Dysphagia Diet

5 Levels for Difficulty In Swallowing Diet

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Purpose

Dysphagia means difficulty with chewing or swallowing food or liquid. To understand how this might happen, it is important to know something about how swallowing occurs. First, food must be chewed thoroughly. Then it is moved to the back of the mouth by tightening the cheek muscles and pressing the tongue against the roof of the mouth. From this point on the process becomes automatic — it is a reflex that people do not actively control. In "rapid- fire" succession, the soft palate closes the nasal airway to prevent food from backing into it, the airway into the lungs is closed, and the esophagus (food pipe) relaxes allowing food and liquid to enter it. The muscular esophagus then contracts in a wave-like action, sweeping the food along into the stomach. A blockage or a malfunction anywhere in this part of the body or in the nervous system controlling swallowing can result in dysphagia. There are two types:

Esophageal dysphagia occurs when food/liquid stops in the esophagus. This happens most often because of consistent stomach acid refluxing (backing up) into the esophagus. Over time, the reflux causes inflammation and a narrowing (stricture) of the esophagus. Food and eventually liquids feel like they are sticking in the middle and lower chest. There may be chest discomfort or even real pain. Fortunately, physicians can usually dilate (widen) this narrowing, and there is now treatment available to keep it from returning. Cancer, hiatus hernia, and certain muscle disorders of the esophagus are less frequent causes of esophageal dysphagia. Solid food is usually more of a problem than liquids

Oropharyngeal dysphagia involves difficulty moving food to the back of the mouth and starting the swallowing process. This type of dysphagia can result from various nerve or brain disorders such as stroke, cerebral palsy, multiple sclerosis, Parkinson's and Alzheimer's diseases, cancer of the neck or throat, a blow to the brain or neck, or even dental disorders. Depending on the cause, symptoms may include drooling, choking, coughing during or after meals, pocketing of food between the teeth and cheeks, gurgly voice quality, inability to suck from a straw, nasal regurgitation (food backing into the nasal passage), chronic respiratory infection, or weight loss. Liquids are usually more of a problem in oropharyngeal dysphagia.

The first step in treatment is to make the proper diagnosis. This involves a medical history and various tests to find the cause of the dysphagia. Often a team approach to treatment is needed. Several types of health care providers — physicians, registered dietitian, psychologist, speech pathologist, occupational therapist — work together to develop the best program.

An important part of the treatment is helping the patient get adequate nutrition, while protecting against complications such as pneumonia from food or liquid getting into the lungs. Obviously, this requires a specialized diet. There are five different diet levels from puréed (level 1) up through modified regular food (level 5). The diets vary in texture and consistency, and are chosen depending on which would be most effective for a specific patient..

Nutrition facts

These diets are all nutritionally adequate. However, some patients may have difficulty taking enough fluid and food to get all the energy and nutrients they need. In this case, an adjustment to diet or treatment will be

required.

Liquids

Fluids are essential to maintain body functions. Usually 6 to 8 cups of liquid (48-64 oz) are needed daily. For some dysphagia patients, this may present problems because thin liquid can be more difficult to swallow. In this case, fluid can be thickened to make it easier to swallow. However, close monitoring by the dysphagia team is required for anyone drinking less than 4 cups of thickened fluid a day or anyone not progressing to thin liquids within 4 weeks.

Calories

The greater problem for some patients is eating enough calories. The whole process of eating simply becomes too difficult and too tiring. However, calorie and protein intake can be increased by fortifying the foods the patient does eat.

- Fortify milk by adding 1 cup of dry powdered milk to one quart of liquid milk. Use this protein fortified milk when making hot cooked creamed soups, sauces, milkshakes, and puddings. Also add margarine, sugar, honey, jelly, or puréed baby food to increase calories.
- Add strained baby fruit to juices, milkshakes, and cooked cereals.
- Add 1 jar of strained baby meat to soup, such as strained chicken noodle soup. Also add strained baby meats to sauces and gravies, and mix with strained vegetables.
- Add juice to prepared fruit, cereal, or milkshakes.

Special Considerations

The following are some general guidelines for safe swallowing. Remember that dysphagia patients have individual requirements, so all of these guidelines may not apply to every patient.

- Maintain an upright position (as near 90 degrees as possible) whenever eating or drinking.
- Take small bites only 1/2 to 1 teaspoon at a time.
- Eat slowly. It may also help to eat only one food at a time.
- Avoid talking while eating.
- When one side of the mouth is weak, place food into the stronger side of the mouth. At the end of the meal, check the inside of the cheek for any food that may have been pocketed.
- Try turning the head down, tucking the chin to the chest, and bending the body forward when swallowing. This often provides greater swallowing ease and helps prevent food from entering the airway.
- Do not mix solid foods and liquids in the same mouthful and do not "wash foods down" with liquids, unless you have been instructed to do so by the therapist.
- Eat in a relaxed atmosphere, with no distractions.
- Following each meal, sit in an upright position (90 degree angle) for 30 to 45 minutes.

Level 1 Puréed Foods

Foods in this group are puréed to a smooth, mashed potato-like consistency. If necessary, the puréed foods can keep their shape with the addition of a thickening agent. Meat is puréed to a smooth pasty consistency. Hot broth or hot gravy may be added to the puréed meat, approximately 1 oz of liquid per 3 oz serving of meat.

CAUTION:

If any food does not purée into a smooth consistency, it may make eating or swallowing more difficult. For example, zucchini seeds sometimes do not blend well.

Hot Foods	Cold Foods
Puréed meats, poultry, & fish	Puréed cottage cheese
Puréed tuna, ham, & chicken salad	Puréed fruit
Pureed scrambled eggs & cheese	Thickened juices & nectars
Baby cereals	Thickened milk or eggnog
Thinned cooked cereals (no lumps)	Malts
Puréed French toast or pancakes	Thick milkshakes
Mashed potatoes	Ice cream
Puréed parsley, au gratin, scalloped potatoes, candied sweet potatoes	Fruit or Italian ice, sherbet
Puréed buttered or Alfredo noodles	Plain yogurt
Puréed vegetables (no corn or peas)	Smooth & drinkable yogurt
Puréed soups & creamed soups	Smooth pudding, mousse, custard
Puréed scalloped apples	Whipped gelatin
Gravies	Sugar, syrup, honey, jelly
Sauces: cheese, tomato, barbecue, white, creamed	Cream
Decaffeinated coffee or tea	Non-dairy creamer
	Margarine
	Mayonnaise
	Ketchup, mustard

Sample Menu, Level 1			
Breakfast	Lunch	Dinner	
 orange juice 1/2 cup cream of wheat 1/2 cup scrambled eggs with cheese 1/2 cup decaffeinated tea 1 cup whole milk 1 cup non-dairy creamer 2 Tbsp ketchup 1 Tbsp margarine 1 tsp salt 1/4 tsp sugar 2 tsp 	 pineapple juice 1/2 cup puréed beef 3 oz gravy 2 Tbsp mashed potatoes 1/2 cup puréed fresh broccoli 1/2 cup apple sauce 1/2 cup decaffeinated coffee 1 cup non-dairy creamer 2 Tbsp 	 puréed turkey barley soup 3/4 cup puréed Hawaiian chicken 3 oz mashed potatoes 1/2 cup puréed spinach 1/2 cup frozen yogurt 1/2 cup decaffeinated tea 1 cup non-dairy creamer 2 Tbsp margarine 1 tsp 	

- margarine 1 tsp
- salt 1/4 tsp
- sugar 1 tsp
- salt 1/4 tsp
- sugar 1 tsp

This Sample Diet Provides the Following			
Calories	1657	Fat	61 gm
Protein	92 gm	Sodium	2590 mg
Carbohydrates	198 gm	Fiber	3163 mg

Level 2 Minced Foods

Foods in this group should be minced/chopped into very small pieces (1/8 inch). The flecks of food are similar in size to sesame seeds.

Hot Foods	Cold Foods
Minced meat, fish, poultry	Cottage cheese
Minced stuffed fish	Junior baby fruit
Flaked fish	Semi-thickened juices
Junior baby meats	Nectars
Minced soft cooked, scrambled, poached eggs	Ripe mashed bananas
Minced soufflé & omelets	Minced canned fruit
Minced soft French toast	Pineapple sauce
Minced soft pancakes	Milk
Cooked cereals	Milkshakes
Minced potatoes	Custard
Minced buttered or Alfredo noodles	Puddings, including rice & tapioca
Minced vegetables	Yogurt
Creamed soups	Fruit ice, Italian ice, sherbet
Puréed vegetables soup or alphabet soup	Whipped gelatin
Minced scalloped apples	Junior baby desserts
Gravies	Sugar, syrup, honey, jelly
Sauces: cheese, creamed, barbecue, tomato, white	Cream
Decaffeinated coffee or tea	Margarine

Sample Menu, Level 2

Breakfast	Lunch	Dinner
 orange juice 1/2 cup oatmeal 1/2 cup scrambled eggs with cheese 1/2 cup decaffeinated tea 1 cup whole milk 1 cup non-dairy creamer 2 Tbsp ketchup 1 Tbsp margarine 1 tsp salt 1/4 tsp sugar 2 tsp 	 pineapple juice 1/2 cup minced beef 3 oz gravy 2 Tbsp mashed potatoes 1/2 cup minced fresh broccoli 1/2 cup applesauce 1/2 cup decaffeinated coffee 1 cup non-dairy creamer 2 Tbsp margarine 1 tsp salt 1/4 tsp sugar 1 tsp 	 puréed turkey barley soup 3/4 cup minced Hawaiian chicken 3 oz mashed potatoes 1/2 cup puréed spinach 1/2 cup frozen yogurt 1/2 cup decaffeinated tea 1 cup non-dairy creamer 2 Tbsp margarine 1 tsp salt 1/4 tsp sugar 1 tsp

This Sample Diet Provides the Following			
Calories	2022	Fat	80 gm
Protein	111 gm	Sodium	2992 mg
Carbohydrates	231 gm	Potassium	4182 mg

Level 3 Ground Foods

Foods in this group should be ground/diced into 1/4-inch pieces. These pieces of food are similar in size to rice.

Hot Foods	Cold Foods
Ground meat, fish, poultry	Cottage cheese
Ground meat salads (no raw eggs)	Smooth fruited yogurt
Ground Swedish meatballs	Fruit juices or nectars
Scrambled eggs or soufflés	Ground canned fruit
Ground poached eggs	Crushed pineapple
Cooked cereals	Ripe bananas
Ground soft French toast	Lemonade/Limeade (no pulp)
Ground potatoes	Milk
Ground noodles	Ice cream

Ground baked potato (no skin)	Custard
Ground well-cooked frozen vegetables (no corn, peas, or mixed vegetables)	Puddings or mousse
Ground canned vegetables	Fruit ice, Italian ice, sherbet
Creamed soups	Cream
Puréed vegetables soup or alphabet soup	Non-dairy creamer
Ground scalloped apples	Margarine
Gravies	Mayonnaise
Sauces: cheese, creamed, barbecue, tomato, white	Ketchup
Decaffeinated tea or coffee	Mustard

Sample Menu, Level 3			
Breakfast	Lunch	Dinner	
 orange juice 1/2 cup oatmeal 1/2 cup scrambled eggs with cheese 1/2 cup decaffeinated tea 1 cup whole milk 1 cup non-dairy creamer 2 Tbsp ketchup 1 Tbsp margarine 1 tsp salt 1/4 tsp sugar 2 tsp 	 pineapple juice 1/2 cup ground beef 3 oz gravy 2 Tbsp mashed potatoes 1/2 cup cooked spinach 1/2 cup applesauce 1/2 cup decaffeinated coffee 1 cup whole milk non-dairy creamer 2 Tbsp margarine 1 tsp salt 1/4 tsp sugar 1 tsp 	 puréed turkey barley soup 3/4 cup ground Hawaiian chicken 3 oz mashed potatoes 1/2 cup ground fresh broccoli 1/2 cup frozen yogurt 1/2 cup decaffeinated tea 1 cup non-dairy creamer 2 Tbsp margarine 1 tsp salt 1/4 tsp sugar 1 tsp 	

This Sample Diet Provides the Following			
Calories	2022	Fat	80 gm
Protein	111 gm	Sodium	2992 mg
Carbohydrates	231 gm	Potassium	4182 mg

Level 4 Chopped Foods

Foods in this group should be chopped into 1/2-inch pieces. These pieces of food are similar in size to uncooked elbow macaroni or croutons (small bread cubes).

Hot Foods	Cold Foods
Chopped meat or poultry	Cottage cheese
Chopped Swedish meatballs	Yogurt
Meat salads (ground or flaked meat)	Milk
Flaked fish	Milkshakes
Poached or scrambled eggs	Soft, cold, dry cereal
Soufflés and omelets	Soft bread (if approved by speech or occupational therapy)
Cooked cereals	Fruit juice or nectars
Chopped French toast or pancakes	Chopped canned fruit
Chopped noodles or pasta (no rice)	Canned fruit cocktail
Chopped cooked vegetables (no frozen peas, corn, or mixed vegetables)	Pudding, mousse, custard
Chopped canned small sweet peas	Ice cream
Creamed soup or vegetable soup	Fruit ice, Italian ice, sherbet
Canned chicken noodle soup	Cream cheese
Chopped potatoes (all kind)	Whipped topping
Gravies	Whipped gelatin
Bacon dressing	Sugar, syrup, honey, jam, jelly
Sauces: cheese, creamed, barbecue, tomato, white	
Decaffeinated tea or coffee	

Sample Menu, Level 4			
Breakfast	Lunch	Dinner	
 orange juice 1/2 cup oatmeal 1/2 cup scrambled eggs with cheese 1/2 cup decaffeinated tea 1 cup whole milk 1 cup non-dairy creamer 2 Tbsp ketchup 1 Tbsp margarine 1 tsp salt 1/4 tsp sugar 2 tsp 	 pineapple juice 1/2 cup chopped beef 3 oz gravy 2 Tbsp mashed potatoes 1/2 cup chopped fresh broccoli 1/2 cup applesauce 1/2 cup decaffeinated coffee 1 cup non-dairy creamer2 Tbsp margarine 1 tsp 	 turkey barley soup 3/4 cup chopped Hawaiian chicken 3 oz mashed potatoes 1/2 cup cooked spinach 1/2 cup frozen yogurt 1/2 cup decaffeinated tea 1 cup non-dairy creamer 2 Tbsp margarine 1 tsp salt 1/4 tsp 	

•	salt 1/4	tsp
•	sugar 1	tsp

This Sample Diet Provides the Following			
Calories	2097	Fat	82 gm
Protein	113 gm	Sodium	3213 mg
Carbohydrates	243 gm	Potassium	4201 mg

Level 5 Modified Re	gular Foods	
Foods in this group are soft, moist, regularly textured foods		
Hot Foods	Cold Foods	
Soft, moist meat, fish, poultry	Soft cheeses	
Baked fish	Cottage cheese	
Meat Salads	Cream cheese	
Soufflés and omelets	Yogurt	
Eggs	Milk	
Stuffed shells	Milkshakes	
Spaghetti with meat sauce	Cold dry cereals (no nuts, dried fruit, coconut)	
Cooked cereal	Crackers	
French toast or pancakes	Soft breads (no hard rolls)	
Toast	Fruit juices or nectars	
Noodles or pasta (no rice)	Canned fruit	
Potatoes (all types)	Ripe bananas	
Soft, cooked vegetables (no corn, lima, or baked beans)	Peeled, ripe, fresh fruit	
Creamed soups or vegetable soup	Cakes (no nuts, dried fruit, coconut)	
Canned chicken noodle soup	Plain doughnuts	
Gravies	Ice cream	
Bacon dressing	Pudding, mousse, custard	
Sauces: cheese, creamed, barbecue, tomato, white	Fruit ice, Italian ice, sherbet	
Decaffeinated tea or coffee	Whipped gelatin	
	Regular gelatin	

Canned fruited gelatin molds
Sugar, syrup, honey, jam, jelly
Cream
Non-dairy creamer
Margarine
Oil
Mayonnaise
Ketchup
Mustard

Sample Menu, Level 5			
Breakfast	Lunch	Dinner	
 orange juice 1/2 cup oatmeal 1/2 cup cheese omelet toast 1 slice decaffeinated tea 1 cup whole milk 1 cup non-dairy creamer 2 Tbsp ketchup 1 Tbsp margarine 1 tsp salt 1/4 tsp sugar 2 tsp jelly 2 tsp 	 pineapple juice 1/2 cup hamburger on bun 3 oz steak fries 1/2 cup green beans 1/2 cup applesauce 1/2 cup decaffeinated coffee 1 cup whole milk 1 cup non-dairy creamer 2 Tbsp margarine 1 tsp salt 1/4 tsp sugar 1 tsp ketchup 2 Tbsp 	 turkey barley soup 3/4 cup Hawaiian chicken 3 oz mashed potatoes 1/2 cup fresh broccoli 1/2 cup frozen yogurt 1/2 cup decaffeinated tea 1 cup non-dairy creamer 2 Tbsp saltine crackers 6 margarine 1 tsp salt 1/4 tsp sugar 1 tsp 	

This Sample Diet Provides the Following			
Calories	2851	Fat	120 gm
Protein	129 gm	Sodium	4062 mg
Carbohydrates	327 gm	Potassium	4609 mg

Commercial Thickening Agents			
Product	Manufacturer	Phone	
Thick n Easy	American Institutional Products, Inc.	(717) 569-1866	
Thick-it	Milani Foods, Inc.	(800) 333-0033	
Thick Set	Bernard Fine Foods, Inc.	(800) 538-3663	

Textures/Consistencies of Foods

The following are examples of medium and thick liquids and foods.

- Medium (nectar consistency):
 - eggnog
 - fruit nectars
 - (apricot, peach, pear)
 - honey
 - thick creamed soups
 - soft set pudding with added
 - milk
 - tomato juice
 - buttermilk
 - ice cream
 - (no nuts or fruit chunks)
 - milkshakes
- Thick (yogurt or pudding consistency):
 - cooked hot cereal
 - pudding
 - custard
 - gravy
 - yogurt (no nuts or fruit chunks)
 - · cottage cheese mixed in
 - · blender with milk or fruit
 - thick malt and milkshakes

Thickening and Thinning Agents

Foods can be thickened or thinned to individual requirements. Many foods can be used to change a liquid to a different consistency. The amount of thickening agent needed to reach a certain food consistency varies depending on the food being thickened and on the thickening agent used.

How to Thin Liquids

- · Add hot milk-based liquids (hot milk or cream) to puréed soups, puréed vegetables, or cooked cereal.
- Add other hot liquids (broth, gravy, sauces) to mashed potatoes, puréed or ground meats, and puréed or chopped vegetables. Butter or melted margarine may also be used.
- Add cold milk-based liquids to cream, yogurt, cold soups, puréed fruits, or puddings and custards.

How to Thicken Liquids and Foods

- Add baby rice or commercial thickener to hot milk-based liquids.
- Add potato flakes, mashed potatoes, or flaked baby cereal to other hot liquids (soups, sauces, gravies).
- · Add plain unflavored gelatin, puréed fruits, banana flakes, or a commercial thickener to cold liquids.
- Add potato flakes, mashed potatoes, thick sauces or gravies, canned puréed or strained meat (baby food), or a commercial thickener to puréed soups.
- Add flaked baby cereal, flavored gelatin, cooked cream of rice or wheat cereal, or a commercial thickener to puréed fruits.
- Add mashed white or sweet potatoes, potato flakes, sauces, or commercial thickener to puréed vegetables.

If a Food is Too Thin, Add One of the Following:

- baby cereal
- banana flakes
- bread crumbs
- cornstarch
- cooked cereals (cream of wheat or rice)
- custard mix
- graham cracker crumbs
- gravy
- instant potato flakes
- · mashed potatoes
- plain unflavored gelatin powder
- plain sauces (white, cheese, tomato)
- puréed fruits (baby food)
- puréed meats (baby food)
- puréed vegetables (baby food)
- saltine cracker crumbs

If a Food is Too Thick, Add One of the Following:

- broth
- bouillon
- gravy
- juice
- liquid flavored gelatin
- melted hot butter/margarine
- milk (hot or cold)
- · plain yogurt
- strained puréed soups

Recipes

Fruit Shake

In a blender, place 1-1/2 cups of fresh, frozen, or canned fruit with 1 cup fortified milk. Mix until smooth. **Fruit Blend**

In a blender, mix 1/4 cup apple juice, 1/4 cup orange juice, and 1 cup canned peaches or pears. Mix until smooth. **High-Protein Smoothies**

In a blender, mix 1 cup fruit-flavored yogurt and 1 cup fortified milk with soft, fresh, peeled fruit or soft, canned fruit, and 1 cup of cottage cheese. Mix until smooth. **Cottage Cheese Pudding**

Mix together 1/4 cup cottage cheese and 3 T baby fruit. Chill. **Creamed Vegetable Soup** In a blender, add 1/2 cup strained or very soft cooked vegetable; 1/2 cup fortified milk, cream, or plain yogurt, 1 tsp margarine; salt, onion powder, and crushed dried parsley flakes to taste. Mix to desired consistency.

Other Tips to Make Foods Easier to Chew and Swallow

- 1. To avoid forming a hard crust on the top of a food or around the edges, cook the food in a covered casserole dish. To make soft scrambled eggs, cook the eggs in the top of a double boiler.
- 2. To keep meat or fish moist, cook in tomato juice or tomato soup.
- 3. To make puréed meat, first drain soft, cooked meat. Place meat in a food processor or

blender to make a paste. Add hot liquid (broth) to the paste and thin to desired consistency.

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