



## **Consistency Alteration of Food & Fluid**

### **Mechanically Altered Foods & Thickened Liquids**

#### **Objectives:**

- 1. Understand why someone may require an altered diet/liquid and why it's important to follow.**
- 2. Describe how to prepare food items for an ordered altered diet.**
- 3. Identify items that are allowed on a patient's altered diet.**

#### **Introduction:**

As people age or have a medical problem, they may develop dysphagia. Dysphagia is the difficulty to chew or swallow their food/fluid, and makes them at risk for aspirating (food/fluid going into the lungs instead of the stomach) or choking. Sometimes people may need altered food items or liquid consistency changes to help them eat safely. These needs are determined by the speech therapist, who may order a Modified Barium Swallow Study (MBS) or Video Fluoroscopic Swallowing Study (VFSS) to determine what particular diet is the safest. People may need to adhere to this altered diet for the rest of their lives or may work with a speech therapist for their diet to be upgraded. It is strongly encouraged that only the physician or speech therapist make diet upgrades.

#### **Liquids:**

- Thickened liquids offer better control of liquids in your mouth.
- Help prevent fluids from entering your lungs and causing infection.
  - Thin Liquids/Regular Liquids
    - Require no additional agent to alter the consistency
    - Water, juice, pop/soda, milk, coffee, and tea.
    - Ice cream and Jell-o are considered thin liquids as they are thin when they melt.
  - Nectar thick liquids
    - Some items are naturally nectar thick, such as fruit nectars, V8 juice, cream soups and some nutritional supplements (some supplements may need to be thickened).
  - Honey Thick Liquids
    - All items need additional agent for thickening, following product manufacturers directions.
  - Pudding Thick Liquids/Spoon thick
    - All items need additional agent for thickening, following product manufacturers directions..

#### **Thickening Agents:**

- Some commonly used agents Simply Thick, Thicken up, and Thick It.
- Broth Based soups are thin and need thickened to the appropriate consistency.
- When making thickened liquids always follow the manufactures directions to make the consistency correctly. Some thickeners come in pre measured packets, pumps, scoops for measuring.
- Thickening agents are either powder or gel.
- They should be prepared and served as close meal service as possible to prevent further thickening or clumping.
- Gel thickeners have been found to be more stable and do not seem to continue to become thicker as they set. Some facilities prefer gel thickener agents for efficiency in the kitchen and improved acceptance.
- From your food supplier you can also purchase pre thickened liquids, that are ready to serve at table side.



**Food Solids:**

- **Regular Consistency**
  - Foods prepared without texture alterations.
- **Mechanical Soft Consistency**
  - Bite size meat, usually ground with blender/industrial food processor.
  - Cooked soft vegetables.
  - No large seeds, nuts, hard breads, or raw fruits/vegetables.
  - Food items should be moist. If needed a gravy or appropriate sauce/condiments should be added.
  - This texture requires less effort to complete the chewing process
  - Refer to your facility spreadsheets/extension sheets for correct serving size.
- **Pureed Consistency**
  - Pureed items should be completely smooth without any pieces or chunks.
  - Mouth feel should be smooth and the consistency of PUDDING or MASHED POTATOES.
  - This texture requires very little to none effort to chew.
  - As presentation is important, gravy and smooth condiments should be added on top for visual appeal and taste, ex: ketchup/mustard on pureed hot dog with bun (to individual's preference) .
  - When items are served staff should always express to the patient what each food item is.
  - Refer to your facility spreadsheets/extension sheets for correct serving size.

If there are questions for items allowed on an altered diet, refer to the Indiana Diet Manual (should be available at your facility) or work with a speech therapist for clarification.

**Concerns related to altered foods and liquid :**

- Dehydration: potential for fluid consumption decline with the start of thickened liquids. It is important that the fluids be made properly to promote hydration.
- Risk for aspiration pneumonia if fluids are not thickened to the correct consistency, always follow the manufacturer directions.
- Patients are at risk for poor nutrition, weight loss, and skin breakdown with altered diets. Patients should be monitored for adequate intakes and acceptance of their prescribed diet.
- To reduce potential for negative effects, foods and fluids should be prepared with the best flavor and appearance possible to assist in acceptance.

Development of a universal national dysphagia diet, for solids and liquids is coming in the near future for texture modified diets. For more information see: International Dysphagia Standardization Initiative [www.iddsi.org/framework](http://www.iddsi.org/framework)

**References and recommended readings**

Castellanos VH, Butler E, Gluch L, Burke B. Use of thickened liquids in skilled nursing facilities. *J Am Diet Assoc* [serial online]. 2004;104:1222-1226. Available at [www.eatright.org](http://www.eatright.org) to ADA members.

The Ohio State University Medical Center. Thickened liquids for safer swallowing. Available at: <http://medicalcenter.osu.edu/PatientEd/Materials/PDFDocs/nut-diet/nut-other/thickened-liquids.pdf>. Accessed December 11, 2010.



**Name:** \_\_\_\_\_

**Position:** \_\_\_\_\_

**Date:** \_\_\_\_\_

### **Correct Use of Altered Diet/Thickened Liquids**

#### **Pre-Test**

1. True or False: Spoon-thick liquids are the consistency of pudding.
  2. Which of the following is not an accepted consistency of liquids:
    - a. Honey-like thickened liquids
    - b. Water-thick liquids
    - c. Spoon-thick liquids
    - d. Nectar-like thick liquids
  3. True or False: If on a Pureed diet patients can have regular potato chips.
  4. True or False: Patients on pureed diet can have all their pureed items blended together in a bowl.
  5. True or False: Resident on a mechanical soft diet can have raw carrots.
  6. True or False: Ice cream is considered a thin liquid.
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#### **Post-Test**

1. True or False: Spoon-thick liquids are the consistency of pudding.
2. Which of the following is not an accepted consistency of liquids:
  - a. Honey-like thickened liquids
  - b. Water-thick liquids
  - c. Spoon-thick liquids
  - d. Nectar-like thick liquids
3. True or False: If on a Pureed diet patients can have regular potato chips.
4. True or False: Patients on pureed diet can have all their pureed items blended together in a bowl.
5. True or False: Patients on a mechanical soft diet can have raw carrots.



**Answer key**

1. True
2. b. Water-thick liquids
3. False
4. False
5. False
6. False