

International Dysphagia Diet Standardisation Initiative



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Disclosures:

- Joseph Murray PhD, CCC-SLP, ABS-SD, FASHA
 - Chief Audiology Speech Pathology Service
 - VA Ann Arbor Healthcare System
 - International Dysphagia Diet Standardisation Initiative
 - Former Board Member
 - American Board of Swallowing and Swallowing Disorders
 - Board Historian

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The International Dysphagia Diet Standardisation Initiative 2016 @http://iddsi.org/framework/
 Attribution is NOT PERMITTED for derivative works incorporating any alterations to the IDDSI framework that extend beyond language translation. Supplementary Notice: Modification of the diagrams or descriptors within the IDDSI framework is DISCOURAGED and NOT RECOMMENDED. Alterations to elements of the IDDSI framework may lead to confusion and errors in diet texture or drink selection for patients with dysphagia. Such errors have previously been associated with adverse events including choking and death.

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TEACHABLE MOMENT

LESS IS MORE

The Horrible Taste of Nectar and Honey—Inappropriate Use of Thickened Liquids in Dementia
 A Teachable Moment

- Wang, C. H., Charlton, B., & Kohlwes, J. (2016). The horrible taste of nectar and honey—inappropriate use of thickened liquids in dementia: a teachable moment. *JAMA internal medicine*, 176(6), 735-736.

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CHOOSING WISELY®: THINGS WE DO FOR NO REASON

Things We Do for No Reason: The Use of Thickened Liquids in Treating Hospitalized Adult Patients with Dysphagia

William C Lippert, MD, MPH¹; Romil Chadha, MD, MPH, SFHM, FACP²; Joseph R Sweigart, MD, FHM, FACP^{3,4}

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- Lippert, W. C., Chadha, R., & Sweigart, J. R. (2019). Things We Do for No Reason: The Use of Thickened Liquids in Treating Hospitalized Adult Patients with Dysphagia. *Journal of hospital medicine*, 14, E1-E3.

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The Case for Altered Texture and Flow

- Nothing new!
 - Use of modified food textures has been known to be employed for many millennia
 - Neanderthal anatomy more adapted for anterior biting and chewing
 - Teeth employed as a thir



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The Case for Manipulating Texture and Flow

- Liquid Flow Manipulation
 - Thickening
 - Slowing liquids offsets latent swallow
 - Allows time for safe reaction:
 - Bradykinesia
 - Dystonia
 - Apraxia

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The Case for Manipulating Texture and Flow

- Solid Food Manipulation
 - Reducing particle size
 - Reduces labor in mastication
 - Limits fatigue
 - May increase oral intake
 - Lessens need for manual bolus manipulation
 - Weakness
 - Apraxia
 - ROM
 - Cognitive decline

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Elders

- Chew solid foods longer
 - Higher number of chews and with lower mastication efficiency compared to young adults (Mioche, Bourdiol, & Peyron, 2004).
 - Increase the number of chews until swallowing.
 - Chewing duration and number of chews increased with age while muscle activity per chew declined
- Increase in consumption time and chews per bite

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Food Properties

- Food properties significantly alter masticatory behavior
- The number of chewing cycles and chewing duration both increase with the hardness of food.
- Amount of time that the food is accumulated in the valleculae is also extended with
 - greater food hardness.
- Food dryness increases duration of chewing cycles

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Eating capability

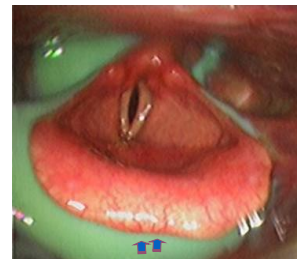
- Combination of capabilities
 - Physical
 - Physiological
 - Cognitive

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Laryngeal Anatomy

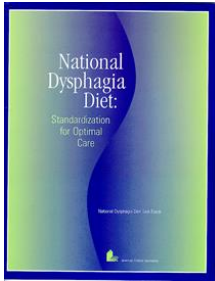


- Larynx rises above floor of pharynx
- Natural barrier to lower airway
- Shield effect
 - Deflects food and liquid around airway
- Airway size
 - 1.8 cm²
 - Increases when seated upright



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- Created in 2002 by the American Dietetic Association



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Safety

Multiple labels and definitions cause confusion within and between health care facilities

Efficiency

Avoids need for re-assessment of food and liquids when patients/clients move between healthcare settings

Commercial consistency

Ready-to-use items and products are consistent from manufacturer to manufacturer

Research

Provides ability to compare research across healthcare and research facilities throughout the world to create clinical evidence

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New Initiative in 2013



- Founded in 2013
 - Goal of developing new global standardized terminology and definitions
 - Texture modified foods
 - Thickened liquids
- In all care settings
- All cultures.



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Health Professionals & Food Service Survey



Most commonly 4-5 levels food textures most often reported



16% use a colour, number [1,II] or scheme ● to identify TM foods

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Health Professionals & Food Service Survey



Most commonly 3-4 levels of liquid thicknesses most often reported

25% use a colour, number [1,II] or scheme ● to identify Thickened liquids ●

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Health Professionals & Food Service Survey

- Only 40% of respondents check that texture modified foods and thickened liquids are of appropriate consistency before serving!?
- Point of serving is key time to ensure correct texture and consistency.



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IDDSI Systematic Review

- There IS evidence that **thickening helps those who aspirate thin liquids**
- There is ALSO evidence that there is such a thing as **“too thick”**, where residue begins to accumulate
- There is no specific evidence to point to **particular rheological values that define the boundaries of effective thickening** (either just thick enough or too thick)

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IDDSI Systematic Review

- There IS evidence solid food and thicker consistencies require **greater effort** in oral processing and swallowing
- There is **very little literature** specifically about texture modified food used for the management of dysphagia

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IDDSI <http://iddsi.org/resources/>

Cher Phys Med Rehabil Rep
DOI: 10.1007/s00431-014-0024-z

SWALLOWING DISORDERS (RE MARTIN, SECTION EDITOR)

Dysphagia
DOI: 10.1007/978-94-007-6578-6

The N for T in Dy: ORIGINAL ARTICLE

The In Modific A Syst: ORIGINAL ARTICLE

Julie A. Y. Chivers^{1,2}, Peter Lam^{3,4,5}, Catriona M. Steele^{1,2,6}, Ron Hanson^{6,7}, Jianhui Chen^{8,9}, Roberto O. Dantas¹⁰, Janice DiStefano^{11,12}, Jun Koyahara^{1,13}, Caroline Leck^{1,14}, Joseph Murray^{1,14}, Mershen Pillay^{1,15,16}, Luis Riquelme^{1,17,18}, Sonke Stancher^{1,19}

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IDDSI IDDSI Framework



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IDDSI FOOD & DRINKS CLASSIFICATION AND TESTING ADULT & PEDIATRIC

This chart provides detailed testing instructions for various food and drink levels. It includes sections for 'TESTING INFO', 'TRANSITIONAL FOODS TEST INSTRUCTIONS', 'FLOW TEST INSTRUCTIONS', and 'FOOD TEST INSTRUCTIONS'. It also includes a 'DRINKS / LIQUIDS' section with specific flow test instructions and viscosity ranges for each level. The chart is color-coded to match the IDDSI levels.

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Mapping to IDDSI - Drinks

Current NDD Standards

Thin	0 Thin
(Naturally thick liquids, e.g. infant formula, supplements)	1 Slightly Thick
Nectar-thick 51-350 mPa.s @20°C ✓	2 Mildly Thick
Honey-thick 351-1750 mPa.s @20°C ✓	3 Moderately Thick
Spoon-thick >1750 mPa.s @20°C ✓	4 Extremely Thick

IDDSI International Dysphagia and Standardization Initiative

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Flow Test
www.iddsi.org

Check your syringe: 0-10 ml scale = 81.5 mm

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

Example videos of the IDDSI flow test can be found on YouTube and accessed through the resources page on the IDDSI website:
www.iddsi.org

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LIQUIDISED MODERATELY THICK www.iddsi.org

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

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LIQUIDISED MODERATELY THICK www.iddsi.org

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

IDDSI Flow Test*	<ul style="list-style-type: none"> Test liquid flows through a 10 ml slip tip syringe leaving > 8 ml in the syringe after 10 seconds (see Syringe Test Guide*)
Fork Drip Test	<ul style="list-style-type: none"> Drips slowly in dollops through the prongs of a fork Tines/Prongs of a fork do <u>not</u> leave a clear pattern on the surface Spreads out if spilled onto a flat surface
Spoon Tilt Test	<ul style="list-style-type: none"> Easily pours from spoon when tilted; does not stick to spoon
Chopstick Test	<ul style="list-style-type: none"> Chopsticks are not suitable for this texture
Finger Test	<ul style="list-style-type: none"> 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

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PUREED EXTREMELY THICK www.iddsi.org

Description/characteristics	<ul style="list-style-type: none"> 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
Texture restrictions shown in summary table	
Physiological rationale for this level of thickness	<ul style="list-style-type: none"> If tongue control is significantly reduced, this category may be easiest to manage Requires less propulsion effort than Minced & Moist (Level 5), Soft & Bite-Sized (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

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TESTING METHODS
See also IDDSI Testing Methods document or <http://iddsi.org>

PUREED EXTREMELY THICK www.iddsi.org

IDDSI Flow test*	n/a Flow test not applicable, please revert to Fork Drip Test and Spoon Tilt Test
Fork Pressure test	<ul style="list-style-type: none"> 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	Sample 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 fork
Fork Drip test contd.	
Spoon Tilt test	<ul style="list-style-type: none"> Cohesive enough to hold its shape on the spoon A full spoonful must pop off the spoon if the spoon is tilted 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 <u>not</u> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Does not fall off the spoon when tilted Sticks to spoon

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"Slump height", yield stress

LIQUIDISED MODERATELY THICK www.iddsi.org

PUREED EXTREMELY THICK www.iddsi.org

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Spoon Tilt Test

The Spoon Tilt Test is used predominantly for measures of samples in levels 4 and 5. The sample should:



- Be 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





Spoon Tilt Test

The spoon tilt test is used to determine the stickiness of the sample (adhesiveness) and the ability of the sample to hold together (cohesiveness). The Spoon Tilt Test is described in existing National Terminologies in Australia, Ireland, New Zealand and the United Kingdom (Atherton et al., 2007; IASLT and Irish Nutrition & Dietetic Institute 2009; National Patient Safety Agency; Royal College Speech & Language Therapists, British Dietetic Association, National Nurses Nutrition Group, Hospital Caterers Association 2011).

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 5 MINCED & MOIST 	
Description/characteristics Texture restrictions shown in summary table	<ul style="list-style-type: none"> • 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 • Small lumps visible within the food <ul style="list-style-type: none"> ➢ Paediatric, 2 mm lump size ➢ Adult, 4mm lump size • Lumps are easy to squash with tongue
Physiological rationale for this level of thickness	<ul style="list-style-type: none"> • 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

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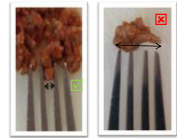
TESTING METHODS  	
See also IDDSI Testing Methods document or http://iddsi.io	
Fork Pressure test	<ul style="list-style-type: none"> • When pressed with a fork the particles should easily be separated between and come through the tines/prongs of a fork • Can be easily mashed with little pressure from a fork [pressure should not make the thumb nail blanch to white]
Fork Drip test	<ul style="list-style-type: none"> • 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
Spoon Tilt test	<ul style="list-style-type: none"> • 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 Chopstick test contd.	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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.

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Measurement for Foods

Fork Pressure Test:

- The slots/gaps between the tines/prongs of a standard metal fork typically measure 4 mm.
- This provides a useful compliance measure for particle size of foods at **Level 5 - Minced & Moist**.



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6 SOFT & BITE-SIZED	
Description/characteristics Texture restrictions shown in summary table	<ul style="list-style-type: none"> • 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 • "Bite-sized" pieces as appropriate for size and oral processing skills <ul style="list-style-type: none"> > Paediatric, 8mm pieces > Adults, 15 mm - 1.5 cm pieces
Physiological rationale for this level of thickness	<ul style="list-style-type: none"> • Bitting 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

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Hard



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Soft





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Soft



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TESTING METHODS	
See also IDDSI Testing Methods document or http://iddsi.org	
 	
Fork Pressure test	<ul style="list-style-type: none"> 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 the fork is removed.
Spoon Pressure test	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Chopsticks can be used to break this texture into smaller pieces
Finger test	<ul style="list-style-type: none"> 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 will not return to its initial shape once pressure is released.

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IDDSI Measurement for Foods

IDDSI Fork Pressure Test:

- A fork can be applied to the food sample to observe its behavior when pressure is applied.
- Pressure applied to the food sample has been quantified by assessment of the pressure needed to make the thumb nail blanch noticeably to white.



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Thumb nail blanched to white



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

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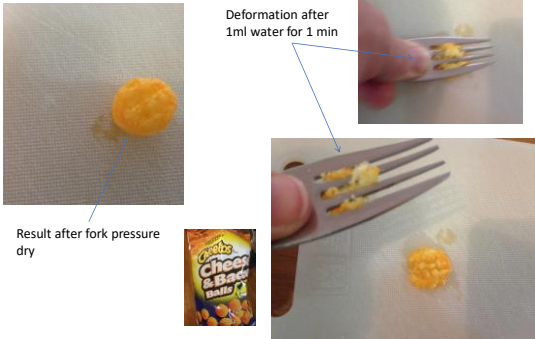
'Transitional foods' Gisel, 1991, Deve med Child Neurol, 33, 69-79; Dovey 2013, Dysphagia, 28, 501-510

- Start as one texture (e.g. solid) and change to another when moisture is applied (saliva, water) or temperature (heat) change occurs
- Minimal chewing required
- Tongue pressure may be sufficient to break food down after alteration in moisture or temperature
- Developmental teaching or rehabilitation of chewing skills



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Dissolvable



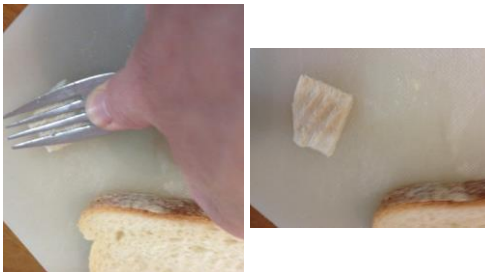
49

Dissolvable



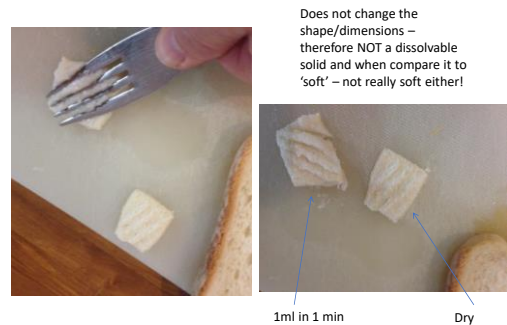
50

Bread - dry



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Bread after 1 min in 1ml water



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FAQ Category: Drinks

Q: My facility has used the terms 'nectar' and 'honey' for decades; why weren't these terms used in the IDDSI framework?

Q: My facility serves sandwiches with moist, minced fillings. Can this be included in the Level 5 - Minced & moist diet?

A: As a general rule, bread products are considered a regular food texture (Level 7) and 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 pre-cut 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. Bread cannot, however, 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). In some countries, modified bread products may be available under the names "pre-gelled" or "soaked" bread. The IDDSI food texture testing guidelines should be used to confirm whether or not these products fall within levels 5 or 6 on the IDDSI framework.

References:
 Berzlanovich AM, Muhm M, Sim E, and Bauer G. 'Foreign body aspiration – an autopsy study'. American Journal of Medicine. 1999; 107, 351-355.
 Berzlanovich AM, Fazany-Dorner B, Walkthor T, and Pasching P. 'Foreign body aspiration: A preventable cause of death in the elderly'. American Journal of Preventive Medicine. 2005; 28, 95-99.

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IDDSI Implementation
Department of Veterans Affairs

- Veterans Health Administration
 - America's largest integrated health care system
 - [1,243 health care facilities](#)
 - 172 medical centers
 - 1,062 outpatient sites of care
 - 364 Preparing/serving food
 - 9 million enrolled Veterans each year

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VA Ann Arbor Healthcare System



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Department of Veterans Affairs
Veterans Health Administration
Washington, DC 20420

VHA DIRECTIVE 2006-032
May 17, 2006

MANAGEMENT OF PATIENTS WITH SWALLOWING (DYSPHAGIA) OR FEEDING DISORDERS

1. PURPOSE: This Veterans Health Administration (VHA) Directive defines the policy and procedures for the assessment, evaluation, treatment, and follow-up of patients with swallowing (dysphagia) or feeding disorders.

i. Chief, Nutrition Food Services, Program Managers, and Integrated Food Service Managers. The Chief, Nutrition Food Services, Program Managers, and Integrated Food Service Managers are responsible for:

- (1) Ensuring that assistive feeding devices are cleaned properly.
- (2) Ensuring that nutrition and food services staff comply with meal and snack times.
- (3) Ensuring that pre-thickened liquids are available for inpatients and residents.
- (4) Ensuring that dietitians adopt and follow standardized diets and diet terminology.
- (5) Ensuring dietitians provide standardized diet terminology training to nurses, physicians, and other providers.
- (6) Ensuring dietitians use standardized patient and resident education materials for diets.
- (7) Ensuring dietitians use standardized outpatient education materials for thickening agents.

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Aware/Prepare 2017

- Demonstration Project (Proof of Concept)
 - Joint RD/SLP Activity
- 6 Test sites
 - Serving temperature
 - Room temperature
- [IDDSI flow test data ASHA 2017.xlsx](#)

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Department of Veterans Affairs
Veterans Health Administration
Washington, DC 20420

VHA DIRECTIVE 2006-032
May 17, 2006

MANAGEMENT OF PATIENTS WITH SWALLOWING (DYSPHAGIA) OR FEEDING DISORDERS

1. PURPOSE: This Veterans Health Administration (VHA) Directive defines the policy and procedures for the assessment, evaluation, treatment, and follow-up of patients with swallowing (dysphagia) or feeding disorders.

4. ACTION

a. **Chief Consultant, Rehabilitation Services.** Chief Consultant for Rehabilitation Services is responsible for:

- (1) Ensuring that evidence-based clinical practice guidelines are developed and communicated and implemented as required by this Directive.
- (2) Ensuring that the content of this Directive is communicated to rehabilitation staff.
- (3) Taking those steps necessary to educate speech-language pathologists on clinical indicators for bedside and instrumental exams, follow-up and treatment, monitoring appropriateness of long-standing diet modification orders, and effective use of assistive feeding devices.

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IDDSI Implementation

- Aware
 - 10-2016
 - VA Central Office Planning
 - Identification of Champions
 - RD
 - SLP
 - 2017/2018 Quarterly Conference
 - Initial conference call
 - Joint SLP/RD
 - >1200 Participants

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Mapping

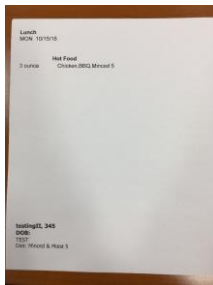
Product Name	Texture or Label	Serving Temperature Data Set			Room Temperature Data Set						
		Temp 1	Temp 2	Temp 3	Temp 1	Temp 2	Temp 3				
Admission Fruit Orange Juice	Thin	Cold	0	0	0	0	0	0	0	0	0
Milk	Thin	Cold	0	0	0	0	0	0	0	0	0
Moroccan 100% Orange Juice	None	Cold	0	0	0	0	0	0	0	0	0
Outback/Crazy Cranberry Juice Cocktail	None	Cold	0	0	0	0	0	0	0	0	0
Admission Pears 100% Orange Juice	None	Cold	0	0	0	0	0	0	0	0	0
Admission Pears 100% Orange Juice	None	Cold	0	0	0	0	0	0	0	0	0
Chicken broth (Nestle produced)	None	Hot	0	0	0	0	0	0	0	0	0
Beef broth (Nestle produced)	None	Hot	0	0	0	0	0	0	0	0	0
Anderson Erickson lowfat milk 1%	None	Cold	0	0	0	0	0	0	0	0	0
Blueberry	Naturally Thick	Cold	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Nonfat cream of mushroom soup	None	Hot	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Anderson Erickson chocolate milk 1%	None	Cold	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Reserve Plus Intensity (Allison)	None	Cold	1	1	1	1	1	1	1	1	1
Milk (Erickson Original)	None	Cold	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Reserve Plus vanilla (Allison)	None	Cold	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Nonfat cream of tomato soup	None	Hot	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Nonfat cream of chicken soup	None	Hot	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Spices Thick Lemon Lime	None	Cold	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Self-Heating Cola	None	Cold	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Spices Cola	None	Cold	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Reserve Plus milk chocolate (Allison)	None	Cold	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Self-Heating Thick Lemon Lime	None	Cold	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Campanelli tomato juice	None	Cold	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Normal Thick of Easy Milk	Nectar	Cold	5	5	5	5	5	5	5	5	5
Thick & Easy Thickened citrus nectar	Nectar	Cold	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
Phone Soup	None	Hot	7	7	7	7	7	7	7	7	7
Thick & Easy Apple Juice	Nectar	Cold	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
Normal Nectar Milk	Nectar	Cold	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
Normal Nectar Orange Juice	Nectar	Cold	9	9	9	9	9	9	9	9	9
Normal Nectar Cranberry Juice	Nectar	Cold	9	9	9	9	9	9	9	9	9

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IDDSI Implementation

- IDDSI Prepare
 - 2 Primary Pilot sites
 - Ann Arbor
 - Cleveland
 - Go live March-2019
 - 10 Secondary Pilots
 - Go live April-2019
 - System Wide
 - Q1 of 2021 (October 2020)

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Ann Arbor/Cleveland

- Mapping Sessions
 - Ann Arbor
 - Initial mapping of all NDD Dysphagia trays
 - Cleveland
 - Mapping of all foods
- IT/Software template development
 - CompuTrition
 - VA DOS interface

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Item	Quantity	Unit	Notes
Rice Krispies	1	cup	
Milk	1	cup	
Crushed Rice	1/2	cup	
...

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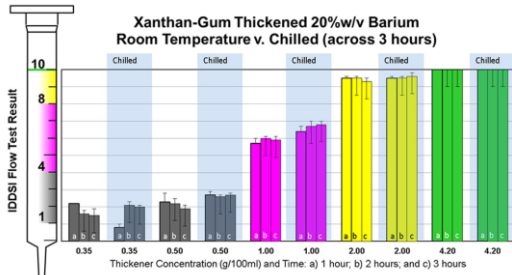
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Dysphagia (2019) 34:73–79
<https://doi.org/10.1007/s00105019-018-9915-6>
 ORIGINAL ARTICLE

Characterizing the Flow of Thickened Barium and Non-barium Liquid Recipes Using the IDDSI Flow Test

Carly E. A. Barbon^{1,2} · Caitiona M. Steele^{1,2,3,4}

Received: 16 February 2018 / Accepted: 20 May 2018 / Published online: 11 June 2018
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Barium Thickener Calculator

<https://steeleswallowinglab.ca/srri/best-practice/barium-recipes/>

<http://steeleswallowinglab.ca/srri/best-practice/barium-recipes/iddsi-barium-calculator/>

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IDDSI APP

- Download
 - Google Play




- Apple Store



72

5 MINCED & MOIST



Hot Food

- 3 ounce Chopped Roast Beef **5**
- 1/2 cup Diced Carrots **5**
- 1/2 cup Mashed Potatoes **4**
- 1/4 cup Beef Gravy **4**
- 6 ounce Blended Veg Soup LS **3**


Example of IDDSI testing & evaluation of a meal

Courtesy of VA

Trayline

- 1 each LS Veg Juice (V8) **1**
- 1/3 cup Cottage Cheese **5**
- 1 each FF Chocolate Pudding **4**
- 6 ounce Nectr Thk Decaf Coff **3**
- 2 pkt Smart Balance **4**

6 SOFT & BITE-SIZED 1 SLIGHTLY THICK



Hot Food

- 3 ounce Chopped Roast Beef **5**
- 1/2 cup Diced Carrots **6**
- 1/2 cup Mashed Potatoes **4**
- 1/4 cup Beef Gravy **4**
- 6 ounce Blended Veg Soup LS **3**

Example of IDDSI testing & evaluation of a meal

Courtesy of VA

Trayline

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- 6 ounce Nectr Thk Decaf Coff **3**
- 2 pkt Smart Balance **4**

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Examples of IDDSI diet orders

6 SOFT & BITE-SIZED + 0 THIN

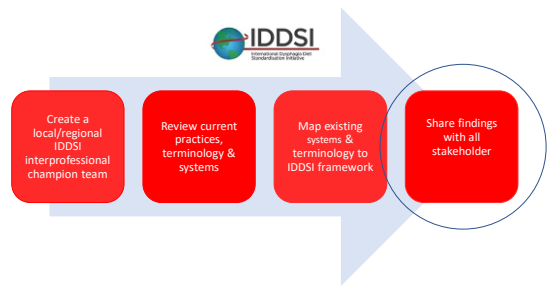
4 PUREED + 2 MILDLY THICK

5 MINCED & MOIST + 3 MODERATELY THICK

4 PUREED + 4 EXTREMELY THICK

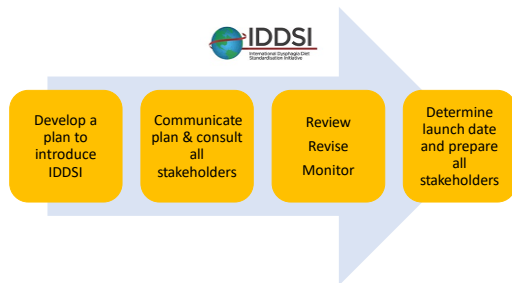
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IDDSI Aware




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IDDSI Prepare



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IDDSI Implementation Plans



IDDSI Implementation Planning - Aware Stage	Persons Responsible	Timeline
<p>ICCT</p> <p>Create a local/regional IDDSI interprofessional Champion Team (ICCT)</p> <p>Develop a detailed overview of project plan, goals of IDDSI implementation to approach senior leadership group</p> <ul style="list-style-type: none"> Seek endorsement & support to develop a smart implementation plan <p>Further develop plan and re-approach senior leadership to get approval</p> <p>Senior leadership agrees to support, invite other stakeholders to be on the ICCT team:</p> <ul style="list-style-type: none"> Clinical Coordinator MFT, GORD & Meditech - TM Food Services Rep - TM to connect with LMMS Director to determine representation OT Rep - CC to connect with OT Practice Leader and seek representation Rehab program - CC to connect with regional director Clinical Nurse Educators - DS to seek representation Audit Director, Emergency - CC to inquiry <p>Increase knowledge and awareness of IDDSI within the ICCT</p> <ul style="list-style-type: none"> Decide what the key messages are for communicating IDDSI to all stakeholders at this stage 	<ul style="list-style-type: none"> DS, Clinical Nutrition Survey The Clinical Nutrition & Regional, Lower Mainland Nutrition Standards CC, SLU PH Regional 	<p>ICCT arrange to a follow up phone meeting for Core Team, (in the next 2 weeks)</p> <p>Create briefing note and send to senior leadership by end of April 2017 (TM & DS)</p> <p>Follow up with senior leadership. If needed by end/May 2017 (M)</p> <p>Core Team to meet at end of May 2017 to develop plan to assemble interprofessional champion team (ICCT) - (M)</p> <p>Objective meeting for ICCT in June 2017</p>
<p>Review current practices, terminology & systems</p>	<p>Review of lower mainland nutrition standards with IDDSI definitions & testing methods</p>	

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IDDSI Implementation Plans

CAMPBELL TO

INTERNATIONAL DEPARTMENT OF DIETETICS

WHAT IS IDDSI?

5

BREAD TEST
Staff Challenge

10

11

12

Step	Task	Due	Responsible
1	Conduct IDDSI training	01 Apr 2018	Dietary Dept
2	Implement IDDSI testing methods	01 Apr 2018	Dietary Dept
3	Monitor and report on IDDSI implementation	01 Apr 2018	Dietary Dept

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IDDSI Print & Post Posters

IDDSI

What is IDDSI?

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IDDSI flow test

IDDSI
London April 2017

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

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IDDSI Colours

IDDSI RGB CMYK and Pantone Colours

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IDDSI Level	Color	RGB	CMYK	Pantone
1	White	255, 255, 255	0, 0, 0, 0	White
2	Light Yellow	255, 255, 225	0, 0, 12, 0	Yellow
3	Light Green	225, 255, 225	12, 0, 12, 0	Green
4	Light Blue	225, 225, 255	12, 12, 0, 0	Blue
5	Light Purple	225, 225, 255	12, 12, 0, 0	Purple
6	Light Orange	255, 225, 225	0, 12, 12, 0	Orange
7	Light Red	255, 225, 225	0, 12, 12, 0	Red
8	Light Grey	225, 225, 225	12, 12, 12, 0	Grey
9	Light Brown	225, 225, 225	12, 12, 12, 0	Brown
10	Light Black	225, 225, 225	12, 12, 12, 0	Black
11	Light White	225, 225, 225	12, 12, 12, 0	White
12	Light Blue	225, 225, 225	12, 12, 12, 0	Blue

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IDDSI Product Labelling

Recommendations for Industry Partners

DO

- THIN
- SLIGHTLY THICK
- MILDLY THICK
- MODERATELY THICK
- LIQUIDISED
- EXTREMELY THICK
- PURGED
- MIXED & MOST
- SOFT & BITE-SIZED
- REGULAR

DON'T

82

Simply Different, Simply Better.™

simplythick

Instant Food Thickener

3 moderately thick

2 mildly thick

83

PROFESSIONAL BERTHELET

PROFESSIONNEL

EZ-THICK

Instant Food and Liquid Thickener

Nutrition Facts

Valuers nutritives

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MODERATELY THICK

HONEY CONSISTENCY

HONEY CONSISTENCY

MILDLY THICK

NECTAR CONSISTENCY

NECTAR CONSISTENCY

THICK & EASY

CLEAR

SUGAR FREE

LOW CALORIE

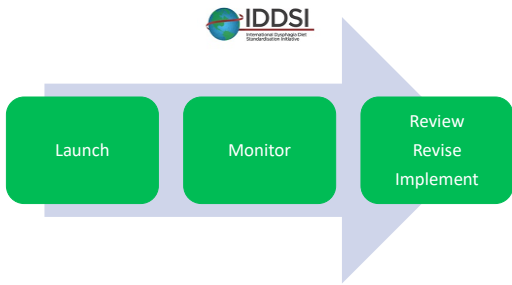
THICKENED PEACH MANGO DRINK

THICKENED PEACH MANGO DRINK

THICK & EASY Thickened beverages meet the special needs of individuals with swallowing difficulties. Our selection of thickened beverages answers your need for ready-to-serve, reliably thickened beverages. The nectar consistency helps promote ease of swallowing.

Every 8 fl. oz. serving of THICK & EASY[®] Thickened Peach Mango Drink provides the full recommended daily requirement for Vitamin C. Ensure proper hydration with great-tasting flavor varieties that are sure to please everyone. Simply chill, pour and enjoy.

IDDSI Adopt



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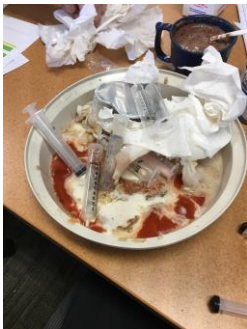
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