

## Thickening liquids with the IDDSI flow test

Why do we thicken liquids?

- To reduce risk of aspiration pneumonia.
- NOT to reduce aspiration in everyone who has it.
- John Ashford, PhD, "[3 pillars of aspiration pneumonia](#)."

Can't we just over-thicken to play it safe?

- No.
- [Robbins et al \(2008\)](#): aspirating "honey thick" (actually pudding thick per the National Dysphagia Diet) leads to higher risk for aspiration pneumonia and longer hospitalizations.
- [Steele et al \(2015\)](#): thicker liquids are more likely to leave pharyngeal residue, which can then be aspirated following the swallow.

Main problems with the thin/nectar/honey/pudding thick system under the National Dysphagia Diet

- Arbitrary cut-offs between thickness levels.
- Thickness measured in centipose, which requires expensive equipment to measure.
- Pre-thickened liquids aren't necessarily accurate.
- People get confused about which is thicker: nectar or honey.
- [SLPs couldn't sort out 10 samples by thickness](#).
- And [SLPs couldn't reliably mix the right thickness](#).
- [Hospital staff couldn't mix reliably either](#).

Learn about IDDSI:

- Listen to John Holahan's [Swallow Your Pride interview](#) about Simply Thick and IDDSI.
- Check out the great resources on [IDDSI.org](#).
- Download and check out the free IDDSI app on iTunes and Google Play.
- [Sign up for IDDSI's monthly newsletter](#) and check out their [E-bites archives](#).
- Watch more than 30 videos on [IDDSI's YouTube channel](#).

## The IDDSI gravity flow test

1. Thicken your beverage according to the manufacturer's instructions.
2. Perform the gravity flow test three times.
  - a. Remove the plunger from one syringe and plug the nozzle with your finger.
  - b. Fill it with 10 mL of fluid, using another syringe to avoid bubbles.
  - c. Remove your finger for 10 seconds, allowing the fluid to drain out naturally.
  - d. Place your finger over the nozzle to stop the flow after 10 seconds.
  - e. Read how much is left.
3. Look at IDDSI's chart to determine which level of thickness the fluid is.
  - a. Level 0: Thin liquid (less than 1 mL left).
  - b. Level 1: Slightly thick (1 - 4 mL left). Used in pediatrics.
  - c. Level 2: Mildly thick (4 - 8 mL left). Similar to nectar thick.
  - d. Level 3: Moderately thick (no less than 8 mL left). Similar to honey thick. Confirm with the Fork Drip Test.
  - e. Level 4: Extremely thick (too thick for syringe). Confirm with the Fork Drip Test and the Spoon Tilt Test.
4. Additional tests for Level 3 (~honey thick) and Level 4 liquids (~pudding thick).
  - a. Fork Drip Test
    - i. Scoop up some liquid onto a fork.
      1. Level 3: will "drip slowly or in dollops/strands through the tines of the fork."
      2. Level 4: will "sit in a mound or pile above the fork. A small amount may flow through and form a tail below the fork."
  - b. Spoon Tilt Test for Level 4
    - i. Scoop up some liquid onto a spoon. It should hold its shape.
    - ii. Tilt the spoon and give a little flick onto a plate. The liquid should slide off easily and shouldn't stick to the spoon. The liquid should hold its shape or spread just a little when it hits the plate.

**See the blog post for more information about the IDDSI gravity flow test:**

<https://eatspeakthink.com/take-guesswork-out-of-thickening-liquids-iddsi-flow-test>.