

IDDSI Consistency Testing for Foods and Liquids

The International Dysphagia Diet Standardization Initiative (IDDSI) aims to use the same words and definitions to describe texture modified foods and thickened liquids. This handout provides details about IDDSI testing methods for liquids and solid foods.

Liquids

Drinks and other liquids such as sauces and nutritional supplements are best checked using the IDDSI Flow Test. For very thick drinks that do not flow through the 10 milliliter (ml) syringe in 10 seconds and are eaten with a spoon, the IDDSI Fork Test and/or Spoon Tilt Test are better ways to test.

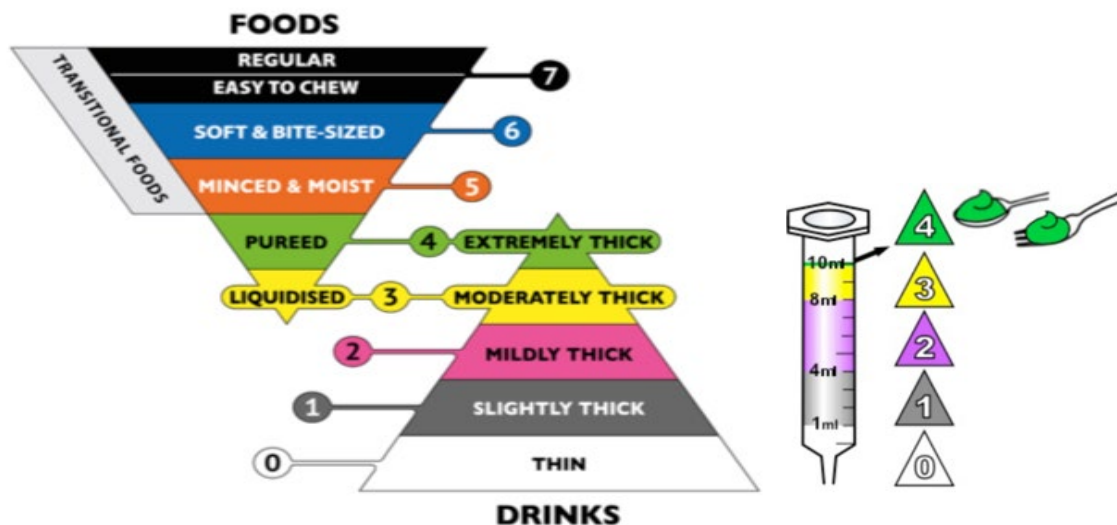
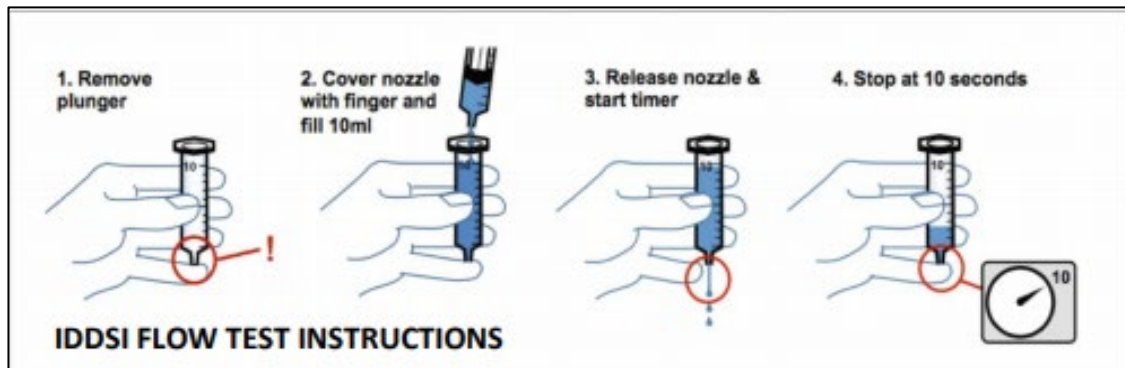
IDDSI Flow Testing

The syringe flow test is an objective way to confirm liquid thickness based on flow rate. See below for how to do this. Videos showing the IDDSI Flow Test can be viewed at:

<http://iddsi.org/framework/drink-testing-methods/>

Materials needed:

- 10 ml slip tip syringes
- Stopwatch or 10 second timer



Thin Liquids	
Description	<ul style="list-style-type: none"> • Flows fast like water • Can drink this through any type of nipple, cup, or straw as suitable for age and skill level
Reason for this level of thickness	<ul style="list-style-type: none"> • Physically able to safely manage all types of liquids
IDDSI Flow Test	<ul style="list-style-type: none"> • Liquid flows through a 10mL slip tip syringe within 10 seconds leaving nothing in the syringe

Slightly Thick Liquids	
Description	<ul style="list-style-type: none"> • Thicker than water • Takes a little more effort to drink than thin liquids • Flows through any type of nipple, syringe or straw
Reason for this level of thickness	<ul style="list-style-type: none"> • Mostly used in the pediatric population that reduces the speed of flow but is still able to flow through a nipple.
IDDSI Flow Test	<ul style="list-style-type: none"> • Liquid flows through a 10mL slip tip syringe leaving 1-4mL of liquid in the syringe after 10 seconds

Mildly Thick Liquids	
Description	<ul style="list-style-type: none"> • Sippable and pours quickly from a spoon but slower than thin drinks • Effort is required to drink this liquid through a standard straw
Reason for this level of thickness	<ul style="list-style-type: none"> • Helpful if thin drinks flow too fast for safety • May be suitable if tongue control is slightly reduced
IDDSI Flow Test	<ul style="list-style-type: none"> • Liquid flows through a 10mL slip tip syringe leaving 4-8mL of liquid in the syringe after 10 seconds

Moderately Thick Liquids	
Description	<ul style="list-style-type: none"> • Can be drunk from a cup • Effort is required to drink this liquid through a standard straw • Can be eaten using a spoon • Cannot be eaten using a fork as it drips slowly through the fork • Can be swallowed directly, no chewing is needed • Smooth texture with no bits of anything
Reason for this level of thickness	<ul style="list-style-type: none"> • Helpful if mildly thick drinks flow too fast for safety • Allows more time for oral control • Need some tongue movement/control • Helpful if painful swallowing
IDDSI Flow Test	<ul style="list-style-type: none"> • Liquid flows through a 10mL slip tip syringe leaving more than 8mL of liquid in the syringe after 10 seconds
Fork Drip test	<ul style="list-style-type: none"> • Drips slowly in dollops through the prongs of the fork • Prongs of a fork do not leave a clear pattern on the liquid when pressed into it • Liquid spreads out when spilled onto a flat surface
Spoon Tilt Test	<ul style="list-style-type: none"> • Easily pours from spoon when tilted; does not stick to spoon

Solid Foods

A few tests may be needed to know which category a food or texture modified food fits into. Testing methods include:

- Fork Drip Test,
- Spoon Tilt Test,
- Fork or Spoon Pressure Test,
- Chopstick Test, and
- Finger Test.



IDDSI Food Testing Methods

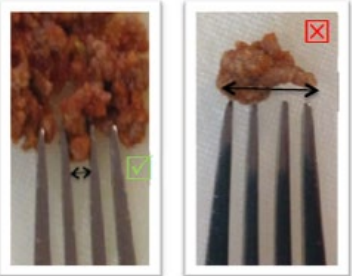
Videos showing examples of these testing methods can be found at:


<http://iddsi.org/framework/food-testing-methods/>

Materials needed:

- Fork
- Spoon
- Chopsticks

Pureed	
Description	<ul style="list-style-type: none"> • Usually eaten with a spoon • Cannot be drunk from a cup, cannot be poured • Cannot be sucked through a straw • Does not require chewing • Falls off spoon in a single plop when tilted and mostly holds its shape on a plate • No lumps • Not sticky • Liquid must not separate from solid
Reason for this level of thickness	<ul style="list-style-type: none"> • If tongue control is greatly reduced, this may be easiest to manage • Requires less tongue effort than Minced and Moist, Soft and Bite-Sized and Regular • No biting or chewing is required • Food remaining after swallowing is a risk if too sticky • Any foods that require chewing, controlled movement or food ball formation are not suitable • Helpful if pain with chewing or swallowing • Helpful if missing teeth, poorly fitting dentures
Fork Pressure test	<ul style="list-style-type: none"> • The fork prongs make a clear pattern/indent on the food • No lumps
Fork Drip Test 	<ul style="list-style-type: none"> • Food sits in a mound on the fork; a small amount may flow through and form a tail below the fork prongs but does not flow or drip continuously through the prongs
Spoon Tilt Test 	<ul style="list-style-type: none"> • Holds its shape on the spoon • A full spoonful must plop off the spoon if turned sideways; a gentle flick may be needed to dislodge the food from the spoon but the food should slide off easily with very little food left on the spoon • May spread out slightly on a plate
Finger Test	<ul style="list-style-type: none"> • It is just possible to hold this texture using fingers; food slides smoothly and easily between fingers and leaves some food

Minced and Moist	
<p>Description</p> 	<ul style="list-style-type: none"> • Can be eaten with a fork or a spoon • Could be eaten with chopsticks if very good hand control • Can be scooped and shaped on a plate (e.g. into a ball shape) • Soft and moist with no separate thin liquid • Small lumps visible within the food <ul style="list-style-type: none"> ○ Child: 2mm size ○ Adult: 4mm size • Lumps are easily squashed with the tongue
<p>Reason for this level of texture</p>	<ul style="list-style-type: none"> • Biting is not required • Minimal chewing is required • Tongue force alone can be used to break up soft small pieces • Tongue force is required to move the food • Helpful if pain or fatigue with chewing • Helpful if missing teeth, poorly fitting dentures
<p>Fork Pressure test</p>	<ul style="list-style-type: none"> • When the food is pressed with a fork, it should easily be separated and come through the prongs of the fork • Can be easily mashed with little pressure from a fork (pressure should not make the fingernail blanch to white)
<p>Fork Drip Test</p>	<ul style="list-style-type: none"> • Scooped food sits in a pile or mound on the fork and does not easily or completely flow or fall through the prongs
<p>Spoon Tilt Test</p>	<ul style="list-style-type: none"> • Holds its shape on the spoon • A full spoonful falls off the spoon if turned sideways or shaken lightly; very little food should remain on the spoon • A scooped mound may spread slightly on a plate
<p>Chopstick Test</p>	<ul style="list-style-type: none"> • Chopsticks can be used to scoop/hold this texture if the food is moist and cohesive and the person has very good hand control
<p>Finger Test</p>	<ul style="list-style-type: none"> • It is possible to easily hold this texture using fingers • Small, soft, moist pieces are easily squashed between fingers

Soft and Bite-Sized	
Description	<ul style="list-style-type: none"> • Can be eaten with a fork, spoon or chopsticks • Can be mashed with pressure from a fork, spoon or chopstick • A knife is not needed to cut this food but may help with loading the fork or spoon • Chewing is required before swallowing • Soft, tender and moist throughout but no separate thin liquid • “Bite-sized” pieces as suitable for size and mouth skills <ul style="list-style-type: none"> ○ Pediatric: 8mm ○ Adult: 15mm = 1.5cm
Reason for this level of texture	<ul style="list-style-type: none"> • Biting is not required • Chewing is required • Tongue force and control is required to move the food for chewing and to keep it within the mouth during chewing • Tongue force is required to move the food for swallowing • Helpful if pain or fatigue with chewing • Helpful if missing teeth, poorly fitting dentures
Fork Pressure Test 	<ul style="list-style-type: none"> • Pressure from a fork held on its side can be used to “cut” or break food into smaller pieces • When a piece of food the size of a thumb nail is pressed with a fork to a pressure where the finger nail blanches to white, the food squashes and changes shape and stays in that shape
Spoon Pressure Test	<ul style="list-style-type: none"> • Pressure from a spoon held on its side can be used to “cut” or break food into smaller pieces • When a piece of food the size of a thumb nail is pressed with a spoon to a pressure where the finger nail blanches to white, the food squashes and changes shape and stays in that shape
Chopstick Test	<ul style="list-style-type: none"> • Chopsticks can be used to break food into smaller pieces
Finger Test	<ul style="list-style-type: none"> • When a piece of food the size of a thumb nail is pressed between fingers where the finger nails blanch to white, the food squashes and changes shape and stays in that shape

Regular	
Description	<ul style="list-style-type: none"> • No texture restrictions at this level • Normal, everyday foods of various textures that are developmentally and age appropriate • Any method is used to eat these foods (e.g. fork, spoon, etc.) • Includes “mixed consistency” foods and liquids (e.g. soup with pieces of vegetables and meat)
Reason for this level of texture	<ul style="list-style-type: none"> • Ability to bite hard or soft foods and chew them for long enough that they form a soft ball that is “swallow ready” • Ability to chew all food textures without tiring easily • Ability to remove bone or gristle that cannot be swallowed safely from the mouth

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 4/2024 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#8111