar products
<b>Dinner</b>	<b><i>Mix well in a blender and then strain</i></b> 1 cup pasta sauce 2 ounces tender-cooked meat or plant-based meat substitute or tofu 1 cup cooked pasta Enough vegetable juice to make the blended food drinkable, if needed
<b>After-Dinner Snack</b>	<b><i>Mix well in blender (or stir well)</i></b> 2 cups blended ice cream of your choice with 1 cup milk or milk substitute

## STAGE 3 – SOFT FOODS

Soft foods are moist, soft-textured and are easy to chew and swallow. Foods that are hard or crunchy should be avoided during this stage. Most foods that are harder can be chopped, moistened, and/or cooked longer to help them become softer and easier to eat and tolerate.

Food Group	Foods Recommended	Foods to Avoid During This Stage
<b>Breads, cereals, grains</b>	<ul style="list-style-type: none"> <li>• Soft white or wheat bread without seeds, dried fruit, nuts or crust</li> <li>• Tortillas</li> <li>• Hot cereals like oatmeal, Cream of Wheat/Rice®</li> <li>• Cold cereals that are soft after soaking in milk</li> <li>• Pancakes and muffins</li> <li>• Soft pasta, soft rice, polenta</li> <li>• Potatoes, yams, sweet potatoes without skins</li> </ul>	<ul style="list-style-type: none"> <li>• Breads containing nuts, seeds, or dried fruit</li> <li>• Tough or crusty-top breads like French or baguette</li> <li>• Cereals containing dried fruit or nuts</li> <li>• Cereals that do not soften when soaked in milk</li> <li>• Potatoes and similar starchy vegetables with skins</li> <li>• Pasta or rice that is hard or “al dente”</li> </ul>
<b>Vegetables</b>	<ul style="list-style-type: none"> <li>• Well-cooked, soft vegetables without seeds or skins (mashed potato, squashes)</li> <li>• Finely chopped cooked greens</li> </ul>	<ul style="list-style-type: none"> <li>• All raw vegetables</li> <li>• Cooked vegetables with skins and/or seeds</li> </ul>
<b>Fruits</b>	<ul style="list-style-type: none"> <li>• Applesauce, ripe soft banana, canned soft fruit, soft fruit cups</li> <li>• Mashed avocado</li> </ul>	<ul style="list-style-type: none"> <li>• Unripe fruit with seeds and skins</li> </ul>
<b>Plant-based protein sources</b>	<ul style="list-style-type: none"> <li>• Mashed beans, lentils, and other legumes (hummus)</li> <li>• Soft or firm tofu</li> <li>• Creamy nut butters</li> <li>• Nut-based milk, oat milk, or coconut milk yogurt</li> </ul>	<ul style="list-style-type: none"> <li>• Nuts and seeds</li> <li>• Crunchy nut butters</li> <li>• Cooked or canned beans in the whole form</li> <li>• Extra firm tofu</li> </ul>
<b>Meats and other animal-based protein sources</b>	<ul style="list-style-type: none"> <li>• Ground or chopped, moist meats or poultry (chicken salad)</li> <li>• Flaked fish without bones (tuna salad)</li> <li>• Eggs or egg substitutes (egg salad)</li> <li>• Soft cheeses (ricotta, cottage)</li> <li>• Greek yogurt</li> </ul>	<ul style="list-style-type: none"> <li>• Whole cut, tough, stringy meats, poultry, and fish</li> <li>• Hot dogs and sausages</li> </ul>
<b>Oils</b>	<ul style="list-style-type: none"> <li>• Almond oil, avocado oil, canola oil, cashew oil, corn oil, grapeseed oil, olive oil, safflower oil, sesame oil, soybean oil, sunflower oil</li> <li>• Butter, soft tub margarine that does not contain trans-fat (melted or blended into foods)</li> </ul>	None
<b>Other</b>	<ul style="list-style-type: none"> <li>• Seasonings, ground spices and smooth condiments as tolerated</li> <li>• Gravies and sauces, tartar sauce, relish, chopped olives</li> <li>• Popsicle</li> <li>• Strained cream soups</li> </ul>	<ul style="list-style-type: none"> <li>• Popcorn, potato chips, corn chips</li> <li>• Whole pickles, whole olives</li> </ul>
<b>Beverages</b>	All	None

## Additional Suggestions

- Eat small, frequent meals, about 5 to 6 per day, to help with tolerance and better food intake.
- Avoid rushing through meals. Chew well and take your time.
- If you feel full quickly, try to eat protein-rich foods first. If you are unable to eat enough protein, try mixing a protein powder supplement with foods that are not protein-rich. The protein powder should have at least 10 grams of protein per scoop.
- Drink liquids between meals and not with your food.
- Use oral nutrition supplements such as Ensure®, Boost®, or Kate Farms® between meals; always closer to the meal you just had and far away from the next one. If you are able to drink one or two of them daily, you may be fine to reduce your tube feeding time.
- If soft foods are still hard for you to swallow and digest, consider trying more pureed foods as an intermediate stage. Any of the soft foods above can be pureed by adding liquids as needed, like soups and sauces, and using a blender or food processor. You can also try baby foods if you get tired of meal prepping. Contact your registered dietitian for more ideas and to make sure you are getting enough nutrition.

## Sample Menu

<b>Breakfast</b>	½ cup diced peaches 1 scrambled egg ½ cup Cream of Wheat/Rice® (mix in a serving of protein powder if you do not eat the egg) 1 cup milk or milk alternative
<b>Mid-Morning Snack</b>	½ cup applesauce 2 spoons of smooth nut butter <i>Oral nutrition supplement if able</i>
<b>Lunch</b>	3 ounces of meatloaf with gravy or tofu with your favorite sauce ½ - ¾ cups of mashed potatoes ½ cup soft cooked baby peas ¾ cup creamy soup (optional)
<b>Mid-Afternoon Snack</b>	1 cup of yogurt or yogurt alternative <i>Oral nutrition supplement if able</i>
<b>Dinner</b>	4 ounces soft, white boneless fish or mashed beans ½ - ¾ cup soft rice with gravy, creamy soup, or sauce ½ cup soft diced carrots
<b>After-Dinner Snack</b>	½ cup cottage cheese or cheese alternative and ½ cup soft fruit cup <i>Oral nutrition supplement if able</i>