

# Division of Developmental Disabilities Services

## Community Services

### Health Care Services Protocol # 1

#### Aspiration/Choking Guidelines

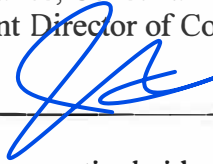
**Prepared by:** Lisa Graves-RN, BSN

**Original Date:** May 2010

**Revised by:** Lisa Graves, Consultative Nurse Workgroup,  
Kami Giglio-Assistant Director of Community Services

**Revision Date:** January 2023

**Approved by:** \_\_\_\_\_



**Date:** 3/8/2023

**I. Objective:** To proactively identify service recipients who are at risk for choking/aspiration and to provide staff with appropriate interventions to manage safe eating practices.

**II. Policy:**

Service recipients are assessed of their risk for aspiration and choking; management of the environment to prevent aspiration and choking; provision and implementation of appropriate safety supports for those who are Moderate to High Risk for aspiration and choking.

**III. Application:**

- All service recipients receiving Residential Habilitation services from the Division of Developmental Disabilities Services (DDDS).
- All service recipients receiving Day and Employment services authorized by DDDS.
- DDDS Community Services staff and contracted Targeted Case Management staff.
- Authorized Residential Habilitation, Day Services, and Nurse Consultation Providers.

**IV. Definitions:**

- A. Aspiration: The inhaling of foods, liquids or foreign objects into the lungs.
- B. Choking: The blocking of the airway by food, liquids or foreign objects.
- C. Dysphagia: Trouble with chewing and swallowing. Food and saliva may go into the lungs instead of the stomach.

**V. Standards:**

- A. An Aspiration/Choking Risk Screening be completed by the Consultative Nurse when a service recipient initially enters into Residential Habilitation Services. (Exhibit A)

- B. Re-assessment shall be completed at least annually in conjunction with the service recipient's Person Centered Plan (PCP) date and any time there is a change in health status or any risk factor is identified. (See Exhibit B). The exhibit is intended as a list of examples/references and not an all-inclusive list of risk factors.
- C. The results (score) of the Aspiration/Choking Risk Screening Tool shall be documented by the Consultative Nurse in the electronic client data management system in the Aspiration Risk Assessment section of the Electronic Comprehensive Health Assessment Tool (ECHAT). If the assessment determines that the service recipient is in the "Moderate" or "High Risk" categories, the Risk Screening Tool must be attached to the RISK section of the PCP document by the Consultative Nurse. If the service recipient is determined to be in the "Low Risk" category, the Risk Screening Tool must be attached to the bottom of the PCP as an external attachment by the Consultative Nurse.
- D. Service recipients identified as "High Risk," who do not have an existing intervention plan for Aspiration/Choking Risk established in their Significant Medical Conditions document, must have immediate precautions taken to ensure their safety is maintained, until an intervention plan is developed or modified (See Section IV below.) If an existing intervention plan is in place, that is effective for the service recipient, no further action is needed. If the existing intervention plan does not sufficiently address the current support needs of the service recipient, the intervention plan shall be amended and changes to the plan documented in a T-log in the electronic client data management system.
- E. The Nurse Consultation provider agency nursing director and agency director must be immediately notified through a T-log in the electronic client data management system and email when a service recipient is newly assessed at "Moderate" or "High Risk." The agency nursing director and agency director must ensure proper safety measures are implemented immediately (See Section IV below).
- F. Each provider agency will maintain a current policy and ensure staff are educated and trained on aspiration/choking risk and safety measures.
- G. The outcome of the Aspiration Risk Assessment shall be discussed with the service recipient's support team members and for service recipients assessed as "Moderate" to "High Risk," an appropriate Significant Medical Conditions intervention plan developed within 30 days of the completed assessment and updated at least annually in conjunction with the annual PCP meeting or whenever a change in the risk-assessment is identified.
- H. A Significant Medical Condition intervention plan shall consist of necessary Safety Supports, interventions and education outlined for staff to follow.
- I. A modified diet and/or liquid consistency as outlined in the healthcare provider's order must be provided for the service recipient for all oral intake.

#### **IV. Recommended Assessments and Follow-up Based on Results of the Assessment:**

A. Low Risk (Score 1-3)

- No action warranted

B. Moderate Risk (Score 4-6)

- Request for speech therapy consultation to determine if dietary modification and/or the use of adaptive feeding equipment is required.
- Team assessment of environmental or behavioral issues related to eating and aspiration/choking risk.
- During evaluation period, request for additional staff observation during mealtimes.
- The above is to be completed if an intervention plan is not already in place or is not sufficiently addressing support needs.

C. High Risk (Score 7 & Above) For those newly assessed at this level or having an increase in score with noted difficulties:

- All of Section B and
- Immediately contact healthcare provider for further guidance and document notification in a T-log.

**V. Staff Education and Training:**

- A. All newly hired staff shall complete the “An Overview of Safe Eating and Drinking Module” on Relias within the first 90 days of hire.
- B. If a service recipient, following the completion of the Aspiration/Choking Risk Screening Tool, is identified at a “Moderate” or “High Risk,” the nurse must provide education and training to the residential habilitation and day services staff within 2 weeks of the completed assessment. Verification of training (i.e., sign in sheet to include date and time of training) must be scanned into a T-log in the service recipient’s electronic client data management system record.
- C. The attached seven Exhibits (B through H) are for additional education purposes. The exhibits are intended as a list of examples/references and not an all-inclusive list of possible diet/liquid consistencies.

**VI. Service Recipients Requiring Conscious Sedation:**

- A. Service recipient must have appropriate preparation prior to procedure (i.e., nothing by mouth at least 8 hours before; medications dependent on instructions from practitioner).
- B. Following the procedure, staff must monitor the service recipient in the practitioner's office until alert and responsive to voice and touch. The service recipient should be able to remain in an upright position without assistance before transporting home.
- C. Two staff must be available to transport the service recipient home from procedure when conscious sedation is used, one staff to drive and one staff to monitor the service recipient for potential changes in consciousness or ability to breathe.
- D. At home following the procedure, the service recipient should be allowed to rest, but monitored one-on-one (in eyesight) at all times until the service recipient is alert, responsive and back to baseline. Once the service recipient is back to baseline, they should be monitored for changes every 15 minutes for the next eight hours.

- E. Staff must ensure the service recipient can remain upright and is back to baseline before offering medications, fluids, or food.
- F. Staff may slowly introduce food and drinks, starting with sips of clear liquids (thickened if a service recipient's diet requires).
- G. Should the service recipient vomit, staff should hold food and drink for 2 hours then slowly introduce food and drinks, starting with clear liquids (thickened if a service recipient's diet requires). If vomiting continues, seek medical attention.
- H. If no further vomiting, progress to ordered diet.
- I. If a service recipient's condition declines (i.e., becomes lethargic, difficult to arouse or demonstrates symptoms of respiratory distress,) 911 emergency response should be contacted immediately.

## VII. References:

Georgia Department of Behavioral Health and Developmental Disabilities. (nd). *What you need to know about choking and aspiration*. Retrieved from [Choking and Aspiration FactSheet.pdf \(georgia.gov\)](#)

International Dysphagia Diet Standardisation Initiative. (July 2019). *Complete IDDSI framework detailed definitions 2.0*. Retrieved from [Microsoft Word - CompleteFramework Final 31Julv2019.](#)

New York State, Office for People with Developmental Disabilities. (2016). *OPWDD choking prevention initiative: preparation guidelines for food and liquid consistency*. Retrieved from [Choking | Office for People With Developmental Disabilities \(ny.gov\)](#)

New York State, Office for People with Developmental Disabilities. (nd). *Prevention of choking and aspiration, stop choking hazards*. Retrieved from [PCA \(ny.gov\)](#)

State of New Jersey, Department of Human Services, Division of Developmental Disabilities. (July 2014). *DDD prevention bulletin; choking*. Retrieved from [ddd health bulletin choking.pdf \(state.nj.us\)](#)

Washington State Department of Social and Health Services, Developmental Disabilities Administration. (nd). *Aspiration/pneumonia training power point*. Retrieved from [Aspiration/Pneumonia Training PowerPoint | DSHS \(wa.gov\)](#)

Washington State Department of Social and Health Services, Developmental Disabilities Administration. (April 2019). *Aspiration the causes and complications you can help manage*. Retrieved from [Aspiration.pdf \(wa.gov\)](#)

## VIII. Exhibits

- A. Aspiration/Choking Risk Screening Tool
- B. Choking and Aspiration Information

- C. Mechanical Soft Diet Information
- D. Total Ground Diet Information
- E. Pureed Diet Information
- F. Diet Consistency Information
- G. Liquid Consistency Information
- H. International Dysphagia Diet Standardization Initiative

**Exhibit A**

**Division of Developmental Disabilities Services  
Community Services  
Aspiration/Choking Risk Screening Tool**

Name: \_\_\_\_\_  
Date of Birth: \_\_\_\_\_  
Prepared by: \_\_\_\_\_

Site: \_\_\_\_\_  
MCI: \_\_\_\_\_  
Date of Screening: \_\_\_\_\_

<i><b>Risk Categories</b></i>	<i><b>Scale</b></i>	<i><b>Score</b></i>
<b><i>Developmental Disability Diagnosis</i></b>		
<i>Mild Developmental Disabilities</i>	0	
<i>Moderate Developmental Disabilities</i>	1	
<i>Severe Developmental Disabilities</i>	1	
<i>Profound Developmental Disabilities</i>	2	
<b><i>Medical Diagnosis</i></b>		
<i>Cerebral Palsy</i>	1	
<i>History of Gastric Reflux</i>	1	
<i>Previous episodes of aspiration/aspiration pneumonia</i>	3	
<i>Tongue thrust</i>	1	
<i>CVA</i>	2	
<i>Degenerative Neurologic Disease</i>	2	
<i>Parkinson's/Huntington's Diseases</i>	2	
<i>Other Movement Disorders</i>	1	
<i>Seizure Disorder</i>	1	
<i>Dementia</i>	1	
<i>PICA</i>	2	
<i>Sleep Apnea</i>	1	
<i>Other Concern (Must Describe)</i>	1	
<b><i>Physical Conditions</i></b>		
<i>Difficulty Chewing</i>	1	
<i>Absence of Chewing</i>	2	
<i>Edentulous</i>	1	
<i>Difficulty Swallowing</i>	1	
<i>Gagging or choking on food and/or liquid</i>	1	
<i>Positive (abnormal) swallowing study</i>	1	
<i>Modified barium swallow positive for aspiration</i>	2	
<i>Other Condition (Must Describe)</i>	1	
<b><i>Eating Habits</i></b>		
<i>Feeds self independently</i>	0	
<i>Needs assistance to eat</i>	1	
<i>Feeds self too fast (picks mouth with food)</i>	1	
<i>Totally dependent for eating</i>	2	
<i>Any modified consistency and/or liquids</i>	3	
<i>Other Concern (Must Describe)</i>	1	
<b><i>Seating Position</i></b>		
<i>Sits at table in regular chair</i>	0	
<i>Wheelchair: Upright</i>	1	
<i>Semi-recline</i>	2	
<i>Poor Positioning</i>	2	
<i>Other Concern (Must Describe)</i>	1	
<b><i>Medications</i></b>		
<i>Any medication that causes sedation</i>	1	
<i>Any psychotropic medication</i>	1	
<i>Other Concern (Must Describe)</i>	1	
<b><i>Risk Score: 1-3 Low Risk 4-6 Moderate Risk 7 and Above High Risk</i></b>	<b>TOTAL SCORE</b>	
<b><i>See Aspiration/Choking Guidelines for Required Assessments and Follow-up Based on Risk Category</i></b>		

**Exhibit B**

**Choking and Aspiration Information**

<b>Medications That Increase Aspiration Risk</b>						
Benzodiazepines	Neuroleptics	Anticonvulsants	Antiparkinsonian agents	Lipid-lowering drugs	Calcium Channel Blockers	Nonsteroidal Anti-Inflammatory drugs
Antineoplastics	Antidepressants	Anxiolytics	Corticosteroids	Diuretics	Antihistamines	Muscle Relaxants
Antibiotics	Iron Preparation	Quinidine	Anticholinergics	Potassium	Narcotics	

<b>Common Choking Hazards</b>			
Popcorn	Potato Chips	Hotdogs & Sausages	Fruit Seeds
Potato Salad	Grapes	Raisins	Peanuts & Nuts
Coins	Balloons	Jewelry	Toys with Small Parts
			Hard Candies
			Chunks of Meat
			Small Balls and Marbles
			Raw Carrots
			Apple Chunks
			Arts & Crafts

<b>Aspiration/Choking Prevention</b>	
Feed small amounts w/recommended consistency & texture (no more than ½ tsp)	Remain upright for at least 30 minutes after eating
Avoid excessive sedation	Take at least 20 minutes for meal time
Provide oral care	Proper positioning
Make sure they have swallowed the first bite	Maintain a pleasant eating atmosphere
Excessive drooling before presenting another	

<b>Risk Factors for Aspiration/Choking</b>	
Food remaining on the tongue after swallowing	Poorly fitted, damaged dentures or edentulous
Pocketing of food on side of mouth	Neglected oral care
Excessive drooling	Use of medications that may affect swallowing (See Above)
Coughing or choking while eating or drinking	Onset of illness which may affect physical ability
Gargling-sounding voice after eating or drinking, throat clearing	Unplanned weight loss
Rumination	PICA Behavior
Inability to maintain posture	Changes in voice
Past and present eating habits (shoveling/rapid ingestion, food stealing)	Nasal regurgitation
Any history of aspiration pneumonia	Nasal discharge during meals
Poor appetite which may stem from fear of choking	Frequent urinary tract infections

## MECHANICAL SOFT DIET

<b>Food Group</b>	<b>Foods Allowed</b>	<b>Foods To Avoid</b>
<p><b>Meat, Fish, Poultry, Eggs, Cheese and Meat Alternates</b></p>	<p>Mechanically ground meat, fish and poultry; soft casseroles containing mechanically ground meats (such as: beef stroganoff, beef and macaroni casserole, lasagna, spaghetti with meat sauce); macaroni and cheese; sloppy joes; soft tacos with ground meat; burritos with ground meat; soft tuna or egg salad; chicken, turkey or ham salad made with mechanically ground meats; mechanically ground luncheon meats mixed with mayonnaise; scrambled eggs; sliced or chopped hard cooked egg; most cheeses including American and cheddar; grilled cheese sandwiches cut into ½ inch size pieces</p>	<p>Peanut Butter; meats unless they are mechanically ground and moist; chili; chunky tuna or egg salad containing raw vegetables</p>
<p><b>Breads, Cereal and Starches</b></p>	<p>Breads and soft rolls including muffins and croissants cut into ½ inch size pieces; dry cereals that soften in milk (such as: flake cereals); cooked cereal; whipped potatoes; scalloped potatoes and other soft potatoes; sweet potatoes; stuffing; noodles; rice; pancakes, waffles, and French toast softened with margarine and syrup; baked beans; French fries &amp; hush puppies (cut into ½ inch size pieces)</p>	<p>Dry cereals (such as: granola) that do not soften in milk; bagels or hard crust breads (such as: Kaiser rolls); breads and cereals with nuts; soft pretzels</p>
<p><b>Fruits and Juices</b></p>	<p>Canned and soft fruit (such as: plums) hand cut into ½ inch size pieces; diced canned fruit (such as: peaches and pears) mechanically chopped into ¼ inch size pieces; orange or grapefruit sections without membrane; crushed pineapple; banana; watermelon; jellied cranberry sauce</p>	<p>Hard raw fruits unless mechanically chopped into ¼ inch size pieces; grapes; cherries</p>



# MECHANICAL SOFT DIET

Food Group	Foods Allowed	Foods To Avoid
<p><b>Vegetables</b></p>	<p>Well-cooked vegetables hand-cut into ½ inch size pieces; raw salads and raw vegetables mechanically chopped into ¼ inch size pieces</p>	<p>Whole kidney beans; brussel sprouts; raw vegetables and raw salads (unless mechanically chopped)</p>
<p><b>Soups</b></p>	<p>All soups except soups with large chunks of meat.</p>	
<p><b>Desserts</b></p>	<p>Ice cream (with toppings smaller than ½ inch in size); fruit ice; sherbet; Oreo cookie shakes and ice creams; pudding; custard; custard-type or cream pie filling (no crust except graham cracker crust); Jell-O; yogurt; moist cakes with icings (no candy decorations); cupcakes and snack cakes; soft fruit or fig bars; soft doughnuts; soft marshmallow cream cookies or cakes; chocolate candy bars; peppermint patties; chocolates with cream filling; soft fudge</p>	<p>Those with nuts or candy bar pieces (such as: candy bar blizzards); chewy candy (such as: caramels, taffy, toffee, licorice); granola bars; hard candies; chewing gum; chewy marshmallow candy; jelly beans; gummy bears; gumdrops</p>
<p><b>Miscellaneous</b></p>	<p>Margarine; plain gravies; cream cheese; cheese spreads; mayonnaise; sugar; salt; herbs; spices; jelly; preserves; condiments; relish; puffed cheese curls; cheese balls; potato chips; dips for chips and vegetables</p>	<p>Fried snacks (such as: corn and nacho chips); popcorn; marshmallow fluff; marshmallows</p>

Exhibit D

**TOTAL GROUND DIET**

<b>Food Group</b>	<b>Foods Allowed</b>	<b>Foods To Avoid</b>
<p><b>Meat, Fish, Poultry, Eggs, Cheese and Meat Alternates</b></p>	<p>Moist mechanically ground meat, fish, or poultry; mechanically chopped casseroles (such as: macaroni and cheese, lasagna, spaghetti with meat sauce, ravioli, manicotti); soft tuna salad without celery pieces; egg salad; regular scrambled eggs; cottage cheese; cheese sauce; shredded cheese</p>	<p>Meats unless they are ground and moist; hard-cooked egg unless combined in other dishes; peanut butter; all others.</p>
<p><b>Breads, Cereals and Starches</b></p>	<p>Cooked cereal; whipped potatoes; sweet potato fluff; mechanically chopped stuffing; soft noodles mechanically chopped into small pieces; pancakes, waffles, French toast or plain muffins softened in thickened milk. Muffins with lumpy ingredients should be pureed. Flake cereal (without raisins or nuts) or krispies must be prepared as follow:</p> <p><b>Add 1 &amp; ½ juice glasses (6 oz.) of milk to ¼ cup cereal; stir the cereal and let stand for 15 minutes until milk is completely absorbed.</b></p>	<p>Dry breadcrumbs or any other dry cereal except flakes or krispies; whole breads including rolls, bagels, biscuits and croissants; crackers unless softened in thickened liquids.</p>
<p><b>Fruits</b></p>	<p>Hand-mashed banana; mechanically chopped canned peaches, pears, apricots and fruit cocktail; crushed pineapple; applesauce; jellied cranberry sauce. Dried fruit must be cooked and then pureed.</p>	<p>Canned, fresh or frozen fruit unless mechanically chopped; dry fruit unless cooked and then pureed.</p>

# TOTAL GROUND DIET

Food Group	Foods Allowed	Foods To Avoid
<p><b>Vegetables</b></p>	<p>Mechanically chopped canned and cooked vegetables (except corn, which must be pureed). Pureed raw vegetables and salads.</p>	<p>Whole corn unless pureed; raw vegetables and salads unless pureed; all cooked vegetables unless mechanically chopped.</p>
<p><b>Soups</b></p>	<p>Tomato soup; broth or bouillon</p>	<p>All soups unless mechanically chopped.</p>
<p><b>Desserts</b></p>	<p>Pureed Jell-O; soft-serve ice cream; fruit ice; sherbet; frozen yogurt; milkshakes; puddings except rice pudding which must be pureed; custard pie filling; cheesecake filling; mousse; plain and fruit flavored yogurt; cakes or cookies softened with thickened milk. Cakes, cookies or muffins containing textured ingredients must be pureed. Whipped toppings; chocolate syrup; caramel syrup; <b>*popsicle; *fudgsicle</b></p>	<p>All desserts or toppings with nuts, seeds, raisins, coconut, candy bar pieces or any chunks. Regular cake and cupcakes unless softened with thickened milk. Cookies and crackers unless softened with thickened liquids; no candies or pie crusts. Cakes, cookies, pies, brownies and cupcakes with lumpy ingredients must be pureed.</p>
<p><b>Miscellaneous</b></p>	<p>Butter; margarine; plain gravy (no chunks); mayonnaise; sugar; salt; herbs; spices; jelly; syrup; condiments; grated cheese; pickle relish; cheese sauce</p> <p><b>*Use appropriate caution and supervision when food items contain a stick.</b></p> <p><b>*Individuals on thickened liquid diets may not have popsicles and fudgsicles.</b></p>	<p>All others including bacon bits, pickles, preserves, salsa.</p>

**Exhibit E**

**PUREED DIET**

<b>Food Group</b>	<b>Foods Allowed</b>	<b>Foods To Avoid</b>
<p><b>Meat, Fish, Poultry, Cheese and Eggs</b></p>	<p>Pureed poultry; pureed meat; pureed fish; pureed cottage cheese; pureed eggs</p>	<p>All other meats and fried or hard cooked egg.</p>
<p><b>Breads, Cereals and Starches</b></p>	<p>Whipped or mashed potatoes; pureed sweet potatoes; pureed rice and pastas; cooked cereals (except oatmeal which needs to be pureed)</p>	<p>Breads and crackers; all dry cereals; oatmeal except if pureed; dry bread crumbs; all other potatoes, pastas and rice</p>
<p><b>Fruits and Juices</b></p>	<p>Pureed fruits; applesauce</p>	<p>All non-pureed fruits</p>
<p><b>Vegetables</b></p>	<p>Pureed vegetables; tomato juice (thickened if needed)</p>	<p>All others</p>
<p><b>Soups</b></p>	<p>Tomato soup; broth and all pureed soups (thickened if needed)</p>	<p>All non-pureed soups (except tomato soup and broth)</p>
<p><b>Desserts</b></p>	<p>Pureed Jell-O; plain pudding, custard or custard pie fillings; plain yogurt or yogurt with pureed fruits; pureed desserts; pureed cake and cookies; chocolate syrup; caramel syrup</p>	<p>All others; rice pudding and tapioca pudding must be pureed.</p>

<p><b>Miscellaneous</b></p>	<p>Butter; margarine; plain gravy (no lumps); sugar; mayonnaise; salt; herbs; spices (such as garlic or onion powder); jelly; mustard; ketchup</p>	<p>All others including grated cheese; tartar sauce; relish; jam; preserves; chunky salad dressings; chopped or minced garlic or onion</p>
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## Exhibit F

### Diet Consistency Information

**Mechanical Soft** – This diet consists of soft foods that are easy to chew. With the exception of meats which should be served mechanically ground and raw fruits and vegetables which should be served mechanically chopped, other foods should be hand chopped into ½ inch size (or smaller) to aid chewing.

**Total Ground Diet** – This diet consists of food for service recipients who are unable to chew food. All foods will be mechanically chopped or mechanically ground into one-quarter inch size pieces. Corn, raw vegetables, salads, rice and textured muffins will be served pureed as specified by the menu. The menu modification sheets will list the appropriate substitute at each meal for bread and rolls (e.g., an extra 4 oz. of the starch or an extra 2 oz. of the casserole). Cakes, cookies, pancakes, French toast and waffles will be moistened in thickened milk. Textured cakes and cookies will be pureed.

**Pureed Diet** – This diet consists of food for service recipients who are unable to chew food. All foods are blenderized to a smooth, moist consistency. The menu modification sheets will list the appropriate substitutes at each meal for bread and rolls (e.g., an extra 4 oz of the starch or an extra 2 oz of the casserole).

## Exhibit G

### Liquid Consistency Information

**The consistency of the liquid a service recipient receives is recommended by an Occupational Therapist or Speech Pathologist and is ordered by a healthcare provider.**

**The texture of food should not be thinner than the prescribed liquid consistency.**

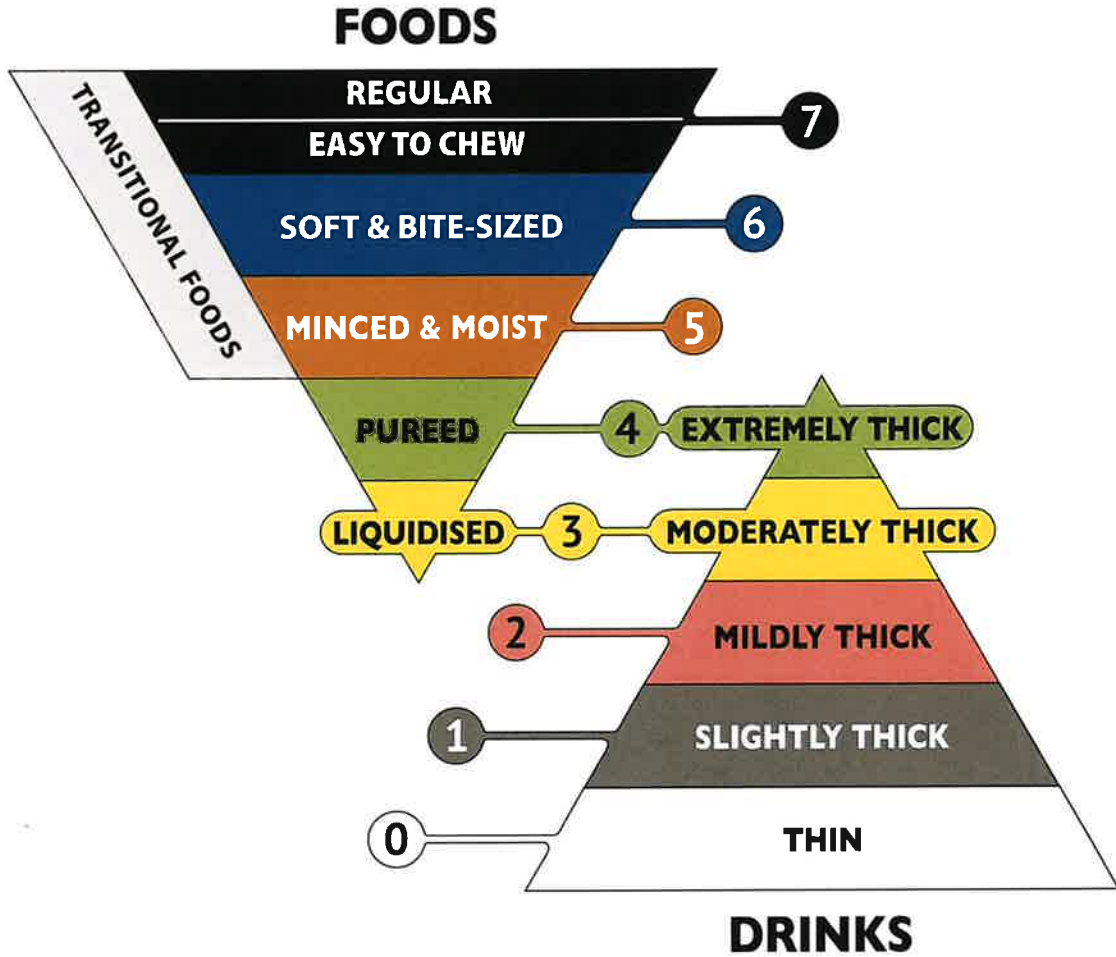
- **Thin Liquids:** Liquids/fluids/beverages are served without change. Includes all liquids, Jell-O, sherbet, Italian Ice, and ice cream. This consistency is considered non-restrictive. Nothing is added.
- **Thickened Liquids:** are prescribed for specific service recipients.

**Nectar Liquids:** Apricot or tomato juice consistency; some liquids will require a thickening agent to reach this consistency.

**Honey Liquids:** Liquids can still be poured, but are very slow. Liquids will require a thickening agent to be added to achieve this consistency.

**Pudding Liquids:** Liquids are spoonable, but when spoon is placed upright, it will not stay.

- **Who Needs this Diet:** Thickened liquids are prescribed for some service recipients with swallowing problems.
- **Why is This Prescribed:** Thickeners slow the flow of liquids and makes them easier to swallow.
- **How to Prepare:**
  - Gather equipment needed for preparation.
  - Follow manufacturer's recommendations EXACTLY for measurements of both the commercial thickener and the liquid.
  - Follow recommendations for waiting time for the thickener to work.
  - USE NO MORE THICKNER THAN NECESSARY to avoid excess calories and over thickening.
  - Remember that all thickening agents whether commercial (Thick-It, Thick and Easy) or non-commercial food items (instant Potatoes, baby fruits, baby cereal, etc.) add extra calories to the foods and liquids they are added to. If the service recipient is on a reducing diet, these calories must be considered. The dietitian must be advised if a thickening agent is to be used.



**Complete IDDSI Framework  
Detailed definitions  
2.0 | 2019**

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## INTRODUCTION

The International Dysphagia Diet Standardisation Initiative (IDDSI) was founded in 2013 with the goal of developing new international standardised terminology and definitions to describe texture modified foods and thickened liquids used for individuals with dysphagia of all ages, in all care settings, and all cultures.

Three years of work by the International Dysphagia Diet Standardisation Committee culminated in the 2016 release and 2017 publication of the IDDSI Framework consisting of a continuum of 8 levels (0-7). Levels are identified by numbers, text labels and colour codes. [Reference: Cichero JAY, Lam P, Steele CM, Hanson B, Chen J, Dantas RO, Duivesteyn J, Kayashita J, Lecko C, Murray J, Pillay M, Riquelme L, Stanschus S. (2017) Development of international terminology and definitions for texture-modified foods and thickened fluids used in dysphagia management: The IDDSI Framework. *Dysphagia*, 32:293-314. <https://link.springer.com/article/10.1007/s00455-016-9758-y>]

The Complete IDDSI Framework Detailed Definitions 2019 is an update to the 2016 document. The Complete IDDSI Framework Detailed Definitions document provides detailed descriptors for all levels of the IDDSI Framework. Descriptors are supported by simple measurement methods that can be used by people with dysphagia or by caregivers, clinicians, food service professionals or industry to confirm the level a food or drink fits into.

This document is to be read in conjunction with IDDSI Testing Methods 2019, IDDSI Evidence 2016 and IDDSI Frequently Asked Questions (FAQs) documents ( <https://iddsi.org/framework/>).

The IDDSI Framework provides a common terminology to describe food textures and drink thickness. IDDSI tests are intended to confirm the flow or textural characteristics of a particular product at the time of testing. Testing should be done on foods and drinks under the *intended serving conditions* (especially temperature). The clinician has the responsibility to make recommendations for foods or drinks for a particular patient based on their comprehensive clinical assessment.

IDDSI would like to acknowledge the interest and participation of the global community including patients, caregivers, health professionals, industry, professional associations and researchers. We would also like to thank our sponsors for their generous support.

Please visit <https://iddsi.org/> for further information.

### The IDDSI Board:

**The IDDSI Board are a group of volunteers who do not draw a salary from IDDSI. They offer their knowledge, expertise and time for the benefit of the international community.**

Co-Chairs: Peter Lam (CAN) & Julie Cichero (AUS);

Board Members: Jianshe Chen (CHN), Roberto Dantas (BRA), Janice Duivesteyn (CAN), Ben Hanson (UK), Jun Kayashita (JPN), Mershen Pillay (ZAF), Luis Riquelme (USA), Catriona Steele (CAN), Jan Vanderwegen (BE).

Past Board Members: Joseph Murray (USA), Caroline Lecko (UK), Soenke Stanschus (GER)

The International Dysphagia Diet Standardisation Initiative Inc. (IDDSI) is independent and operates as a not-for-profit entity. IDDSI is grateful to a large number of agencies, organizations and industry partners for financial and other support. Sponsors have not been involved with the design or development of the IDDSI framework.

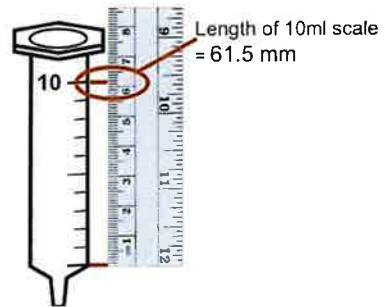
Implementation of the IDDSI framework is in progress. IDDSI is extremely grateful to all sponsors supporting implementation <https://iddsi.org/about-us/sponsors/>

<b>Description/ Characteristics</b>	<ul style="list-style-type: none"> <li>• Flows like water</li> <li>• Fast flow</li> <li>• Can drink through any type of teat/nipple, cup or straw as appropriate for age and skills</li> </ul>
<b>Physiological rationale for this level of thickness</b>	<ul style="list-style-type: none"> <li>• Functional ability to safely manage liquids of all types</li> </ul>

**Although descriptions are provided, use IDDSI Testing methods to decide if the liquid meets IDDSI Level 0.**  
**TESTING METHOD**  
 See also *IDDSI Testing Methods* document or <https://iddsi.org/framework/drink-testing-methods/>

<b>IDDSI Flow Test*</b>	<ul style="list-style-type: none"> <li>• Less than 1 mL remaining in the 10 mL slip tip syringe<sup>#</sup> after 10 seconds of flow (see IDDSI Flow Test instructions*)</li> </ul>
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**#Before you test...**  
 You *must check* your syringe length because there are differences in syringe lengths. Your syringe should look like this



**IDDSI FLOW TEST INSTRUCTIONS**

1. Remove plunger
2. Cover nozzle with finger and fill 10ml
3. Release nozzle & start timer
4. Stop at 10 seconds

Level 4: Use IDDSI fork-drip / spoon-tilt tests

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# 1

# SLIGHTLY THICK

**Description/  
Characteristics**

- Thicker than water
- Requires a little more effort to drink than thin liquids
- Flows through a straw, syringe, teat/nipple
- Similar to the thickness of most commercially available 'Anti-regurgitation' (AR) infant formulas

**Physiological rationale for this level of thickness**

- Often used in the paediatric population as a thickened drink that reduces speed of flow yet is still able to flow through an infant teat/nipple. Consideration to flow through a teat/nipple should be determined on a case-by-case basis.
- Also used in adult populations where thin drinks flow too fast to be controlled safely. These slightly thick liquids will flow at a slightly slower rate.

Although descriptions are provided, use IDDSI Testing methods to decide if the liquid meets IDDSI Level 1.

**TESTING METHOD**

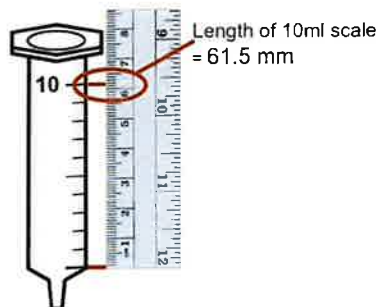
See also *IDDSI Testing Methods* document or <https://iddsi.org/framework/drink-testing-methods/>

**IDDSI Flow Test\***

- Test liquid flows through a 10 mL slip tip syringe<sup>#</sup> leaving 1-4 mL in the syringe after 10 seconds (see IDDSI Flow Test instructions\*)

**#Before you test...**

You *must check* your syringe length because there are differences in syringe lengths. Your syringe should look like this



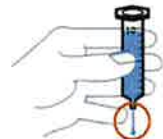
1. Remove plunger



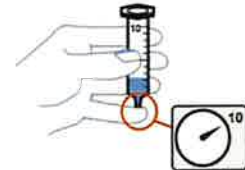
2. Cover nozzle with finger and fill 10ml



3. Release nozzle & start timer

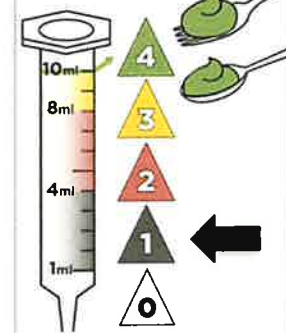


4. Stop at 10 seconds



**IDDSI FLOW TEST INSTRUCTIONS**

Level 4: Use IDDSI fork-drip / spoon-tilt tests



# 2

# MILDLY THICK

<b>Description/ Characteristics</b>	<ul style="list-style-type: none"> <li>• Flows off a spoon</li> <li>• Sippable, pours quickly from a spoon, but slower than thin drinks</li> <li>• Mild effort is required to drink this thickness through standard bore straw (standard bore straw = 0.209 inch or 5.3 mm diameter)</li> </ul>
<b>Physiological rationale for this level of thickness</b>	<ul style="list-style-type: none"> <li>• If thin drinks flow too fast to be controlled safely, these Mildly Thick liquids will flow at a slightly slower rate</li> <li>• May be suitable if tongue control is slightly reduced.</li> </ul>

Although descriptions are provided, use IDDSI Testing methods to decide if the liquid meets IDDSI Level 2.

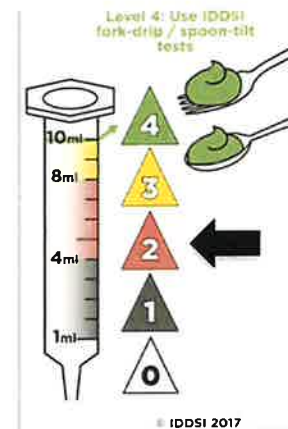
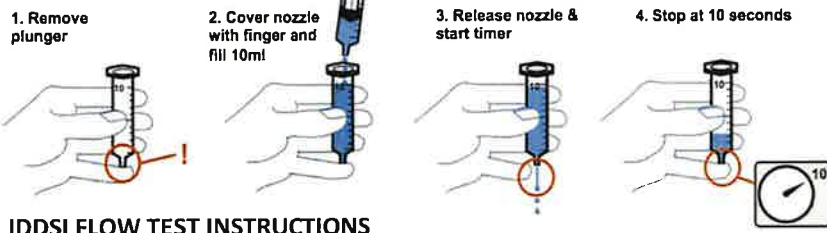
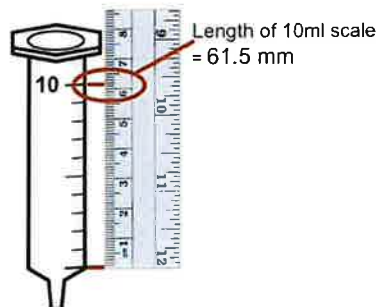
### TESTING METHOD

See also *IDDSI Testing Methods* document or <https://iddsi.org/framework/drink-testing-methods/>

<b>IDDSI Flow Test*</b>	<ul style="list-style-type: none"> <li>• Test liquid flows through a 10 mL slip tip syringe leaving 4 to 8 ml in the syringe after 10 seconds (see IDDSI Flow Test instructions*)</li> </ul>
-------------------------	--

#### #Before you test...

You *must check* your syringe length because there are differences in syringe lengths. Your syringe should look like this





## 3 MODERATELY THICK

Description/characteristics	<ul style="list-style-type: none"> <li>• Can be drunk from a cup</li> <li>• Moderate effort is required to suck through a standard bore or wide bore straw (wide bore straw = 0.275 inch or 6.9 mm)</li> <li>• Cannot be piped, layered or molded on a plate because it will not retain its shape</li> <li>• Cannot be eaten with a fork because it drips slowly in dollops through the prongs</li> <li>• Can be eaten with a spoon</li> <li>• No oral processing or chewing required – can be swallowed directly</li> <li>• Smooth texture with no ‘bits’ (lumps, fibers, bits of shell or skin, husk, particles of gristle or bone)</li> </ul>
Physiological rationale for this level of thickness	<ul style="list-style-type: none"> <li>• If tongue control is insufficient to manage Mildly Thick drinks (Level 2), this Liquidised/Moderately thick level may be suitable</li> <li>• Allows more time for oral control</li> <li>• Needs some tongue propulsion effort</li> <li>• Pain on swallowing</li> </ul>

Although descriptions are provided, use IDDSI Testing methods to decide if the food/liquid meets IDDSI Level 3.

### TESTING METHODS

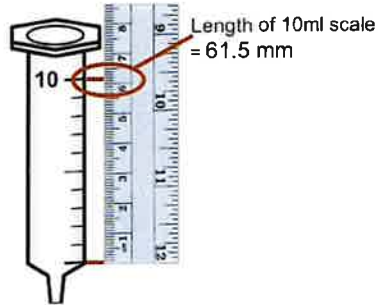
See also *IDDSI Testing Methods* document or <https://iddsi.org/framework/drink-testing-methods/> and <https://iddsi.org/framework/food-testing-methods/>

IDDSI Flow Test*	<ul style="list-style-type: none"> <li>• Test liquid flows through a 10 ml slip tip syringe leaving &gt; 8 ml in the syringe after 10 seconds (see IDDSI Flow Test Guide*)</li> </ul>
Fork Drip Test	<ul style="list-style-type: none"> <li>• Drips slowly in dollops through the prongs of a fork</li> <li>• When a fork is pressed on the surface of Level 3 Moderately Thick Liquid/Liquidised food, the tines/prongs of a fork do not leave a clear pattern on the surface</li> <li>• Spreads out if spilled onto a flat surface</li> </ul>
Spoon Tilt Test	<ul style="list-style-type: none"> <li>• Easily pours from spoon when tilted; does not stick to spoon</li> </ul>
<i>Where forks are not available</i> Chopstick Test	<ul style="list-style-type: none"> <li>• Chopsticks are not suitable for this texture</li> </ul>
<i>Where forks are not available</i> Finger Test	<ul style="list-style-type: none"> <li>• It is not possible to hold a sample of this food texture using fingers, however, this texture slides smoothly and easily between the thumb and fingers, leaving a coating</li> </ul>
<b>Food specific or Other examples (NB. this list is not exhaustive)</b>	<p>The following items may fit into IDDSI Level 3:</p> <ul style="list-style-type: none"> <li>• Infant “first foods” (runny rice cereal or runny pureed fruit)</li> <li>• Some sauces and gravies, as confirmed by IDDSI Flow Test</li> </ul>

- Some syrups, as confirmed by IDDSI Flow Test

**#Before you test...**

You *must check* your syringe length because there are differences in syringe lengths. Your syringe should look like this



**IDDSI FLOW TEST INSTRUCTIONS**

1. Remove plunger
2. Cover nozzle with finger and fill 10ml
3. Release nozzle & start timer
4. Stop at 10 seconds

Level 4: Use IDDSI fork-drip / spoon-tilt tests

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**3 LIQUIDISED**  
**3 MODERATELY THICK**

Drips slowly or in dollops/strands through the slots of a fork

# 4 PUREED

# 4 EXTREMELY THICK

<b>Description/characteristics</b>	<ul style="list-style-type: none"> <li>• Usually eaten with a spoon (a fork is possible)</li> <li>• Cannot be drunk from a cup because it does not flow easily</li> <li>• Cannot be sucked through a straw</li> <li>• Does not require chewing</li> <li>• Can be piped, layered or molded because it retains its shape, but should <b>not</b> require chewing if presented in this form</li> <li>• Shows some very slow movement under gravity but cannot be poured</li> <li>• Falls off spoon in a single spoonful when tilted and continues to hold shape on a plate</li> <li>• No lumps</li> <li>• <b>Not</b> sticky</li> <li>• Liquid must not separate from solid</li> </ul>
<b>Physiological rationale for this level of thickness</b>	<ul style="list-style-type: none"> <li>• If tongue control is significantly reduced, this category may be easiest to control</li> <li>• Requires less propulsion effort than Minced &amp; Moist (level 5), Soft &amp; Bite-Sized (Level 6) and Regular and Regular Easy to Chew (Level 7) but more than Liquidised/Moderately thick (Level 3)</li> <li>• No biting or chewing is required</li> <li>• Increased oral and/or pharyngeal residue is a risk if too sticky</li> <li>• Any food that requires chewing, controlled manipulation or bolus formation are <b>not</b> suitable</li> <li>• Pain on chewing or swallowing</li> <li>• Missing teeth, poorly fitting dentures</li> </ul>

**Although descriptions are provided, use IDDSI Testing methods to decide if the food/liquid meets IDDSI Level 4.**

**TESTING METHODS**

See also *IDDSI Testing Methods* document or <https://iddsi.org/framework/food-testing-methods/>

IDDSI Flow test	<ul style="list-style-type: none"> <li>• <b>n/a.</b> The IDDSI Flow test is not applicable, please use the Fork Drip Test and Spoon Tilt Test</li> </ul>
Fork Pressure test	<ul style="list-style-type: none"> <li>• Smooth with no lumps and minimal granulation</li> <li>• When a fork is pressed on the surface of Level 4 Extremely Thick Liquid/Pureed food, the tines/prongs of a fork can make a clear pattern on the surface, and/or the food retains the indentation from the fork</li> </ul>
Fork Drip test Fork Drip test contd.	<ul style="list-style-type: none"> <li>• Sample sits in a mound/pile above the fork; a small amount may flow through and form a short tail below the fork tines/prongs, but it <b>does not</b> flow or drip continuously through the prongs of a fork (see</li> </ul>

	picture below)
Spoon Tilt test	<ul style="list-style-type: none"> <li>• Cohesive enough to hold its shape on the spoon</li> <li>• A full spoonful must plop off the spoon if the spoon is tilted or turned sideways; a very gentle flick (using only fingers and wrist) may be necessary to dislodge the sample from the spoon, but the sample should slide off easily with very little food left on the spoon. A thin film remaining on the spoon after the Spoon Tilt Test is acceptable, however, you should still be able to see the spoon through the thin film; i.e. the sample should <u>not</u> be firm and sticky</li> <li>• May spread out slightly or slump very slowly on a flat plate</li> </ul>
Where forks are not available Chopstick test	<ul style="list-style-type: none"> <li>• Chopsticks are not suitable for this texture</li> </ul>
Where forks are not available Finger test	<ul style="list-style-type: none"> <li>• It is just possible to hold a sample of this texture using fingers. The texture slides smoothly and easily between the fingers and leaves noticeable coating</li> </ul>
Indicators that a sample is too thick	<ul style="list-style-type: none"> <li>• Does not fall off the spoon when tilted</li> <li>• Sticks to spoon</li> </ul>

#### FOOD SPECIFIC OR OTHER EXAMPLES

The following item may be suitable for IDDSI Level 4:

- Purees suitable for infants (e.g. pureed meat, thick cereal)



Spoon Tilt Test: Holds shape on spoon; not firm and sticky; little food left on spoon



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The following images show examples of foods that would be suitable or unsuitable for Level 4 according to the IDDSI Spoon Tilt Test

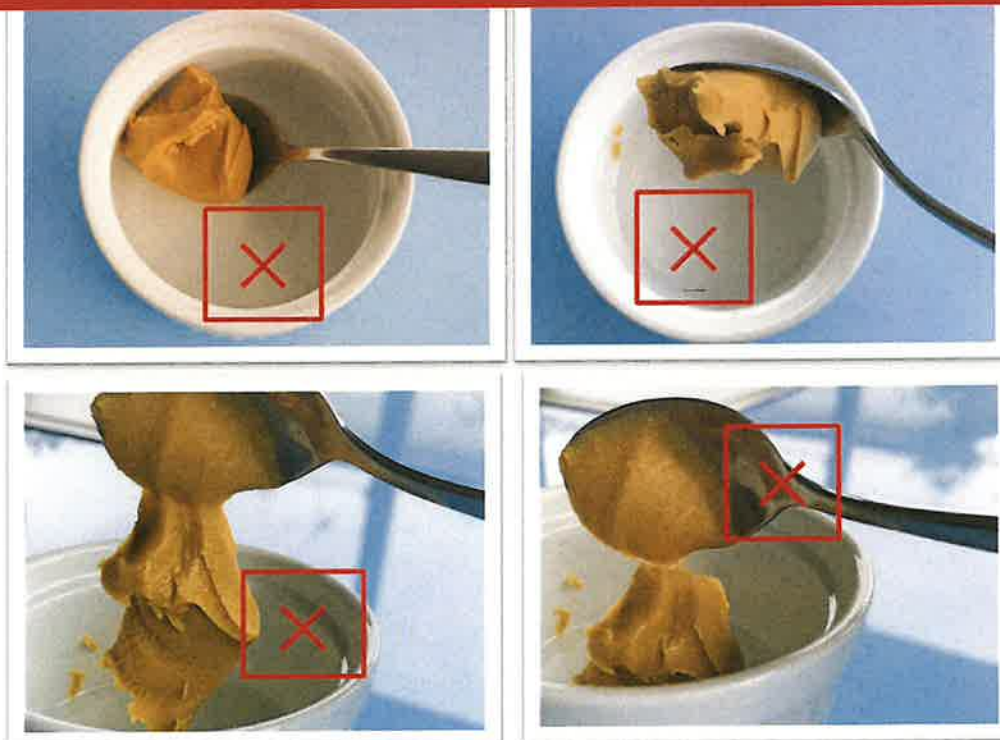
Spoon Tilt Test: SAFE: Holds shape on spoon; not firm and sticky; little food left on spoon



Spoon Tilt Test: SAFE: Holds shape on spoon; not firm and sticky; little food left on spoon



Spoon Tilt Test: UNSAFE: Holds shape on spoon; FIRM AND STICKY; LOTS OF food left on spoon



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IDDSI 2.0 | July, 2019



# MINCED & MOIST



<b>Description/characteristics</b>	<ul style="list-style-type: none"><li>• Can be eaten with a fork or spoon</li><li>• Could be eaten with chopsticks in some cases, if the individual has very good hand control</li><li>• Can be scooped and shaped (e.g. into a ball shape) on a plate</li><li>• Soft and moist with no separate thin liquid</li><li>• Small lumps visible within the food<ul style="list-style-type: none"><li>➢ <b>Paediatric, equal to or less than 2 mm width and no longer than 8mm in length</b></li><li>➢ <b>Adult, equal to or less than 4mm width and no longer than 15mm in length</b></li></ul></li><li>• Lumps are easy to squash with tongue</li></ul>
<b>Physiological rationale for this level of thickness</b>	<ul style="list-style-type: none"><li>• Biting is not required</li><li>• Minimal chewing is required</li><li>• Tongue force alone can be used to separate the soft small particles in this texture</li><li>• Tongue force is required to move the bolus</li><li>• Pain or fatigue on chewing</li><li>• Missing teeth, poorly fitting dentures</li></ul>
<b>Although descriptions are provided, use IDDSI Testing methods to decide if the food meets IDDSI Level 5. TESTING METHODS</b> See also <i>IDDSI Testing Methods</i> document or <a href="https://iddsi.org/framework/food-testing-methods/">https://iddsi.org/framework/food-testing-methods/</a>	
Fork Pressure test	<ul style="list-style-type: none"><li>• When pressed with a fork the particles should easily be separated between and come through the tines/prongs of a fork</li><li>• Can be easily mashed with little pressure from a fork [pressure should <u>not</u> make the thumb nail blanch to white]</li></ul>
Fork Drip test	<ul style="list-style-type: none"><li>• When a sample is scooped with a fork it sits in a pile or can mound on the fork and does not easily or completely flow or fall through the tines/prongs of a fork</li></ul>
Spoon Tilt test	<ul style="list-style-type: none"><li>• Cohesive enough to hold its shape on the spoon</li><li>• A full spoonful must slide/pour off/fall off the spoon if the spoon is tilted or turned sideways or shaken lightly; the sample should slide off easily with very little food left on the spoon; i.e. the sample should <u>not</u> be sticky</li><li>• A scooped mound may spread or slump very slightly on a plate</li></ul>
<i>Where forks are not available</i> Chopstick test	<ul style="list-style-type: none"><li>• Chopsticks can be used to scoop or hold this texture if the sample is moist and cohesive <i>and</i> the person has very good hand control to use chopsticks</li></ul>

Where forks are not available  
Finger test

- It is possible to easily hold a sample of this texture using fingers; small, soft, smooth, rounded particles can be easily separated using fingers. The material will feel moist and leave fingers wet.

**FOOD SPECIFIC OR OTHER EXAMPLES** <https://iddsi.org/framework/food-testing-methods/>

#### MEAT

- Finely minced\* or chopped\*, soft mince
  - Paediatric, equal to or less than 2mm width and no longer than 8mm in length
  - Adult, equal to or less than 4mm width and no more than 15mm in length
- Serve in mildly, moderately or extremely thick, smooth, sauce or gravy, draining excess
- \*If texture cannot be finely minced it should be pureed



#### MINCED & MOIST



Use slot between fork prongs (4mm) to determine whether minced pieces are the correct or incorrect size

#### FISH

- Finely mashed in mildly, moderately or extremely thick smooth, sauce or gravy, draining excess
  - Paediatric, equal to or less than 2mm width and no longer than 8mm in length
  - Adult, equal to or less than 4mm width and no more than 15mm in length

#### FRUIT

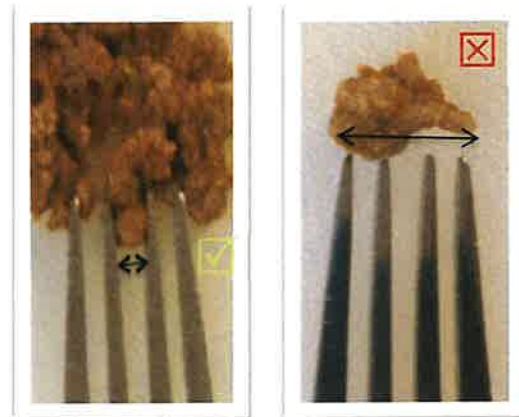
- Serve finely minced or chopped or mashed
- Drain excess juice
- If needed, serve in mildly, moderately or extremely thick smooth sauce or gravy AND drain excess liquid. No thin liquid should separate from food
  - Paediatric, equal to or less than 2mm width and no longer than 8mm in length
  - Adult, equal to or less than 4mm width and no more than 15mm in length

#### VEGETABLES

- Serve finely minced or chopped or mashed
- Drain any liquid
- If needed, serve in mildly, moderately or extremely thick smooth sauce or gravy AND drain excess liquid. No thin liquid should separate from food
  - Paediatric, equal to or less than 2mm width and no longer than 8mm in length
  - Adult, equal to or less than 4mm width and no more than 15mm in length

#### CEREAL

- Thick and smooth with small soft lumps
  - Paediatric, equal to or less than 2mm width and no longer than 8mm in length
  - Adult, equal to or less than 4mm width and no more than 15mm in length
- Texture fully softened
- Any milk/fluid must not separate away from cereal. Drain any excess fluid before serving



**Note - lump size requirements for all foods in Level 5 Minced & Moist:**

- Paediatric, equal to or less than 2mm width and no more than 8mm in length
- Adult, equal to or less than 4mm width and no more than 15mm in length

## BREAD

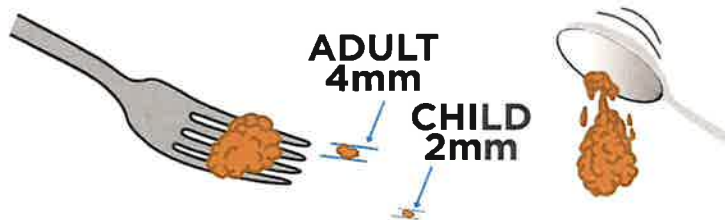
- No regular, dry bread, sandwiches or toast of any kind
- Use IDDSI Level 5 Minced & Moist sandwich recipe video <https://www.youtube.com/watch?v=W7bOufgmz18>
- Pre-gelled 'soaked' breads that are very moist and gelled through the entire thickness



## RICE, COUSCOUS, QUINOA (and similar food textures)

- Not sticky or glutinous
- Should not be particulate or separate into individual grains when cooked and served
- Serve with smooth mildly, moderately or extremely thick sauce AND Sauce must not separate away from rice, couscous, quinoa (and similar food textures). Drain excess fluid before serving

*Minced & Moist food must pass all three tests!*



### IDDSI Fork Test

*Paediatric*, equal to or less than 2mm width and no more than 8mm in length

*Adult*, equal to or less than 4mm width and no more than 15mm in length

4mm is about the gap between the prongs of a standard dinner fork

Soft enough to squash easily with fork or spoon

Don't need thumb nail to blanch white

### IDDSI Spoon Tilt Test

Sample holds its shape on the spoon and falls off fairly easily if the spoon is tilted or lightly flicked

Sample should *not* be firm or sticky



# SOFT & BITE-SIZED



**IDDSI**  
International Dysphagia Diet  
Standardisation Initiative  
www.iddsi.org

<b>Description/characteristics</b>	<ul style="list-style-type: none"> <li>• Can be eaten with a fork, spoon or chopsticks</li> <li>• Can be mashed/broken down with pressure from fork, spoon or chopsticks</li> <li>• A knife is not required to cut this food, but may be used to help load a fork or spoon</li> <li>• Soft, tender and moist throughout but with no separate thin liquid</li> <li>• Chewing is required before swallowing</li> <li>• ‘Bite-sized’ pieces as appropriate for size and oral processing skills               <ul style="list-style-type: none"> <li>➤ <b>Paediatric, 8mm pieces (no larger than)</b></li> <li>➤ <b>Adults, 15 mm = 1.5 cm pieces (no larger than)</b></li> </ul> </li> </ul>
<b>Physiological rationale for this level of thickness</b>	<ul style="list-style-type: none"> <li>• Biting is not required</li> <li>• Chewing is required</li> <li>• Food piece sizes designed to minimize choking risk</li> <li>• Tongue force and control is required to move the food and keep it within the mouth for chewing and oral processing</li> <li>• Tongue force is required to move the bolus for swallowing</li> <li>• Pain or fatigue on chewing</li> <li>• Missing teeth, poorly fitting dentures</li> </ul>

**Although descriptions are provided, use IDDSI Testing methods to decide if the food meets IDDSI Level 6.**

### TESTING METHODS

See also *IDDSI Testing Methods* document or <https://iddsi.org/framework/food-testing-methods/>

Fork Pressure test	<ul style="list-style-type: none"> <li>• Pressure from a fork held on its side can be used to ‘cut’ or break apart or flake this texture into smaller pieces</li> <li>• When a sample the size of a thumb nail (1.5x1.5 cm) is pressed with the tines of a fork to a pressure where the thumb nail blanches to white, the sample squashes, breaks apart, changes shape, and does not return to its original shape when the fork is removed.</li> </ul>
Spoon Pressure test	<ul style="list-style-type: none"> <li>• Pressure from a spoon held on its side can be used to ‘cut’ or break this texture into smaller pieces.</li> <li>• When a sample the size of a thumb nail (1.5 cm x1.5 cm) is pressed with the base of a spoon, the sample squashes, breaks apart, changes shape, and does not return to its original shape when the spoon is removed.</li> </ul>
<i>Where forks are not available</i> Chopstick test	<ul style="list-style-type: none"> <li>• Chopsticks can be used to break this texture into smaller pieces or puncture food</li> </ul>

Where forks are not available  
Finger test

- Use a sample the size of a thumb nail (1.5 cm x 1.5 cm). It is possible to squash a sample of this texture using finger pressure such that the thumb and index finger nails blanch to white. The sample breaks apart and will not return to its initial shape once pressure is released.

#### FOOD SPECIFIC OR OTHER EXAMPLES

##### MEAT

- Cooked, tender meat no bigger than
  - Paediatric, 8mm pieces
  - Adults, 15 mm = 1.5 x 1.5 cm pieces
  - If texture cannot be served soft and tender at 1.5 cm x 1.5 cm (as confirmed with fork/ spoon pressure test), serve minced and moist

**Note - food size requirements for all foods in Level 6 Soft & Bite-sized:**

- Paediatric, 8mm pieces
- Adult, 15mm = 1.5cm pieces

##### FISH

- Soft enough cooked fish to break into small pieces with fork, spoon or chopsticks no larger than
  - Paediatric, 8mm pieces
  - Adults, 15 mm = 1.5 cm pieces
- No bones or tough skins

##### CASSEROLE/STEW/CURRY

- Liquid portion (e.g. sauce) must be thick (as per clinician recommendations)
- Can contain meat, fish or vegetables if final cooked pieces are soft and tender and no larger than
  - Paediatric, 8mm pieces
  - Adults, 15 mm = 1.5 cm pieces
- No hard lumps

##### FRUIT

- Serve minced or mashed if cannot be cut to soft & bite-sized pieces
  - Paediatric, 8mm pieces
  - Adults, 15 mm = 1.5 cm pieces
- Fibrous parts of fruit are not suitable
- Drain excess juice
- Assess individual ability to manage fruit with high water content (e.g. watermelon) where juice separates from solid in the mouth during chewing

##### VEGETABLES

- Steamed or boiled vegetables with final cooked size of
  - Paediatric, 8mm pieces
  - Adults, 15 mm = 1.5 cm pieces
- Stir fried vegetables may be too firm and are not soft or tender. Check softness with fork/spoon pressure test

##### CEREAL

- Smooth with soft tender lumps no bigger than
  - Paediatric, 8mm pieces
  - Adults, 15 mm = 1.5 cm pieces
- Texture fully softened
- Any excess milk or liquid must be drained and/or thickened to thickness level recommended by clinician

## BREAD

- No regular dry bread, sandwiches or toast of any kind
- Use IDDSI Level 5 Minced & Moist sandwich recipe video to prepare bread and add to filling that meets Level 6 Soft & Bite-sized requirements  
<https://www.youtube.com/watch?v=W7bOufqgz18>
- Pre-gelled 'soaked' breads that are very moist and gelled through the entire thickness



## RICE, COUCOUS, QUINOA (and similar food textures)

- Not particulate/grainy, sticky or glutinous

# 6 SOFT & BITE-SIZED



Thumb nail blanched to white



Sample squashes and does not return to its original shape when pressure is released

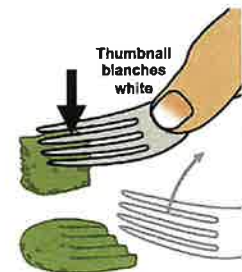
Food pieces no bigger than 8mm x 8mm lump size for children



Food pieces no bigger than 1.5cm x 1.5cm bite size for adults



**Soft & Bite-Sized food must pass both food piece size and softness tests!**





# EASY TO CHEW



<b>Description/characteristics</b>	<ul style="list-style-type: none"><li>• Normal, everyday foods of <b>soft/tender textures</b> that are developmentally and age appropriate</li><li>• Any method may be used to eat these foods</li><li>• Sample size is not restricted at Level 7, therefore, foods may be of a <b>range of sizes</b><ul style="list-style-type: none"><li>➢ Smaller or greater than 8mm pieces (Paediatric)</li><li>➢ Smaller or greater than 15 mm = 1.5 cm pieces (Adults)</li></ul></li><li>• Does not include: hard, tough, chewy, fibrous, stringy, crunchy, or crumbly bits, pips, seeds, fibrous parts of fruit, husks or bones</li><li>• May include 'dual consistency' or 'mixed consistency' foods and liquids if also safe for Level 0, and at clinician discretion. If unsafe for Level 0 Thin, liquid portion can be thickened to clinician's recommended thickness level</li></ul>
<b>Physiological rationale for this level of thickness</b>	<ul style="list-style-type: none"><li>• Requires the ability to bite soft foods and chew and orally process food for long enough that the person forms a soft cohesive ball/bolus that is 'swallow ready'. Does not necessarily require teeth.</li><li>• Requires the ability to chew and orally process soft/tender foods without tiring easily</li><li>• May be suitable for people who find hard and/or chewy foods difficult or painful to chew and swallow</li><li>• This level could present a choking risk for people with clinically identified increased risk of choking, because food pieces can be of <i>any</i> size. Restricting food piece sizes aims to minimize choking risk (e.g. Level 4 Pureed, Level 5 Minced &amp; Moist, Level 6 Soft &amp; Bite-sized have food piece size restrictions to minimize choking risk)</li><li>• This level may be used by qualified clinicians for developmental teaching, or progression to foods that need more advanced chewing skills</li><li>• <b>If the person needs supervision to eat safely, before using this texture level consult a qualified clinician to determine the person's food texture needs, and meal time plan for safety</b><ul style="list-style-type: none"><li>• People can be unsafe to eat without supervision due to chewing and swallowing problems and/or unsafe mealtime behaviours. Examples of unsafe mealtime behaviors include: not chewing very well, putting too much food into the mouth, eating too fast or swallowing large mouthfuls of food, inability to self-monitor chewing ability.</li><li>• Clinicians should be consulted for specific advice for patient needs, requests and requirements for supervision.</li><li>• <b>Where mealtime supervision is needed, this level should only be used under the strict recommendation and written guidance of a qualified clinician</b></li></ul></li></ul>



Although descriptions are provided, use IDDSI Testing methods to decide if the food meets IDDSI Level 7 Easy to Chew.

#### TESTING METHODS

See also IDDSI Testing Methods document or <https://iddsi.org/framework/food-testing-methods/>

Fork Pressure Test	<ul style="list-style-type: none"> <li>Pressure from a fork held on its side can be used to 'cut' or break apart or flake this texture into smaller pieces</li> <li>When a sample the size of a thumb nail (1.5x1.5cm) is pressed with the tines of a fork to a pressure where the thumb nail blanches to white, the sample squashes, breaks apart, changes shape and does not return to its original shape when the fork is removed.</li> </ul>
Spoon Pressure Test	<ul style="list-style-type: none"> <li>Pressure from a spoon held on its side can be used to 'cut' or break or flake this texture into smaller pieces</li> <li>When a sample the size of a thumb nail (1.5x1.5cm) is pressed with the base of a spoon to a pressure where the thumb nail blanches to white, the sample squashes, breaks apart, changes shape and does not return to its original shape when the spoon is removed.</li> </ul>
<i>Where forks are not available</i> Chopstick Test	<ul style="list-style-type: none"> <li>Chopsticks can be used to puncture this texture</li> </ul>
<i>Where forks are not available</i> Finger test	<ul style="list-style-type: none"> <li>Use a sample the size of a thumb nail (1.5x1.5cm). It is possible to squash a sample of this texture using finger pressure such that the thumb and index finger nails blanch to white. The sample squashes and breaks apart and will not return to its initial shape once pressure is released.</li> </ul>

#### FOOD SPECIFIC OR OTHER EXAMPLES

##### MEAT

- Cooked until tender.
- If texture cannot be served soft and tender, serve minced and moist

##### FISH

- Soft enough cooked fish to break into small pieces with the side fork, spoon or chopsticks

##### CASSEROLE/STEW/CURRY

- Can contain meat, fish, vegetables, or combinations of these if final cooked pieces are soft and tender
- Serve in mildly, moderately or extremely thick sauce AND drain excess liquid
- No hard lumps

##### FRUIT

- Soft enough to be cut broken apart into smaller pieces with the side of a fork or spoon. Do not use the fibrous parts of fruit (e.g. the white part of an orange).

##### VEGETABLES

- Steam or boil vegetables until tender. Stir fried vegetables may be too firm for this level. Check softness with fork/spoon pressure test

##### CEREAL

- Served with texture softened
- Drain excess milk or liquid and/or thicken to thickness level recommended by clinician

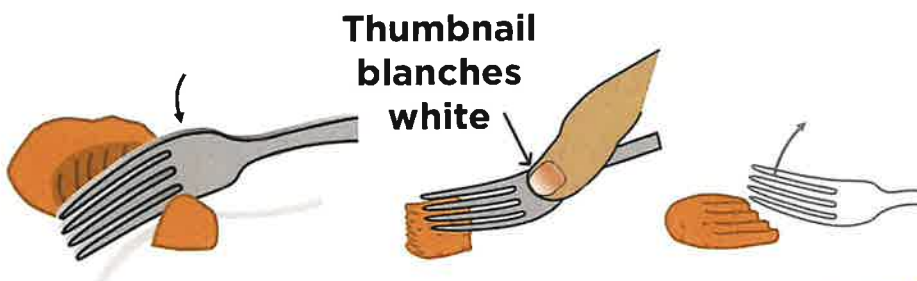
##### BREAD

- Bread, sandwiches and toast that can be cut or broken apart into smaller pieces with the side of a fork or spoon can be provided at clinician discretion

RICE, COUSCOUS, QUINOA (and similar food textures)

- No special instructions

**Easy to Chew foods must break apart easily with the side of a fork or spoon and pass Fork Pressure Test**



**Thumb nail blanches white**

**Must be able to break food apart easily with the side of a fork or spoon**

**IDDSI Fork Pressure Test**

**To make sure the food is soft enough,** press down on the fork until the thumb nail blanches to white, then lift the fork to see that the food is completely squashed and does not regain its shape





# REGULAR

## Description/characteristics

There are NO texture restrictions at this level

- Normal, everyday foods of various textures that are developmentally and age appropriate
- Any method may be used to eat these foods
- Foods may be hard and crunchy or naturally soft
- Sample size is not restricted at Level 7, therefore, foods may be of a **range of sizes**
  - Smaller or greater than 8mm pieces (Paediatric)
  - Smaller or greater than 15 mm = 1.5 cm pieces (Adults)
- Includes hard, tough, chewy, fibrous, stringy, dry, crispy, crunchy, or crumbly bits
- Includes food that contains pips, seeds, pith inside skin, husks or bones
- Includes 'dual consistency' or 'mixed consistency' foods and liquids

## Physiological rationale for this level of thickness

- Ability to bite hard or soft foods and chew them for long enough that they form a soft cohesive ball/bolus that is 'swallow ready'
- An ability to chew all food textures without tiring easily
- An ability to remove bone or gristle that cannot be swallowed safely from the mouth

## TESTING METHOD

- Not Applicable

# TRANSITIONAL FOODS



<b>Description/characteristics</b>	<ul style="list-style-type: none"> <li>• Food that starts as one texture (e.g. firm solid) and changes into another texture specifically when moisture (e.g. water or saliva) is applied, or when a change in temperature occurs (e.g. heating)</li> </ul>
<b>Physiological rationale for this level of thickness</b>	<ul style="list-style-type: none"> <li>• Biting not required</li> <li>• Minimal chewing required</li> <li>• Tongue can be used to break these foods once altered by temperature or with addition of moisture/saliva</li> <li>➤ May be used for developmental teaching or rehabilitation of chewing skills (e.g. development of chewing in the paediatric population and developmental disability population; rehabilitation of chewing function post stroke)</li> </ul>

**Although descriptions are provided, use IDDSI Testing methods to decide if the food meets the requirements for Transitional foods.**

## TESTING METHOD

See also *IDDSI Testing Methods* document or <https://iddsi.org/framework/food-testing-methods/>

Fork pressure test	<ul style="list-style-type: none"> <li>• After moisture or temperature has been applied, the sample can be easily deformed and does not recover its shape when the force is lifted.</li> <li>• Use a sample the size of the thumb nail (1.5 cm x 1.5 cm), place 1 ml of water on the sample and wait one minute. Apply fork pressure using the tines of the fork until the thumbnail blanches to white. The sample is a transitional food texture if after removing the fork pressure:             <ul style="list-style-type: none"> <li>• The sample has been squashed and disintegrated and no longer looks like its original state</li> <li>• Or it has melted significantly and no longer looks like its original state (e.g. ice chips).</li> </ul> </li> </ul>
Spoon pressure test	<ul style="list-style-type: none"> <li>• As above, using the base of the spoon in place of the fork</li> </ul>
<i>Where forks are not available</i> Chopstick test	<ul style="list-style-type: none"> <li>• Use a sample the size of the thumb nail (1.5 cm x 1.5 cm), place 1 ml of water on the sample and wait one minute. The sample should be easily broken apart using chopsticks with minimal pressure.</li> </ul>

Where forks are not available  
Finger test

- Use a sample the size of the thumb nail (1.5 cm x 1.5 cm), place 1 ml of water on the sample and wait one minute. The sample will break apart completely by rubbing the sample between the thumb and index finger. The sample will not return to its initial shape

#### FOOD SPECIFIC OR OTHER EXAMPLES

IDDSI Transitional Foods may include and are not limited to:

- Ice chips
- Ice cream/Sherbet if assessed as suitable by a Dysphagia specialist
- Japanese Dysphagia Training Jelly sliced 1 mm x 15 mm
- Wafers (also includes Religious Communion wafer)
- Waffle cones used to hold ice cream
- Some biscuits/ cookies/ crackers
- Some potato crisps – only ones made or formed from mashed potato (e.g. Pringles)
- Shortbread
- Prawn crisps

#### Specific examples used in paediatric or adult disability dysphagia management

Commercially available foods<sup>#</sup> that are transitional foods textures include but are not limited to:

- Veggie Stix™
- Cheeto Puffs™
- Rice Puffs™
- Baby Mum Mums™
- Gerber Graduate Puffs™

<sup>#</sup>The mention of certain manufacturers' products does not imply that they are endorsed or recommended in preference to others of a similar nature that are not mentioned.

## TRANSITIONAL FOODS



- Apply 1 ml of water to sample
- Wait 1 minute



# FOOD TEXTURES THAT POSE A CHOKING RISK

Examples are drawn from international autopsy reports



**Hard or dry textures are a choking risk because** they require good chewing ability to break down *and* mix with saliva to make them moist enough to be safe to swallow.

*Examples of hard or dry textures:* nuts, raw carrots, crackling, hard crusty rolls

**Fibrous or tough textures are a choking risk because** they require good chewing ability, and sustained chewing ability to break down to small enough pieces that are safe to swallow.

*Examples of fibrous or tough textures:* steak, pineapple

**Chewy textures are a choking risk because** they are sticky and can become stuck to the roof of the mouth, the teeth or cheeks and fall into the airway

*Examples of chewy textures:* candies/lollies/sweets, cheese chunks, marshmallows, chewing gum, sticky mashed potato

**Crispy textures are a choking risk because** they require good chewing ability to break down and mix with saliva to make them soft, rounded and moist enough to be safe to swallow.

*Examples of crispy textures:* crackling, crisp bacon, some dry cereals

**Crunchy textures are a choking risk because** they require good chewing ability, and sustained chewing ability to break them into small enough pieces and mix with saliva so that they are safe to swallow.

*Examples of crunchy textures:* raw carrot, raw apple, popcorn

**Sharp or spiky textures are a choking risk because** they require good chewing ability to break them into small enough, soft, rounded pieces and moist enough to be safe to swallow.

*Example of sharp or spiky textures:* dry corn chips

**Crumbly textures are a choking risk because** they need good tongue control to bring crumbly pieces together and mix with enough saliva to hold together to be moist and safe to swallow.

*Examples of crumbly textures:* crumbly dry cakes, dry cookies, dry biscuits or scones

**Pips, seeds, and the white parts of fruit are a choking risk because** they are hard and part of other hard or fibrous textures, making it a complex process to separate and remove them from the mouth

*Examples of pips, seeds and white parts of fruit* include apple or pumpkin seeds, the white part of oranges

**Skins, husks or outer shells are a choking risk because** the pieces are often fibrous, spiky, and dry needing good chewing skills to make the pieces smaller, and enough saliva to make it moist, OR enough skill to remove the pieces from the mouth. These small pieces become stuck to teeth and gums and catch in the throat when swallowed.

*Examples of skins, husks or outer shells* include pea shells, grape skin, bran, psyllium

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**Bone or gristle is a choking risk because** these pieces are hard and not usually chewed and swallowed. They require good tongue skills to remove them from the food texture they are attached to, and then remove the bone or gristle from the mouth.

*Examples of bone or gristle* includes chicken bones, fish bones

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**Round, or long shaped foods are a choking risk because** if they are not chewed into small pieces and are swallowed whole they are a shape that can completely block the airway causing choking

*Examples of round or long shaped foods* include sausages, grapes

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**Sticky or gummy textures are a choking risk because** they are sticky and can become stuck to the roof of the mouth, the teeth or cheeks and fall into the airway. They require sustained and good chewing ability to reduce stickiness by adding saliva to make them safe to swallow.

*Examples of chewy textures:* nut butter, overcooked oatmeal, edible gelatin, Konjac containing jelly, sticky rice cakes, candy

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**Stringy textures are a choking risk because** the string can be difficult to break and the flesh can become trapped with part in the mouth and part in the throat tied together by the stringy texture.

Examples of stringy textures include: green string beans, rhubarb

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**Mixed thin-thick textures are a choking risk because** they require an ability to hold the solid piece in the mouth while the thin liquid portion is swallowed. After the liquid portion is swallowed the solid pieces are chewed and swallowed. This is a very complex oral task.

*Examples of mixed thin-thick textures* include: soup with food pieces, cereal pieces with milk, bubble tea

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**Complex food textures are a choking risk because** they require an ability to chew and manipulate a variety of food textures in one mouthful.

*Examples of complex food textures* include: hamburger, hot dog, sandwich, meatballs and spaghetti, pizza

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**Floppy textures are a choking risk because** if they are not chewed into small pieces they become thin and wet and can form a covering over the opening of the airway, stopping air from flowing.

*Examples of floppy textures* include: lettuce, thin sliced cucumber, baby spinach leaves

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**Juicy food textures where the juice separates from the food when chewing is a choking risk** because it needs the person to be able to swallow the juice while controlling the solid piece in the mouth, Once the juice has been swallowed good chewing skills are needed to break the food into smaller pieces for safe swallowing. It is a complex oral task.

*Example of juicy food textures* include: watermelon

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**Hard skins or crusts formed during cooking or heating are a choking risk** because they require good chewing skills to break them down into smaller pieces while mixed with other food textures not affected by the heating process.

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## **\*Accompanying documents <https://iddsi.org/framework/>**

- IDDSI Testing Methods
- IDDSI Evidence
- IDDSI Frequently Asked Questions (FAQs)



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