



IASLT & INDI

Comparison Document:

The International Dysphagia Diet Standardisation Initiative Framework and Irish Consistency Descriptors for Modified Fluids and Food Consensus Document (2009)

Date: May 2018

Executive Summary

This document outlines the Irish Association of Speech and Language Therapist's (IASLT) and the Irish Nutrition and Dietetic Institute's (INDI) joint position on the adoption of the International Dysphagia Diet Standardisation Initiative's (IDDSI) Framework and Descriptors for texture modified diets and thickened fluids for the Irish context. It is recommended that the IDDSI Framework should replace the existing consensus document Irish Consistency Descriptors for Modified Fluids and Food Consensus Document published by the IASLT and INDI in 2009.

Key points of this document:

- Background & Context
- Importance of having a standard Framework
- Importance of common language/terminology:
- Comparison between IDDSI vs Irish Diet Descriptors
- Comparison between IDDSI vs Irish Fluid Descriptors
- Appendix 1: Frequently Asked Questions (FAQ)
- Appendix 2: Progress of the Implementation of IDDSI Internationally as of April 2018

The Irish Association of Speech and Language Therapists (IASLT)

The IASLT is the professional body of Speech & Language Therapists in Ireland, representing over 800 members.

The Irish Nutrition & Dietetic Institute (INDI)

The INDI is the professional body of Dietitians in Ireland, representing over 750 members.

Working Group:

- Adrian Bradley, Speech and Language Therapist (Chair)
- Amy Craddock, Dietitian
- Mairead O'Sullivan, Dietitian
- Sara Brennan, Speech and Language Therapist
- Sharon Keogh, Speech and Language Therapist
- Siobhan Quigley, Dietitian
- Deirdre Kidney, Speech and Language Therapist



Introduction

The International Dysphagia Diet Standardisation Initiative (IDDSI)

The IDDSI are a group of volunteers from diverse professions including nutrition & dietetics, medicine, speech pathology, occupational therapy, nursing, patient safety, engineering, food science & technology from around the world who came together to develop international standardised terminology and definitions for texture modified foods and thickened liquids for persons with dysphagia.

The IDDSI's objectives, as stated on their website, are as follows:

- To develop a standardised way of naming and describing texture modified foods and thickened liquids for people with dysphagia across the lifespan
- Our process is intended to be person-focused, rather than profession focused. We seek to develop a global terminology that will 'work' for all cultures and that will be accompanied by practical and valid measurement techniques that will facilitate use by persons with dysphagia, caregivers, clinicians, food service professionals and industry partners.
- To seek a common language that can be used for technical, cultural, professional and non-professional uses. We believe this should be a living document, changing as needs change.

It is worth noting that this is an industry backed initiative with the following sponsors listed on the IDDSI website:

- Nestlé Nutrition Institute (2012-2015)
- Nutricia Advanced Medical Nutrition (2013-2014)
- Hormel Thick & Easy (2014-2015)
- Campbell's Food Service (2013-2015)
- Apetito (2013-2015)

- Trisco (2013-2015)
- Food Care Co. Ltd. Japan (2015)
- Flavour Creations (2013-2015)
- Simply Thick (2015)
- Lyons (2015)

Background – adapted from 2009 Consensus Document

The Irish Consistency Descriptors for Modified Fluids and Food Consensus Document (2009)

This consensus document was published in November 2009 and sought to provide a national consensus regarding the terminology used in the dietary management of patients with Dysphagia and was the first step in standardising the terminology used to describe food and fluid consistencies in the Republic of Ireland (hereafter known only as Ireland). Its aims were to facilitate communication and consistency between Speech and Language Therapists, Dietitians, other healthcare professionals, patients, and their families/carers.

The 2009 consensus document was drafted following investigation of (then) current practices in Ireland and abroad. The survey of existing practices in Ireland identified a wide range of terms being used to describe modified fluids and food, which highlighted the need for standardised terminology of consistencies in Ireland to improve communication between all relevant professions, therefore ensuring safety for patients. The terminologies suggested were adapted from the 'Australian Standardised Definitions and Terminology for Texture Modified Foods and Fluids' (Dietitians Association of Australia and the Speech Pathology Association of Australia Ltd, 2007), to best fit with our needs and the needs of our patients at that time. This document has been due for review for since January 2011 but due to resourcing and other commitments, this has not occurred.

The International Dysphagia Diet Standardisation Initiative (IDDSI) Framework and Descriptors in Ireland

In April 2016 the Co-Chairs of the IDDSI, Peter Lam (Dietitian, Canada) and Dr. Julie Cichero (Speech and Language Pathologist, Australia) gave a presentation to representatives of both the IASLT and INDI in Dublin. The purpose of their visit was to discuss the adoption of the IDDSI Framework and Descriptors for texture modified foods and thickened liquids in Ireland. Following this meeting the representatives wrote to their respective organisations to recommend the joint adoption of the IDDSI Framework to replace the existing Consensus Document from 2009.

The reasons for this recommendation include:

• The IDDSI framework is applicable to all dysphagia patients (all ages, all cultures) all carers and all staff working with patients who have dysphagia in all care settings.

Care settings include (this list is not exhaustive):

Acute Hospital Services.

Intellectual Disability Services.

Mental Health Services.

Residential Services for Older Persons

Rehabilitation Medicine

Palliative Care

Paediatrics and Neonatology

Primary Community and Continuing Care

Voluntary Bodies

Private Healthcare Settings.

- The IDDSI framework was developed using evidence, survey responses and expert
- A systematic review of the literature completed and published in open access: Steele et al., (2015) *Dysphagia*, 30(1): 20-26; available at: https://www.magonlinelibrary.com/toc/bjnn/13/Sup2
- IDDSI outline improved testing methods for classifying food texture and thickened liquids, providing instructions for easy, reliable and accessible methods to test different foods and drinks.
 - O It is worth noting that the 'Australian Standardised Definitions and Terminology for Texture Modified Foods and Fluids' (2007) document was used as the basis for the development of the terminology for the IDDSI Framework. As mentioned above, this is the same document from which the IASLT INDI consensus document (2009) was adapted.
- The IDDSI framework focuses on food and fluid consistency at the point of service. This represents a move away from using lists of specified foods for each texture. It provides tests to carry out at the point of service of the food or fluid to assess that the food or liquid is the correct consistency as per 'patient's recommendation. This mitigates some of the risk posed by foods that can be a number of different consistencies depending on how they are prepared. Instead, the technique places responsibility on the server to ensure that it the correct consistency immediately before consumption.
- Ireland will be able to produce comparable international research in the area of dysphagia and diet/fluids if IDDSI guidelines are implemented
 - The IDDSI systematic review (Steele et al., 2015) "points to an urgent need to conduct quality research to determine thickness levels that provide therapeutic benefit by reducing risk for penetration/aspiration and/or improving swallowing function."



- Recommendations for patients with dysphagia will be internationally recognised and facilitate easier transfer of Dysphagia recommendations across multiple countries.
 - o A list of countries that have agreed to adopt the IDDSI framework and an update on their progress as of April 2018 is available in Appendix 1.
 - o IDDSI's plan is for the framework to be translated into a number of languages as part of worldwide implementation.
- The current National Descriptors were due for review in January 2011. This has not taken place and instead been replaced with this document.

Importance of having a standardised framework

From Cichero et al. (2013) *The Need for International Terminology and Definitions for Texture-Modified Foods and Thickened Liquids Used in Dysphagia Management: Foundations of a Global Initiative*. Curr Phys Med Rehabil Rep. 2013; 1(4): 280–291; Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3873065/

"The benefits of standardized terminology and definitions have been demonstrated in countries around the world (the UK, USA, Australia, Japan, New Zealand, Ireland). It is our belief that international standardization will result in improved safety, reliability and quality of texture-modified foods and liquids for the vulnerable population of people with dysphagia. For government, industry, hospitals and skilled nursing facilities, standardized terminology promises benefits through the reduction of costs associated with waste and errors. For all parties, there is a desire that the implementation of standardized terminology and definitions would lead to a reduction in critical incidents where death may be an outcome. *Patient safety is at the core of this initiative*. The benefits of inter-professional collaboration have been ably demonstrated in the development and publication of the British Dysphagia Diet Food Texture Descriptors [44••]. The international initiative looks forward to building on this foundation of inter-professional collaboration for a successful outcome."

Adapted from: http://iddsi.org/Documents/IDDSI_Why_IDDSI_Presentation_December2017.pptx

- Safety
 - o Multiple labels and definitions cause confusion
 - o Safer transfer of information between patients, families therapists and institutions
- Increases clinical efficiency
 - o Reduces need to reassess for safety on transfer
 - o Reduces need to confirm and clarify clinical information (if common terminology)
- Commercial implications
 - o 'Off the shelf' items are consistent between suppliers, manufacturers
 - o Products are the same as those prescribed in hospital/clinical setting
- Evidence base
 - o Research can be compared across the world to create a strong clinician evidence base

Benefits of common language/terminology

- Robust
- Evidence based
- Practical objective testing methods that are evidence based
- Point of service focus
- Improved communication at interdisciplinary and patient level

Limitations of a standardised Framework:

The Framework alone:

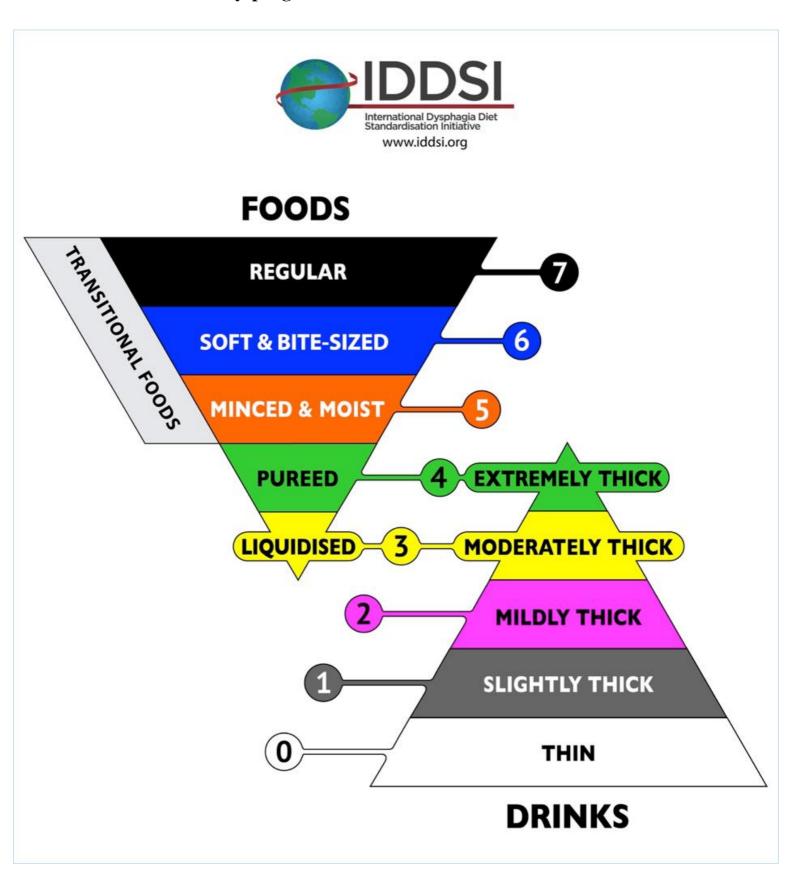
- Does not ensure adequate nutrition
- Does not eliminate risk
- Does not fully address the need for clear implementation if primarily developed by private industry partners, potential for conflict of interest

All care settings referred to in this document support people with dysphagia. Currently there is inequity in access to Speech and Language Therapists and Dietitians across the health service. This results in clinical risk surrounding the transfer of those with dysphagia from one setting to the next. The HSE is aware of this clinical risk, and the risks will be considered by the working group in their implementation plan.



Comparison of the Frameworks

The International Dysphagia Diet Standardisation Initiative Framework:



Comparison between Diet consistencies as outlined in the IDDSI Framework (2016) and the Irish Consistency Descriptors for Modified Fluids and Food Consensus Document (joint IASLT/INDI document, 2009)

IDDSI systematic review (Steele et al., 2015):

- The best available evidence regarding the selection of an optimal food consistency for a person with Dysphagia comes from the careful exploration of tolerance for different foods in a comprehensive clinical swallowing assessment;
- Thicker and harder items require greater effort in oral processing and swallowing.

	IDDSI	National Descriptors
Unmodified	Level 7 – 'Regular'	'Unmodified – Regular Foods'
	Level 6 – 'Soft'	Texture A – 'Soft'
	Level 5 – 'Minced & Moist'	Texture B – 'Minced & Moist'
	*Level 4 - 'Pureed'	*Texture C – 'Smooth Pureed'
	Level 3 – 'Liquidised'	Texture D – 'Liquidised'
Most modified		

Primary differences:

- Notion of 'Levels' versus 'Textures'
- Use of Numbers (levels) instead of Letters e.g. 'Level 6 Soft' versus 'Texture A Soft'
- Concept of 'Regular' foods is common but has a more descriptive label in 2009 document
- *Removal of the word 'Smooth' from Texture C/Level 4 (in bold above)

Measurement: See section entitled Testing Methods for each consistency below.

Regular Diet	IDDSI	National Descriptors
	(Level 7 – Regular)	(Unmodified Regular Foods)
Description & Characteristics:	 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 Includes hard, tough, chewy, fibrous, stringy, dry, crispy, crunchy, or crumbly bits Includes food that contains pips, seeds, pith inside skin, husks or bones 	 These are everyday foods There are various textures of regular foods. Some are hard and crunchy, others are naturally soft
Testing Methods	N/A	N/A
Inclusions/Exclusions	There are NO texture restrictions	By definition all food and textures
	at this level	can be included

Particle Size • Can be caten with a fork, spoon or chopsticks • Can be mashed/broken down with pressure from fork, spoon or chopsticks • Can be mashed/broken down with pressure from fork, spoon or chopsticks • A knife is not required to cut this food, but may be used to help loading a fork or spoon • Chewing is required before swallowing • Soft, tender and moist throughout but with no separate thin liquid Physiological rationale: • 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 bolus for swallowing • Pain or fatigue on chewing • Missing teeth, poorly fitting dentures Particle Size 'Bite sized' pieces as appropriate for size and oral processing skills (Paediatric 8mm; Adults 1.5 cm) Particle Size 'Bite sized' pieces as appropriate for size and oral processing skills (Paediatric 8mm; Adults 1.5 cm) Targeted particle size for children over 5 years and adults = 1.5 x 1.5 cm. Targeted particle size for infants and children - less than half that for adults and children over 5 years or equal to 0.8cm (based on tracheal size) Testing Methods Fork Pressure test Pressure from a fork held on its side can be used to 'cut' or break this texture into smaller pieces When a sample the size of a thumb nail (-1.5x1.5 cm) is pressed with the base of a fork to a pressure where the thumb nail blanches to white, the sample squashes and changes shape, and does not return to its original shape when fork is removed	Soft Diet	IDDSI (Lovel 6 Soft and Rite Sized)	National Descriptors (Toyture A., Soft Diet)
and oral processing skills (Paediatric 8mm; Adults 1.5 cm) Children over 5 years and adults = 1.5 x 1.5 cm. Targeted particle size for infants and children over 5 years or equal to 0.8 cm (based on tracheal size) Testing Methods Fork Pressure test Pressure from a fork held on its side can be used to 'cut' or break this texture into smaller pieces When a sample the size of a thumb nail (~1.5x1.5 cm) is pressed with the base of a fork to a pressure where the thumb nail blanches to white, the sample squashes and changes shape, and does not return to its		 chopsticks Can be mashed/broken down with pressure from fork, spoon or chopsticks A knife is not required to cut this food, but may be used to help loading a fork or spoon Chewing is required before swallowing Soft, tender and moist throughout but with no separate thin liquid Physiological rationale: 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 bolus for swallowing Pain or fatigue on chewing Missing teeth, poorly fitting 	category may be naturally soft (e.g. ripe banana) or may be cooked or cut to alter its texture Soft foods can be chewed but not necessarily bitten Minimal cutting required – easily broken up with a fork Food should be moist or served with a sauce or gravy to increase moisture content (NB sauces and gravies should be served at the required thickness
Pressure from a fork held on its side can be used to 'cut' or break this texture into smaller pieces When a sample the size of a thumb nail (~1.5x1.5 cm) is pressed with the base of a fork to a pressure where the thumb nail blanches to white, the sample squashes and changes shape, and does not return to its		and oral processing skills (Paediatric 8mm; Adults 1.5 cm)	children over 5 years and adults = 1.5 x 1.5cm. Targeted particle size for infants and children – less than half that for adults and children over 5 years or equal to 0.8cm (based on tracheal size)
Spoon Pressure test	Testing Methods	Pressure from a fork held on its side can be used to 'cut' or break this texture into smaller pieces When a sample the size of a thumb nail (~1.5x1.5 cm) is pressed with the base of a fork to a pressure where the thumb nail blanches to white, the sample squashes and changes shape, and does not return to its original shape when fork is removed	INII



Pressure from a spoon held on its side can be used to 'cut' or break this texture into smaller pieces.

When a sample the size of a thumb nail (~1.5 cm x1.5 cm) is pressed with the bowl of a spoon, the sample squashes and changes shape, and does not return to its original shape when the spoon is removed

Chopstick test

Chopsticks can be used to break this texture into smaller pieces

Finger test

Use a sample the size of the 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 will not return to its initial shape once pressure is released

Inclusions/Exclusions

Includes: crumbly bits (crumbly dry cakes or biscuits)

Excludes: As a general rule, bread products are not permitted at levels 6 (Soft & Bite-Sized) or 5 (Minced & Moist). This decision is based on a review of the choking literature, in which bread is frequently identified as a cause of choking (Irwin et al., 1977; Ekberg & Feinberg, 1992; South Australia Coronial Inquest, 1997; Wick et al., 2006; Berzlanovich et al., 1999, 2005; Food Safety Commission of Japan, 2010; Licea, 2016). If a piece of bread or sandwich is precut to fall below the maximum size guideline of Level 6 (1.5 cm for adults), then a clinician might decide to allow it for some patients on a case-by-case basis.

Includes Bread

Excludes: dry cakes

Minced & Moist	IDDSI (Level 5 – Minced & Moist)	National Descriptors (Texture B – Minced & Moist)
Description & Characteristics:	 Can be eaten with a fork or spoon Could be eaten with chopsticks in some cases, if the individual has very good hand control Can be scooped and shaped (e.g. into a ball shape) on a plate Soft and moist with no separate thin liquid Lumps are easy to squash with tongue Physiological Rationale: Biting is not required Minimal chewing is required Tongue force alone can be used to break soft small particles in this texture Tongue force is required to move the bolus Pain or fatigue on chewing Missing teeth, poorly fitting dentures 	 Food in this category is soft and moist and should Easily form into a ball Individual uses tongue rather than teeth to break the small lumps in this texture. Food is soft and moist and should easily form into a ball Food should be easily mashed with a fork Lumps are soft and rounded (no hard or sharp lumps)
Particle Size	• Small lumps visible within the food (Paediatric 2-4 mm; adult 4mm)	· Recommended particle size for children over 5 years and adults = 0.5cm Recommended particle size for infants and children – 0.2-0.5cm (based on tracheal size)
Testing Methods	Fork Pressure test When pressed with a fork the particles should easily be separated between and come through the tines/prongs of a fork Can be easily mashed with little pressure from a fork [pressure should not make thumb nail blanch to white] Fork Drip test A scooped sample 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	

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	Spoon Tilt test Cohesive enough to hold its shape on the spoon A full spoonful must slide/pour 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 not be sticky A scooped mound may spread or slump very slightly on a plate	
	Chopstick test Chopsticks can be used to scoop or hold this texture if the sample is moist and cohesive and the person has very good hand control to use chopsticks	
	Finger test It is possible to easily hold a sample of this texture using fingers; small soft, smooth, rounded particles can be easily squashed between fingers. The material will feel moist and leave fingers wet.	
Inclusions/Exclusions	Excludes: Bread cannot be easily mashed or broken down into particles of 4mm or smaller, due to its fibrous nature and it is therefore not suitable for inclusion at Level 5 (Minced & Moist).	Excludes: Bread

Puree	IDDSI	National Descriptors
	(Level 4)	(Texture C – Smooth Puree)
Description & Characteristics:	 Usually eaten with a spoon (a fork is possible) Cannot be drunk from a cup Cannot be sucked through a straw Does not require chewing Can be piped, layered or moulded Shows some very slow movement under gravity but cannot be poured Falls off spoon in a single spoonful when tilted and continues to hold shape on a plate No lumps Not sticky Liquid must not separate from solid Physiological rationale If tongue control is significantly reduced, this category may be easiest to manage Requires less propulsion effort than Minced & Minced (level 5), Soft (Level 6) and Regular (Level 7) but more than Liquidised/Moderately thick (Level 3) No biting or chewing is required Increased residue is a risk if too sticky Any food that requires chewing, controlled manipulation or bolus formation are not suitable Pain on chewing or swallowing Missing teeth, poorly fitting dentures 	 Food in this category is smooth and lump free. It is similar to the consistency of commercial pudding At times, smooth pureed food may have a grainy quality but should not contain lumps Smooth and lump free but may have a grainy quality Moist and cohesive enough to hold its shape on a spoon (i.e. when placed side by side on a plate these consistencies would maintain their position without 'bleeding' into one another) Food could be moulded, layered or piped
Particle Size	N/A	N/A
Testing method	IDDSI Flow test* No flow or drip through a slip tip syringe after 10 sec (refer to IDDSI Flow test Instructions)* Fork Pressure test	Cohesive enough to hold its shape on a spoon (i.e. when placed side by side on a plate these consistencies would maintain their position without 'merging' into

	The tines/prongs of a fork can make a clear pattern on the surface, and/or the food retains the indentation from the fork No lumps Fork Drip test The food sits in a mound/pile above the fork; a small amount may flow through and form a tail below the fork tines/prongs, but it does not flow or drip continuously through the prongs of a	one another)
	fork Spoon Tilt test Cohesive enough to hold its shape on the spoon • A full spoonful must plop off the spoon if the spoon is titled or turned sideways; a very gentle flick 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; i.e. the sample should not be firm and sticky • May spread out slightly or slump very slowly on a flat plate	
	Chopstick test Chopsticks are not suitable for this texture Finger test	
	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 residue Indicators that a sample is too thick	
Inclusions/Exclusions	Does not fall off the spoon when tilted Sticks to spoon	Some individuals may
Inclusions/Exclusions		benefit from the use of runny pureed texture. This texture would be prescribed on a case by case basis <i>and is labelled Texture D – Liquidised</i>

Comparison between liquid consistencies as outlined in the IDDSI Framework and the Irish Consistency Descriptors for Modified Fluids and Food Consensus Document (joint IASLT/INDI document)

IDDSI systematic review (Steele et al., 2015):

- Thicker liquids reduce the risk of penetration-aspiration, but also increase risk of post-swallow residue in the pharynx.
- The literature was insufficient to support the delineation of specific viscosity boundaries or other quantifiable material properties related to these clinical outcomes.

	IDDSI	IASLT/INDI
Unmodified	Level 0 (thin)	Unmodified Regular Fluids
	Level 1 (slightly thick)	Grade 1 (very mildly thick)
	Level 2 (mildly thick)	Grade 2 (mildly thick)
	Level 3 (moderately thick)	Grade 3 (moderately thick)
Most modified	Level 4 (extremely thick)	Grade 4 (extremely thick)

Primary differences:

- Notion of 'Levels' versus 'Grades'
- IDDSI give physiological rationale for each liquid consistency
- Standardised testing in place for IDDSI liquids using a flow test with a 10ml slip tip syringe for thin fluids, Level 1, Level 2 and Level 3. Subjective testing is also used for Level 3 and can only be used for Level 4 i.e. a fork drip test and a spoon tilt test. Subjective testing methods are only used in the IASLT/INDI document. The document states; "testing scales for viscosity exist but are not formalised or standardised and therefore are not included".
- IDDSI gives food examples for Level 3 and Level 4 fluids. IASLT/INDI document does not.
- In practice in some centres in Ireland it has been found that more thickener is required and the liquid has to set for longer to achieve the different levels when compared to grades.
- Of note: "The official IDDSI recommendation is that products in Levels 0-4 should be smooth and homogenous, without particles or lumps. If you are blending a smoothie or soup, then you must take care to ensure there are no lumps or seeds. If particles clog the syringe during the IDDSI Flow Test, then additional blending or passing through a sieve is recommended. The IDDSI Flow Test has been successfully used to measure thickness of soup and smoothies. It is also sensitive enough to show changes in consistency with a change in temperature. It should be noted that the IDDSI Flow Test is designed to confirm the flow characteristics of Levels 0-3. Level 4 Extremely Thick will not flow through the syringe or may pass only 1-2 droplets. At this level, the Spoon Tilt test and Fork Drip test are recommended to confirm sample characteristics." IDDSI FAQ

Please note;

Fluid consistencies will be discussed from thickest down to thinnest in keeping with the flow of the IDDSI framework visual

*See also Level 4	IDDSI (Level 4 Extremely Thick)	National Descriptors (Crade 4 Extremely Thick)
*See also Level 4 Pureed diet Description and characteristics:	 Holds shape on spoon Flows very slowly under gravity Does not require chewing Could be piped, layered or moulded No lumps Falls off spoon in a single spoonful when tilted and continues to hold shape on a plate Cannot be sucked through a straw Not sticky Liquid does not separate from solid Physiological rationale: If tongue control is significantly reduced, this category may be easiest to manage Requires less propulsion than Minced & Moist (Level 5), Soft (Level 6) and Regular (Level 7) but more than Moderately Thick/Liquidised (Level 3) No biting or chewing required Caution: Samples that are 	 National Descriptors (Grade 4 – Extremely Thick) Similar to the thickness of pudding or mouse Cohesive and holds its shape on a spoon It is not possible to pour this type of fluid from a cup into the mouth It is not possible to drink this thickness using a straw Spoon is the optimal method for taking this type of liquid This fluid is too thick if the spoon is able to stand upright in it unsupported
	too thick increase the risk of post – swallow residue in the pharynx	
Testing Methods/Information	 No flow or drip through a 10mL slip tip syringe after 10 seconds (See IDDSI Flow Test Instructions) A full spoonful must plop off the spoon if the spoon is titled or turned sideways; a very gentle flick 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; i.e. the 	 No flow Subjectively, fluids at this thickness sit on and do not flow through the prongs of a fork Testing scales for viscosity exist but are not formalised or standardised, and therefore are not included

sample should not be firm and sticky	
Fork Test	
 The prongs of a fork can make a clear pattern on the surface, and/or the sample retains the indentation from the fork Spreads or slumps very slowly if spilled 	
 Indicators that a sample is too thick Does not fall off the spoon when tilted Sticks to spoon 	

*See also Level 3	IDDSI	National Descriptors
Liquidised diet	Level 3 (Moderately Thick)	Grade 3 (Moderately Thick)
Description and characteristics:	 Will not hold its shape on a spoon Sippable, pours slowly off a spoon Difficult to suck through a standard bore or wide bore straw (wide bore straw = 0.275 inch or 6.9mm) Cannot be piped, layered or moulded Cannot be eaten with a fork because it drops through the prongs Physiological rational If tongue control is insufficient to manage Mildly Thick drinks (Level 2), this Moderately Thick/Liquidised level may be suitable Flows slowly from a spoon or cup: easier to control Allows more time for oral control Needs some tongue propulsion effort 	 Similar to the thickness of room temperature honey Slow flow Cohesive and pours slowly Possible to drink directly from a cup although fluid flows very slowly Difficult to drink using a straw, even if using a wide bore straw Spooning this fluid into the mouth may be the best way of taking this fluid

Testine	IDDCI Flow Toot	0.1: 4: 1 0.:1 4
Testing	IDDSI Flow Test	 Subjectively, fluids at
Methods/Information	 Test liquid flows slowly 	this thickness slowly
	through a 10mL slip tip	drip in dollops through
	syringe leaving more than	the prongs of a fork
	8mL in the syringe after 10	 Testing scales for
	seconds (see IDDSI Flow	viscosity exist but are
	Test Instructions)	not formalised or
		standardised, and
	Fork Test	therefore are not
	 Prongs of a fork do not 	included
	make a clear pattern on the	
	surface	
	 Spreads out if spilled 	

	IDDGI	National Descriptors
	IDDSI	National Descriptors
	Level 2 (Mildly Thick)	Grade 2 (Mildly Thick)
Description and characteristics:	 Flows off a spoon Sippable, pours quickly from a spoon, but slower than thin drinks Effort is required to drink this thickness through a standard bore straw (standard bore straw (standard bore straw = 0.209 inch or 5.3 mm diameter) Physiological rational If thin drinks flow too fast to be controlled safely, these Mildly Thick liquids will flow at a slightly slower rate May be suitable if tongue control is slightly reduced 	 Thicker than naturally thick fluids but not as thick as a thick milkshake Steady flow Pours quickly from a cup but slower that Grade 1-Very Mildly Thick fluids May leave a coating film of residue in the cup after being poured Drink this fluid thickness from a cup Effort required to take this thickness via a standard bore straw Consideration should be given to flow through a teat as determined on a case-by-case basis
Testing Methods/Information	 IDDSI Flow Test Test liquid flows through a 10mL slip tip syringe leaving 	 Subjectively, fluids at this thickness run fast through the prongs of a
	4 to 8mL in the syringe after	fork, but leave a
	10 seconds (See IDDSI Flow	coating on the prongs
	Test instructions)	Testing scales for
		viscosity exist but are
		not formalised or
		standardised, and
		therefore are not
		included

IDDSI	National Descriptors
Level 1 (Slightly Thick)	Grade 1 (Very Mildly Thick)



Description and 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 commercially available 'Anti-regurgitation' (AR) infant formula Physiological rational Predominately 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 	 Similar to naturally thick fluids such as fruit nectar or pouring cream Fast flow Pours quickly from a cup but slower than regular, unmodified fluids May leave a light coating film of residue in the cup after being poured Drink this fluid thickness from a cup No effort required to take this thickness via a standard bore straw Consideration should be given to flow through a teat as determined on a case-by-case basis
Testing Methods/Information	case-by-case basis. IDDSI Flow Test • Test liquid flows through a 10mL slip tip syringe leaving 1-4mL in the syringe after 10 seconds (see IDDSI Flow Test instructions)	 Subjectively, fluids at this thickness run fast through the prongs of a fork, but leave a mild coating on the prongs Testing scales for viscosity exist but are not formalised or standardised, and therefore are not included

	IDDSI	National Descriptors
	Level 0 (Thin)	Unmodified Regular Fluids
Description and characteristics:	 Flows like water Fast flow Can drink through any type of teat/nipple, cup or straw as appropriate for age and skills 	May naturally occur in a variety of thickness levels. The fluids in this category are not thickened with a commercially available fluid thickener
	 Physiological rational Functional ability to safely manage liquids of all types 	 Very fast-fast flow Drink through any type of teat, cup or straw as appropriate for age and skills

		 Breast milk may be considered an Unmodified-Regular fluid. Infant formula, commercially available 'Easy digest' Milk and 'Anti-regurgitation' (AR) formula are thicker than Unmodified-Regular fluids but are unmodified by commercially available fluid thickener All fluids which are unmodified by commercially available thickener should be examined on a case by case basis to determine their consistency
Testing	IDDSI Flow Test	• N/A
Methods/Information	 Test liquid flows through a 10mL slip tip syringe completely within 10 seconds, leaving no residue (See IDDSI Flow Test Instructions) 	

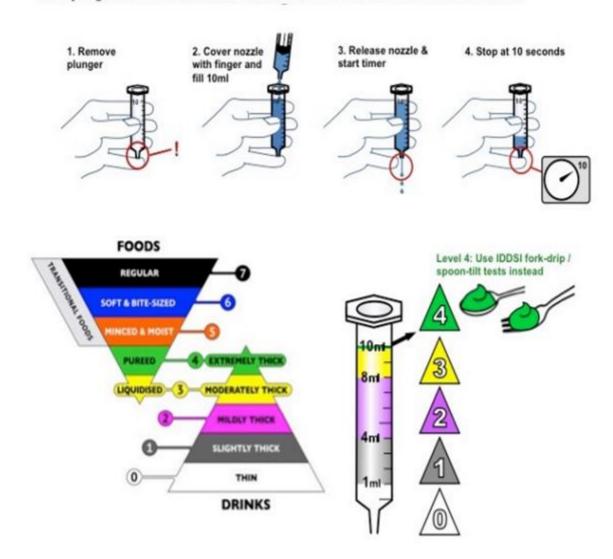
IDDSI Flow Testing to Classify Thickness.

The following has been included from the IDDSI Framework Testing Methods document available at: http://iddsi.org/Documents/IDDSIFramework-TestingMethods.pdf

The IDDSI flow test to classify liquid thickness

The International Dysphagia Diet Standardisation Initiative (IDDSI) framework of terminology and definitions includes an objective measurement tool for liquid thickness.

The syringe flow test classifies IDDSI Levels 0-3 based on their rate of flow.



Flow Testing: Syringe Considerations

"The IDDSI Flow Test uses a 10mL slip tip hypodermic syringe... Although 10ml syringes were initially thought to be identical throughout the world based on reference to an ISO standard (ISO 7886-1), it has subsequently been determined that the ISO document refers only to the nozzle of the syringe and that variability in barrel length and dimensions may exist between brands. Specifically the IDDSI Flow Test uses a reference syringe with a measured length of 61.5mm from the zero line to the 10mL line (BDTM syringes were used for the development of the tests – manufacturer code 301604). IDDSI is aware that some syringes are labelled as 10mL, but in fact have a 12mL capacity. Results using a 12mL syringe will be different to those from a true 10mL syringe. As a result it is important to check the barrel length..." (IDDSI, 2016)

Appendix 1: Frequently Asked Questions

IDDSI in Ireland 2018

FAQ: Implementation

How do I find out more about IDDSI?

The website <u>www.iddsi.org</u> offers comprehensive information about IDDSI. There is an international Frequently Asked Questions (FAQ) document available on the IDDSI website.

Do I have to change to the IDDSI framework?

During the course of reviewing the IDDSI framework, both IASLT and INDI recognised that the implementation of this framework requires health service wide action. It requires training and information to be provided to all those working with dysphagic patients. Professions such as nursing, catering, healthcare assistants, chefs require training. It is not within the remit of the IASLT and INDI to deliver same. The professional bodies have raised this clinical risk situation with the HSE. Dr Colm Henry has commissioned Ms Jackie Reed from the HSCP office to establish a national implementation steering group. The first meeting of the working group took place on May 30th 2018. There are professional body representatives as well as front line SLTs and Dietitians on the group.

Is there a deadline for changing?

It is recommended that if you are using the 2009 descriptors in your work setting, you continue to do so. It is expected that the HSE working group will issue initial guidance by September 2018. IASLT and INDI members will be expected to abide by the national implementation plan as it is rolled out in partnership with the HSE.

What support will I get to implement IDDSI?

This IDDSI website www.iddsi.org is very informative. It provides support for implementation. Useful resources such as adoption posters, videos and good ideas for the implementation process are available for clinicians. It also includes the formal comparison document from the IASLT and INDI as well as this FAQ section.

What are the barriers to change that I am likely to meet and how do I overcome them?

If you plan to change to the IDDSI before the HSE resources and guidance is available, you must consider how you will train all the staff in your organisation who are involved in dysphagia treatment. If this patient is then being discharged to another setting (without access to SLT and Dietitian), then consider how that setting will be able to implement your recommendations without training etc.

If possible, IASLT and INDI recommends delaying implementation work until the HSE instructions are available. Both professional bodies will then be advising the professions of next steps, for use by both HSE and non HSE employees working in dysphagia.

Can I set up IDDSI champions in my hospital / nursing home?

IASLT and INDI recommend implementation of this only when the HSE instructions are available. Both professional bodies will then be advising the professions of next steps, for use by both HSE and non HSE employees working in dysphagia.

Appendix 2: International Progress of the Implementation of IDDSI as of April 2018 (from www.iddsi.org)

Country	Activity
Australia	Speech Pathology Australia and Dietitians Association of Australia Boards have now ratified the decision to endorse the framework within Australia. Although implementation and adoption of the IDDSI framework will be a number of years away, further work will now be undertaken to look at the risks and implementation of the IDDSI framework. Australian clinicians are asked to use the current Australian Standards for Texture Modified Foods and Fluids at present until a transition plan to IDDSI is in place.
Belgium	IDDSI framework featured in Parki's Kookatelier (Parki's Cooking workshop), a cookbook with recipes rated according to IDDSI framework. Received Royal reception by King and Queen of Belgium.
Brazil	Implementation discussions and translation of IDDSI framework and descriptors are currently underway.
Canada	Implementation discussions are currently underway across Canada in several Health Authorities and regional groups. Pilot underway in New Brunswick. IDDSI framework and descriptors are being incorporated into university curricula and incorporated into PEN (Practice-based Evidence in Nutrition)
China	Formation of the International Dysphagia Diet Standards Implementation Committee (IDDSIC).
Denmark	Review of IDDSI framework in relation to current standards.
France	Translation of IDDSI framework and descriptors currently underway.
Germany	Primary IDDSI pilot underway in Kempen, Germany. Translation of IDDSI framework and descriptors underway.
Ireland	Implementation discussions are currently underway. IDDSI framework and descriptors have been incorporated into university curricula.
Israel	Implementation discussions are currently underway.
Japan	Translation of IDDSI framework and descriptors underway. IDDSI framework launched at 2015 JSDR meeting. IDDSI framework and descriptors have been incorporated into university curricula.

The Netherlands	Review of IDDSI framework in relation to current standards. Translation of IDDSI framework and descriptors underway.
New Zealand	New Zealand Speech-language Therapists' Association formally endorses IDDSI standards and implementation processes are underway. Awaiting decision by New Zealand Dietitians Association.
Norway	Review of IDDSI framework in relation to current standards. Translation of IDDSI framework and descriptors underway.
Poland	Translation of IDDSI framework and descriptors underway. IDDSI framework and descriptors are being incorporated into university curricula.
Slovenia	Inclusion of IDDSI presentation in first Slovenian Congress of Dysphagia 2016.
Sweden	Review of IDDSI framework in relation to current standards. Translation of IDDSI framework and descriptors underway. IDDSI framework and descriptors have been incorporated into university curricula.
South Africa	Review of IDDSI framework in relation to current standards. Translation of IDDSI framework and descriptors underway. IDDSI framework and descriptors have been incorporated into university curricula.
Thailand	Review of IDDSI framework and translation underway.
Turkey	Review of IDDSI framework and implementation discussions underway.
United Kingdom	Review of IDDSI framework in relation to current national standards and implementation discussions underway.
United States and Territories	The American Academy of Nutrition and Dietetics (AND) and the American Speech-Language-Hearing Association have voted to formally support the implementation of IDDSI framework and definitions. Work is underway to develop an IDDSI implementation plan. IDDSI has already received many reports from many organizations in the US and territories about IDDSI implementation process.