Comparison of the **International Dysphagia Diet Standardisation** Initiative (IDDSI) Framework and Irish Consistency Descriptors for Modified Fluids and Food (2009)

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Learning Objectives

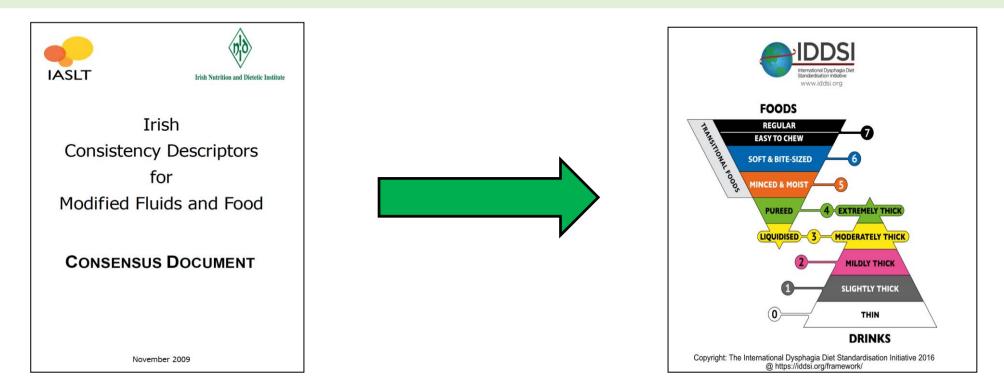
On successful completion of this module, it is expected that Irish healthcare professionals will be able to;

- Explain the similarities and differences between the Irish Consistency Descriptors for Modified Fluids and Food and the IDDSI Framework
- Describe how the Irish Consistency Descriptors (2009) will map to the IDDSI levels

Supporting Resources

- IDDSI Framework
- IASLT & INDI Comparison Document (May 2018): The IDDSI and Irish Consistency Descriptors for Modified Foods and Fluids (2009)
- Mapping Posters
- Change to IDDSI Safety Notice
- Section 5 of Implementation Toolkit for the Food, Nutrition and Hydration Policy for Adult Patients in Acute Hospitals
- Toolkit for Texture Modified Diets for Paediatrics: a guide for staff to support menu planning of texture modified diets in a paediatric setting

Ireland is changing to IDDSI



- Current practice is based on Irish Consistency Descriptors for Modified Fluids and Food Consensus Document published in 2009
- The HSE recommend that the IDDSI Framework should replace this document and that the IDDSI Framework be used from September 2019 onwards

The International Dysphagia Diet Standardisation Initiative (IDDSI) Framework



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What's new with IDDSI?

Food Textures

Irish Consistency Descriptors for Modified Fluids and Food (2009)	IDDSI Framework
Unmodified: Regular Foods	Level 7: Regular Level 7: Regular Easy to Chew
Texture A: Soft	Level 6: Soft and Bite-Sized
Texture B: Minced & Moist	Level 5: Minced & Moist
Texture C: Smooth Pureed	Level 4: Pureed
Texture D: Liquidised	Level 3: Liquidised

Changes specific to food

- Introduction of colour coding
- 'Levels' instead of 'Textures'
- Use of numbers instead of letters
- Terminology change
 - Smooth Pureed = <u>Pureed</u>
 - Soft = <u>Soft & Bite-Sized</u>
- New subcategory: Level 7 Regular Easy To Chew
- New testing methods: Fork Pressure test, Fork Drip test, Spoon Tilt test, Chopstick test, Finger test
- Concept of 'Transitional Foods'
- Particle size change at Level 5 Minced and Moist

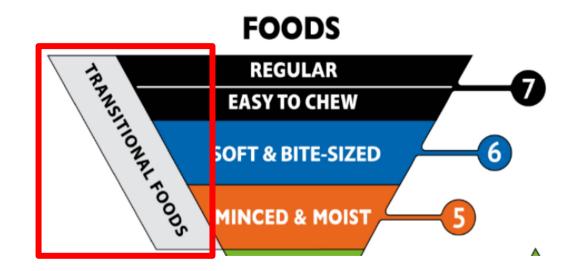
Level 7 Regular Easy to Chew

IDDSI added a subcategory Level 7 Regular Easy to Chew

- It was developed following feedback from clinicians seeking a diet of softer foods that did not have to be of any particular particle size restriction
- Suitable for older individuals who struggle with harder to chew foods due to factors such as age, deconditioning, minor change in dental status, fatigue or personal preference
- The reason for softer food is **<u>not</u>** increased concern about choking

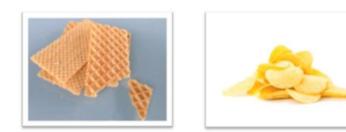
Transitional Foods (levels 5,6,7)

- In the Irish Consistency Descriptors (2009) document, there was a special notes section that included foods and other items requiring special consideration for individuals with dysphagia
- IDDSI have created a new category called 'Transitional Foods' which encompasses some of these foods



Examples of Transitional Foods

- Ice chips
- Ice cream if assessed as suitable by a Speech & Language Therapist
- Wafers (Also includes Religious Communion wafer)
- Waffle cones used to hold ice cream
- Some biscuits, cookies and crackers
- Shortbread
- Prawn crisps





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Commercially available foods that are transitional food textures include but are not limited to:

• KP Skips crisps, Chickatee crisps, Snax crisps, Cadbury's Milk Chocolate buttons- small discs

Mixed/Dual Consistency Foods

- Mixed/Dual Consistency Foods are foods that include both solids and liquids e.g. vegetables in a soup broth
- Irish Consistency Descriptors (2009) did not refer to Mixed/Dual Consistency Foods under any particular texture but they were included within the 'Special Notes' section
- IDDSI consider mixed or dual consistency foods to be only suitable for Level 7 Regular

Other foods that need special consideration for those with dysphagia

- Irish Consistency Descriptors (2009) addressed other foods that need special consideration for those with dysphagia within their 'Special Notes' section
 - Bread
 - Jelly
 - Soup
- IDDSI have also addressed these foods...

Other foods that need special consideration for those with dysphagia

Irish Consistency Descriptors (2009)

Bread- requires an ability to both bite ulletand chew. Chewing stress required for bread is similar to that of raw apple. The muscle activity required for each chew of bread is similar to that required to chew peanuts. For this reason, individuals who fatigue easily may find bread difficult to chew. Bread requires moistening with saliva for effective mastication. Bread does not dissolve when wet; it clumps. It poses a choking risk if it adheres to the roof of the mouth, pockets in the cheeks or if swallowed in a large clump.

IDDSI

Bread- requires the ability to both bite
and chew. Although bread looks and
feels soft, it cannot easily be mashed or
broken down into particles of 4mm or
smaller due to its fibrous nature. The
ability to safely manage bread and
sandwiches should be assessed on a case
by case basis.

Other foods that need special consideration for those with dysphagia **Irish Consistency Descriptors (2009) IDDSI**

- **Jelly-** may be excluded from diets ulletfor individuals who require thickened fluids. This is because jelly particulates in the mouth if not swallowed promptly
- **Soup** Individuals who require • thickened fluids will require their soups thickened to the same consistency as their fluids unless otherwise advised by a Speech and Language Therapist

- Jelly- not typically included on dysphagia diets as it breaks apart in the mouth making it more challenging to swallow
- **Soup** Vegetables/Meat in a soup broth are considered a mixed/dual consistency food (Level 7)

Food Level Examples

- Irish Consistency Descriptors (2009) and IDDSI provide food level examples differently
- Irish Consistency Descriptors (2009) provided examples of recommended foods and foods to avoid for Textures A-D

Texture B – Minced and moist

Recommended foods and those to avoid (Examples Only)

	Recommended Foods	Avoid
Bread, cereals, rice, pasta, noodles	 Breakfast cereals with small moist lumps, for example porridge or weetabix soaked in milk ^(a) Small, moist pieces of soft pasta, for example moist macaroni cheese (some pasta dishes may require blending or mashing) Noodles (chopped) 	 All breads, sandwiches, pastries, crackers and dry biscuits Rice that does not hold together, for example parboiled long-grain, basmati Crispy or dry pasta, for example edges of a pasta bake or lasagne
Vegetables, legumes, <i>potatoes</i>	 Tender cooked vegetables that are easily mashed with a fork Well cooked legumes (partially mashed or blended) Mashed or creamed potatoes 	 All raw vegetables Vegetable pieces larger than 0.5cm or too hard to be mashed with a fork Fibrous/stringy vegetables tha require chewing for example peas, celery Roast potatoes, croquettes or chips

Food Level Examples

- IDDSI provide a list of food specific or other examples
- Applies to levels 3-7 and transitional level

FOOD SPECIFIC OR OTHER EXAMPLES http://iddsi.org/framework/food-testing-methods/

MEAT

- Finely minced or chopped, tender mince
 - o Paediatric, 2mm lump size
 - Adult, 4mm lump size
- Serve in extremely thick, smooth, non-pouring sauce or gravy
- *If texture cannot be finely minced it should be pureed

FISH

- Finely mashed in extremely thick smooth, nonpouring sauce or gravy
 - o Paediatric, 2mm lump size
 - o Adult, 4mm lump size

FRUIT

- Serve mashed
- Drain excess juice
 - o Paediatric, 2mm lump size
 - o Adult, 4mm lump size

VEGETABLES

• Finely minced or chopped or mashed





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



Drinks

Irish Consistency	IDDSI Framework
Descriptors for Modified	
Fluids and Food (2009)	
Unmodified Regular Fluids	Level 0: Thin
Grade 1: Very Mildly Thick	Level 1: Slightly Thick
Grade 2: Mildly Thick	Level 2: Mildly Thick
Grade 3: Moderately Thick	Level 3: Moderately Thick
Grade 4: Extremely Thick	Level 4: Extremely Thick

Important change with drinks

The thickness of drinks will change for Level 2 and 3

 IDDSI level 2 drinks will be thinner than Grade 2 drinks
 IDDSI level 3 drinks will be thinner than Grade 3 drinks

 People moving to IDDSI level 2 or 3 will need to be monitored for any difficulty swallowing

Drinks: main differences

- Colour coding has changed
- IDDSI Levels vs Irish Consistency Descriptors Grades
- Testing methods: IDDSI Standardised IDDSI Flow test (level 0-3) & subjective testing
- Change in thickness for Levels 2 & 3
- Descriptor terminology changes
 - Unmodified Regular = Thin
 - Grade 1 Very Mildly Thick = Slightly Thick

Comparison of food & drink levels

	IDDSI Level 7 – Regular	Irish National Descriptors 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 at this level	By definition all food and textures can be included

	IDDSI Level 7 – Regular Easy To Chew	Irish National Descriptors No Equivalent
Description & Characteristics:	 Designed to meet the needs of individuals who do not have dysphagia or increased choking risk but might benefit from softer choices for other reasons (choice, recent illness, temporary mouth or jaw pain) Normal, everyday foods* of soft/tender texture Any method may be used to eat these foods e.g. fingers, fork, spoon or chopsticks Food particle size is not restricted This level is NOT intended for people where there is an increased risk of choking The service user should be able to remove bone, gristle or other hard pieces that cannot be swallowed safely from his/her mouth without help or direction from others *may include 'mixed thin & thick texture' food and liquids together 	This is a new food level for Ireland
Testing Methods	Food must break apart easily with side of fork/spoon IDDSI Fork Pressure Test	
Inclusions/ Exclusions	 Foods that are hard, tough, chewy, fibrous, have stringy textures, pips/seeds, bone or gristle Service users who are unsafe to eat without supervision 	

	IDDSI	Irish National Descriptors
	Level 6 - Soft and Bite-Sized	Texture A – Soft Diet
Description & Characteristics:	 Can be eaten with a 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 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 	 Food in this 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 level)
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 1.5cm. 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)
Testing Methods	 Fork Pressure Test Spoon Pressure Test Chopstick Test Finger Test 	Nil
Inclusions/ Exclusions		Any food bigger than suggested particle size List of foods to 'Avoid'

	IDDSI	Irish National Descriptors
	Level 5- Minced & Moist	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 	 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 should be easily mashed with a fork Lumps are soft and rounded (no hard or sharp lumps)
	Missing teeth, poorly fitting dentures	
Particle Size	Small lumps visible within the food (Paediatric 2mm; 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 Fork Drip Test Spoon Tilt Test Chopstick Test Finger Test 	Food should be easily mashed with a fork
Inclusions/ Exclusions		Any food bigger than suggested particle size List of foods to 'Avoid'

	IDDSI	Irish National Descriptors
	Level 4 -Pureed / Extremely Thick Drink	Texture C – Smooth Pureed / Grade 4
		Extremely Thick
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 	 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
	 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 	 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
	 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 	 No flow 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
Particle Size	N/A	N/A
Testing Methods	 IDDSI Flow Test* Fork Pressure Test Fork Drip Test Spoon Tilt Test Finger 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 one another) Subjectively, fluids at this thickness sit on and do not flow through the prongs of a fork
	Indicators that a sample is too thick: Does not fall off the spoon when tilted but instead sticks to spoon	
Inclusions/ Exclusions		Some individuals may benefit from the use of runny pureed texture. This texture would be prescribed on a case by case basis and is labelled Texture D– Liquidised

	IDDSI Level 3 –Liquidised / Moderately Thick Drink	Irish National Descriptors Texture D – Liquidised / Grade 3 Moderately Thick
Description & 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 drips slowly in dollops through the prongs Smooth texture with 'no bits' (lumps, fibres, bits of shell or skin, husk, particles of gristle or bone) 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 No oral processing or chewing required – can be swallowed directly 	 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 A smooth, pouring, uniform consistency. Smooth and lump free This food has been pureed or sieved to remove any particles. Do not hold their shape, they merge into one another when placed side by side on a plate and as result are generally served in a bowl
Testing Methods	 IDDSI Flow Test (More than 8mL in the syringe after 10 seconds) Fork Drip Test Spoon Tilt Test 	 Cannot be eaten with a fork Can be taken through a wide bore straw Subjectively, fluids at this thickness slowly drip in dollops through the prongs of a fork
Inclusions/ Exclusions		 Recommend caution when prescribing as high liquid content can make liquidized diet, energy and nutrient dilute Maybe difficult to achieve this texture with some foods e.g. pasta, noodles Due to the liquid nature of this diet, it may not be suitable for those who require modified consistency fluids

	IDDSI Level 2 –Mildly Thick Drink	Irish National Descriptors Grade 2 – Mildly Thick
Description & 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 = 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	IDDSI Flow Test (Leaving 4 to 8mL in the syringe after 10 seconds)	 Subjectively, fluids at this thickness run fast through the prongs of a fork, but leave a coating on the prongs Testing scales for viscosity exist but are not formalised or standardised, and therefore are not included

	IDDSI Level 1–Slightly Thick Drink	Irish National Descriptors Grade 1 –Very Mildly 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 commercially available 'Antiregurgitation' (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 case-by-case basis. 	 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	IDDSI Flow Test (Leaving 1-4mL in the syringe after 10 seconds)	 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 Level 0 (Thin)	National Descriptors 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 Physiological rational Functional ability to safely manage liquids of all types 	 May naturally occur in a variety of thickness levels. The fluids in this category are not thickened with a commercially available fluid thickener 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 Methods	IDDSI Flow Test (Flows through a 10mL slip tip syringe completely within 10 seconds, leaving no residue)	• N/A

Summary: general changes

- Colour coding
- 'Levels' versus '<u>Textures</u>' and <u>'Grades'</u>
- Numbers instead of letters for each level
- New testing methods for food and drinks
- IDDSI give physiological rationale for each level

Summary: changes specific to food

- Terminology change
 - Smooth Pureed = <u>Pureed</u>
 - Soft = <u>Soft & Bite-Sized</u>
- New subcategory: Level 7 Regular Easy To Chew
- New testing methods: Fork Pressure test, Fork Drip test, Spoon Tilt test, Chopstick test, Finger test
- Concept of 'Transitional Foods'
- Particle size change at Level 5 Minced and Moist

Summary: changes specific to drinks

- Terminology change
 - Unmodified Regular = <u>Thin</u>
 - Very Mildly Thick= <u>Slightly Thick</u>
- Colour coding has changed
- Change in thickness for Levels 2 & 3
- New testing methods: IDDSI Standardised IDDSI Flow test (level 0-3) & Fork Drip Test, Spoon Tilt Test (3-4)

Learning Objectives



On successful completion of this module, it is expected that Irish healthcare professionals will be able to;

- Explain the similarities and differences between the Irish Consistency Descriptors for Modified Fluids and Food and the IDDSI Framework
- Describe how the Irish Consistency Descriptors (2009) will map to the IDDSI levels

Acknowledgments

- Education and Training subgroup of the HSE national working group 'Changes in Dysphagia Management'
- Working group for the IASLT/INDI Comparison Document: The IDDSI Framework and Irish Consistency Descriptors for Modified Fluids and Food Consensus Document (2009)
- Adrian Bradley, SLT Cork University Hospital

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The End