Before discussing thickening agents, here is some background on both dysphagia and consistency changes of diet:

- Dental soft, pureed, and NDD (levels 1, 2, & 3) are consistencies available at HMC.
  - NDD stands for National Dysphagia Diet
  - Dysphagia is a condition where the ability to swallow is compromised because the muscles involved in swallowing aren’t functioning properly; perhaps due to stroke or old age
  - Aspiration simply means food or liquid getting into the lungs

- An NDD diet is usually recommended by a speech language pathologist after an evaluation, but may be ordered by physician (usually following a barium swallow test)
- Dental soft and pureed diets are usually prescribed for patients with no difficulty in swallowing, but may still have difficulty chewing their food; usually due to dental problems

**Consistency of Diet**

- Thickened liquids may be prescribed for a patient in combination with an NDD diet
  - These liquids are thickened according to how delayed the patient’s swallow reflex is (i.e. how long it takes the muscles in the throat to work). Therefore, thicker liquids usually translate into a more delayed reflex.

- Thin liquids are those with no thickening agent added; strictly regular fluid(s)

- Nectar thickened liquids are considered one step up from a thin liquid consistency
  - Some liquids are already considered nectar thickened, such as whole chocolate milk, and even some nutritional supplements (if chilled)
  - To reach nectar thickened consistency, 1 Tablespoon + 1 teaspoon of thickening agent is recommended for every 4 oz. of fluid (or 4 teaspoons, respectively)

- To reach a honey thickened consistency, thickening agent must always be added.
  - This consistency is obtained by addition of 1 Tablespoon + 1½ teaspoon of thickening agent to every 4 oz. of fluid (or 3½ teaspoons, respectively)
A pudding thickened liquid is obtained by adding agent to a liquid until it reaches a thicker, pudding consistency.

-This consistency is reached by adding **2 Tablespoons** of thickening agent to every **4 oz.** of fluid.

Important things to remember:

- Thickening agent should be added **slowly** to fluid while stirring vigorously for at least 15 seconds. Let stand for 1-5 minutes in order to reach the desired consistency.
- If you are not using mix provided on a meal tray, it’s important to always read the thickening agent directions to reach the desired consistency.
- Please note that once it’s added to fluid, the agent will continue to thicken over time. It’s best to give the patient the thickened beverage no more than 1-5 minutes after reaching the desired consistency.