

## How and Why to Thicken Liquids

Some children have trouble swallowing. This is called dysphagia (dis-**fay**-juh). Children with dysphagia need to have their food and drinks changed so they can safely eat and drink.

If your child has dysphagia, you may need to make the liquids they drink thicker. Thickened liquids move more slowly than thin liquids. This gives your child extra time to control the liquid while swallowing and keep it out of the lungs. This helps protect their airway.

### How to Thicken Liquids

- If your child is under 12 months old (corrected age), it's recommended to use **infant cereal** to thicken liquids.
  - **Do not use infant cereal in human milk.** Human milk breaks down cereal and won't keep it thick. If you have questions, talk to your child's doctor or health care provider.
  - Use measuring spoons to figure out cereal amounts. Do not use kitchen spoons.
- Below are the instructions for thickening with infant cereal. In the chart, tsp is teaspoons and oz is ounces. Follow these levels if your child is **under** 12 months old (corrected age):



Level 1 IDDSI Slightly thick



Level 2 IDDSI Mildly thick/nectar



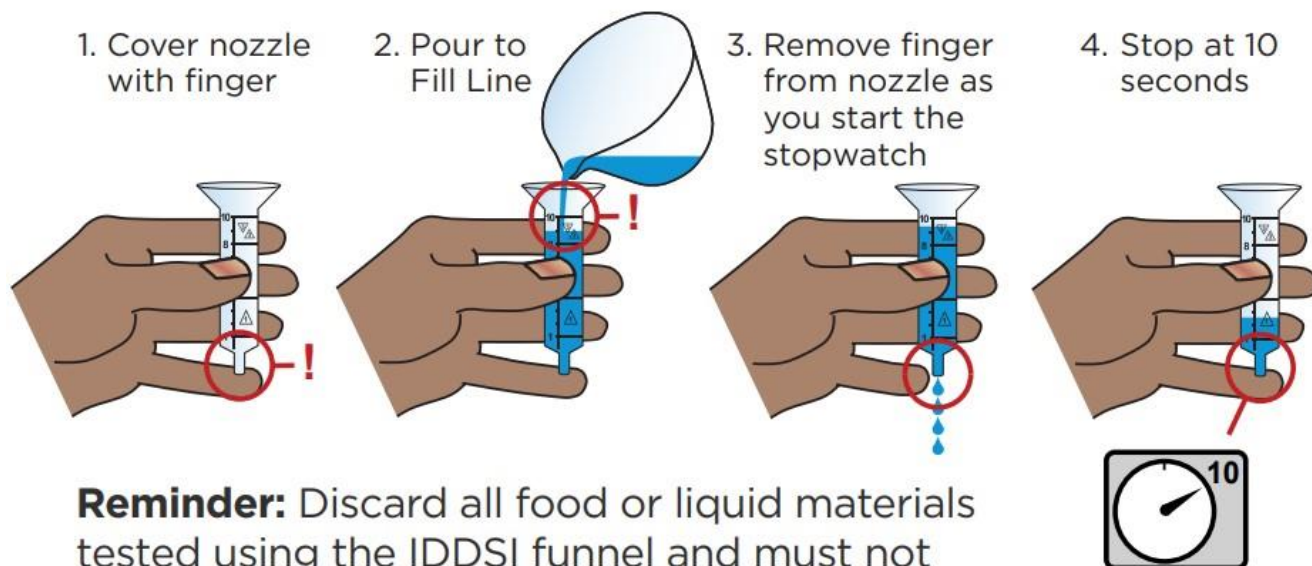
Level 3 IDDSI Moderately thick/honey

Similac®	Elecare®
<b>Level 1</b> ¾ to 2 tsp cereal/oz formula	<b>Level 1</b> 1 ½ to 2 ¼ tsp cereal/oz formula
<b>Level 2</b> 1 ½ to 2 ½ tsp cereal/oz formula	<b>Level 2</b> 1 ¾ to 2 ¾ tsp cereal/oz formula
<b>Level 3</b> 1 ¾ to 3 tsp cereal/oz formula	<b>Level 3</b> 2 ¼ to 3 ¼ tsp cereal/oz formula

<b>Neocate®</b> <b>Level 1</b> 1 to 2 ½ tsp cereal/oz formula <b>Level 2</b> 1 ½ to 2 ¾ tsp cereal/oz formula <b>Level 3</b> 2 ¼ to 3 ¼ tsp cereal/oz formula	<b>Enfamil™ (excludes Enfamil AR)</b> <b>Level 1</b> ½ to 2 tsp cereal/oz formula <b>Level 2</b> 1 to 2 ½ tsp cereal/oz formula <b>Level 3</b> 1 ¾ to 3 tsp cereal/oz formula
<b>Pediasure®</b> <b>Level 1</b> ½ to 1 ¾ tsp cereal/oz formula <b>Level 2</b> 1 to 2 ¼ tsp cereal/oz formula <b>Level 3</b> 1 ¾ to 3 tsp cereal/oz formula	<b>Boost® Kids Essentials</b> <b>Level 1</b> ½ to 1 ½ tsp cereal/oz formula <b>Level 2</b> ¾ to 2 tsp cereal/oz formula <b>Level 3</b> 1 ½ to 2 ¾ tsp cereal/oz formula
<b>Other Formulas</b> <b>Level 1</b> ½ to 2 ¼ tsp cereal/oz formula <b>Level 2</b> ¾ to 2 ¾ tsp cereal/oz formula <b>Level 3</b> 1 ½ to 3 ¼ tsp cereal/oz formula	

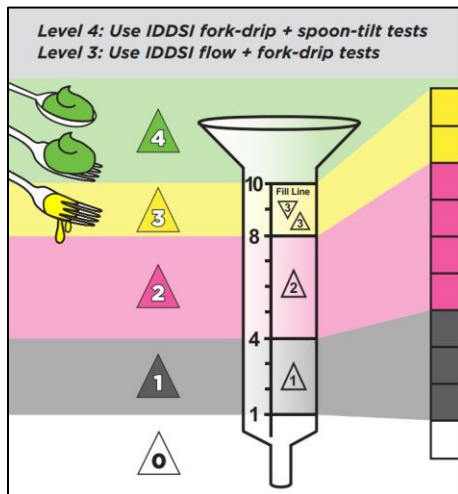
- Any liquid thickened with infant cereal should be flow-tested before feeding. This makes sure it's the right consistency. To make sure products are thickened correctly, use the simple test shown below (Picture 1). **Use an IDDSI funnel to test liquid flow rate.**

IDDSI level depends on liquid remaining after 10 seconds flow:



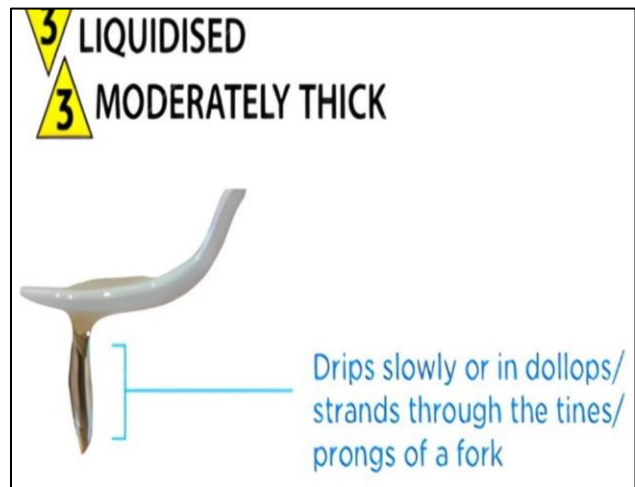
**Picture 1** The IDDSI Flow Test

**Picture 2**



Images Source: ©The International Dysphagia Diet Standardisation Initiative, 2016 – <https://iddsi.org/framework/>

**Picture 3**



**Pictures 2 and 3** Thicken liquids with infant cereal. Check for proper thickness. Level 3 liquids also need to be tested using the fork drop test.

## Tips for Thickening

- When you prepare a drink with infant cereal for the flow test, mix only 1 ounce of the drink or formula. When you reach the correct level, mix the rest of the drink or formula that you need, using the same amount of cereal for each additional ounce (Picture 2).
- When using infant **cereal**, if your flow test is too thin, add more infant cereal by  $\frac{1}{4}$  **teaspoon**. If it is too thick, decrease infant cereal by  $\frac{1}{4}$  teaspoon.
- We recommend the use of “pulverized” infant cereal, such as Earth’s Best®, for thickening if your child is under 12 months of age corrected.
- If you use infant cereal flakes, such as Gerber®, add it to a plastic bag and run a can or a rolling pin over the bag to crush the cereal, or use a blender to pulverize the cereal more.
- Thicken the contents of each bottle **right before** feeding. If using cold formula, mix the cereal in **after** the formula has been warmed. Shake it hard to mix the cereal and liquid well. Offer thickened formula right away. The formula will keep getting thicker as it sits.
- Check the nipple during feeding to make sure it’s not clogged with cereal. You may need to roll the nipple with your fingers or clean out the clog.

## Important Notes

- Ask your child’s doctor, health care provider, or pharmacist how to thicken liquid medicines.
- Talk to your child’s doctor or registered dietitian if you have questions about how these changes may affect the amount of liquid and how many calories your child is getting.

- Your child may need a different bottle nipple so the thickened liquids can get through. Talk with your child’s doctor, speech language pathologist, or occupational therapist before making any changes.
- Let your child’s doctor or health care provider know as soon as possible if they’re:
  - Eating less than normal
  - More irritable
  - Not gaining weight as expected
  - Having constipation
  - Having less wet diapers
  - Coughing or choking during feeds

## Artificial Thickeners

**Do not use fake (artificial) thickeners unless your child is over 12 months old (corrected).** For questions about corrected age, ask their doctor or health care provider. Follow the manufacturer thickening instructions on the can or packet.

## Where to Buy Artificial Thickeners

There are a lot of name-brand thickeners. You can get artificial thickeners at your local pharmacy. You can also order thickener online or by phone. Always follow the manufacturer’s packaging instructions for thickening.

### Simply Thick®

[www.simplythick.com](http://www.simplythick.com)

1 (800) 205-7115

This product can also be used with human milk if your child is over **12 months** of age corrected. This product should not be used for any child under **12 years** of age with a history of necrotizing enterocolitis (NEC).



**Level 1** IDDSI Slightly thick – Use slightly thick packet (Level 1 Slightly Thick) with 4 ounces of liquid or use nectar (Level 2 Mildly Thick) packet and mix with 6 ounces of liquid.



**Level 2** IDDSI Mildly thick/nectar – Mix one packet of mildly thick/nectar with 4 ounces of liquid.



**Level 3** IDDSI Moderately thick/honey – Mix one packet of moderately thick/honey with 4 ounces of liquid.

# Purathick™

[www.healthierthickening.com/purathick/](http://www.healthierthickening.com/purathick/)

1 (866) 950-7278

This product can be used if your child is **over 12 months of age**, corrected. This product should not be used if your child has galactosemia or allergy to galactomannans.

1

**Level 1** IDDSI Slightly thick – Mix one packet with 7 to 8 ounces of liquid.

2

**Level 2** IDDSI Mildly thick/nectar – Mix one packet with 5 to 6 ounces of liquid.

3

**Level 3 IDDSI** Moderately thick/honey – Mix one packet with 3 to 4 ounces of liquid.

There are other products that can thicken liquids. Talk to your child’s doctor or health care provider before using a thickening product .

## Special Instructions

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