

Do You IDDSI Too?

Let's Talk Implementation

Luis F. Riquelme, Ph.D., CCC-SLP, BCS-S

- Associate Professor, New York Medical College, Valhalla, NY
- Director, Center for Swallowing & Speech-Language Pathology, New York-Presbyterian Brooklyn Methodist Hospital, Brooklyn, NY

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Disclosure:

International Dysphagia Diet Standardization Initiative (IDDSI)
Board Member

The IDDSI Board is a team of volunteers, consisting of dietitians, speech pathologists, food scientists, physicians, occupational therapists, engineers, nurses, and professionals who have come together to help create the IDDSI framework.



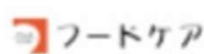
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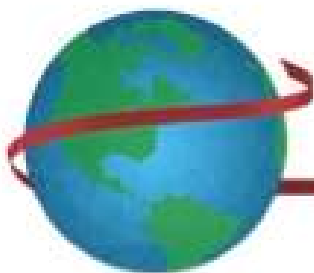
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The International Dysphagia Diet Standardisation Initiative is supported by funding from a variety of industry sources.



IDDSI

International Dysphagia Diet
Standardisation Initiative



Safety through...

Common terminology for

All ages

All care settings

All cultures

www.iddsi.org

Why do we need a standardized system?

Safety

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

Efficiency

Avoids need for re-assessment of food & liquids when patients move between healthcare settings

Commercial Consistency

Ready to use items & products are consistent from manufacturer to manufacturer

Research

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

Curr Phys Med Rehabil Rep
DOI 10.1007/s40141-013-0024-z

SWALLOWING DISORDERS (RE MARTIN, SECTION EDITOR)

Dysphagia
DOI 10.1007/s00455-014-9578-x

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ORIGINAL ARTICLE

Julie A. Y
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Dysphagia
DOI 10.1007/s00455-016-9758-y

ORIGINAL ARTICLE

Catriona M
Carly E. A.
Roberto O.
Peter Lam
Weslania V

Development of International Terminology and Definitions for Texture-Modified Foods and Thickened Fluids Used in Dysphagia Management: The IDDSI Framework

Received: 24
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Julie A. Y. Cichero^{1,2} · Peter Lam^{1,3,4} · Catriona M. Steele^{1,5,6} · Ben Hanson^{1,7} · Jianshe Chen^{1,8} · Roberto O. Dantas^{1,9} · Janice Duivesteyn^{1,10,11} · Jun Kayashita^{1,12} · Caroline Lecko^{1,13} · Joseph Murray^{1,14} · Mershen Pillay^{1,15,16} · Luis Riquelme^{1,17,18} · Soenke Stanschus^{1,19}

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Curr Phys Med Rehabil Rep
DOI 10.1007/s40141-013-0024-z

SWALLOWING DISORDERS (RE MARTIN, SECTION EDITOR)

The Need for International Terminology and Definitions for Texture-Modified Foods and Thickened Liquids Used in Dysphagia Management: Foundations of a Global Initiative

Julie A. Y. Cichero • Catriona Steele • Janice Duivesteyn • Pere Clavé •
Jianshe Chen • Jun Kayashita • Roberto Dantas • Caroline Lecko •
Renee Speyer • Peter Lam • Joseph Murray

<http://tinyurl.com/q54terf>

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The Need for International Terminology... (2013)

- Survey of current terminology and practice
 - 33 countries, 2050 responses
 - Persons with dysphagia, caretakers, organizations, health care professionals, food service providers, researchers, industry
- Results:
 - Common use of 3-4 levels of *food*
(54 different names)
 - Common use of >3 levels of *liquids*
(27 different names)

The Need for International Terminology... (2013)

- 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.



Dysphagia

DOI 10.1007/s00455-014-9578-x

ORIGINAL ARTICLE

The Influence of Food Texture and Liquid Consistency Modification on Swallowing Physiology and Function: A Systematic Review

Catriona M. Steele • Woroud Abdulrahman Alsanei • Sona Ayanikalath •
Carly E. A. Barbon • Jianshe Chen • Julie A. Y. Cichero • Kim Coutts •
Roberto O. Dantas • Janice Duivestein • Lidia Giosa • Ben Hanson •
Peter Lam • Caroline Lecko • Chelsea Leigh • Ahmed Nagy • Ashwini M. Namasivayam
Weslania V. Nascimento • Inge Odendaal • Christina H. Smith • Helen Wang

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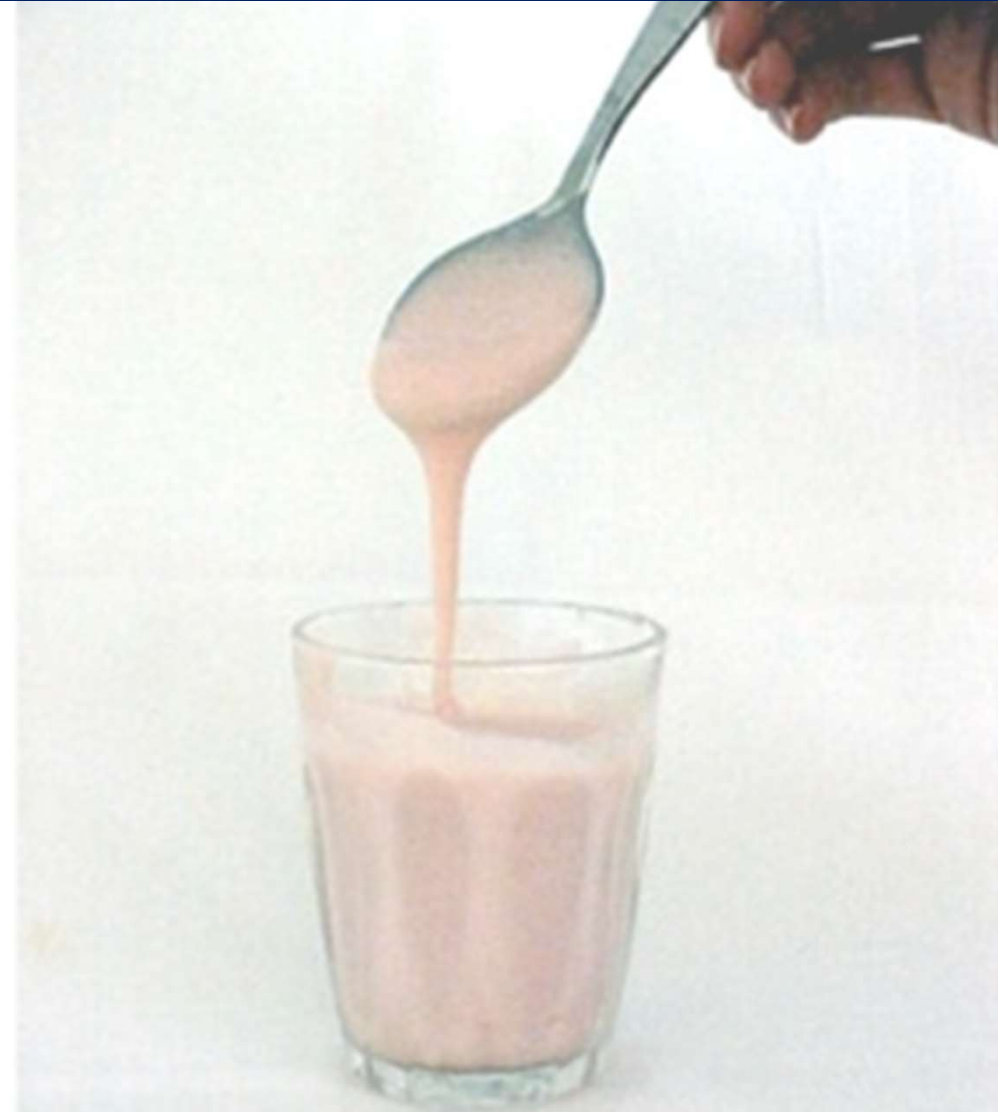
Systematic Review 2014

- Original literature search: 10,000 non-duplicate articles were found about the use of texture modified foods and thickened liquids for management of dysphagia.
- Relevance review: 488 articles remained
- Quality rating and inter-rater reliability: 36 articles were used to inform this review

Evidence - Therapeutic effect of thickened liquids: Systematic reviews

Newman, 2016, Dysphagia, 31: 232-49; Steele et al., 2014, Dysphagia, 30: 2-26

1. Thickened liquids help those who aspirate thin liquids
2. Liquids can be “too thick”, where residue begins to accumulate
 - Suggests an *upper* ‘therapeutic thickness’ boundary exists



**Ongoing research required to determine
*therapeutic thickness level/s***

Evidence - Therapeutic effect of texture modified food: Systematic review

Steele et al., 2014, Dysphagia, 30:2-26

1. Solid food and thick/paste consistencies = greater effort in oral processing and swallowing
2. Very little literature on texture modified food used for dysphagia management



ETHICS

RCT studies unsafe if a potential outcome is death by choking

Putting it all together...



Developing a
culturally-sensitive,
age-span relevant
framework for
classifying texture
modified foods and
thickened drinks

IDDSI Board of Directors



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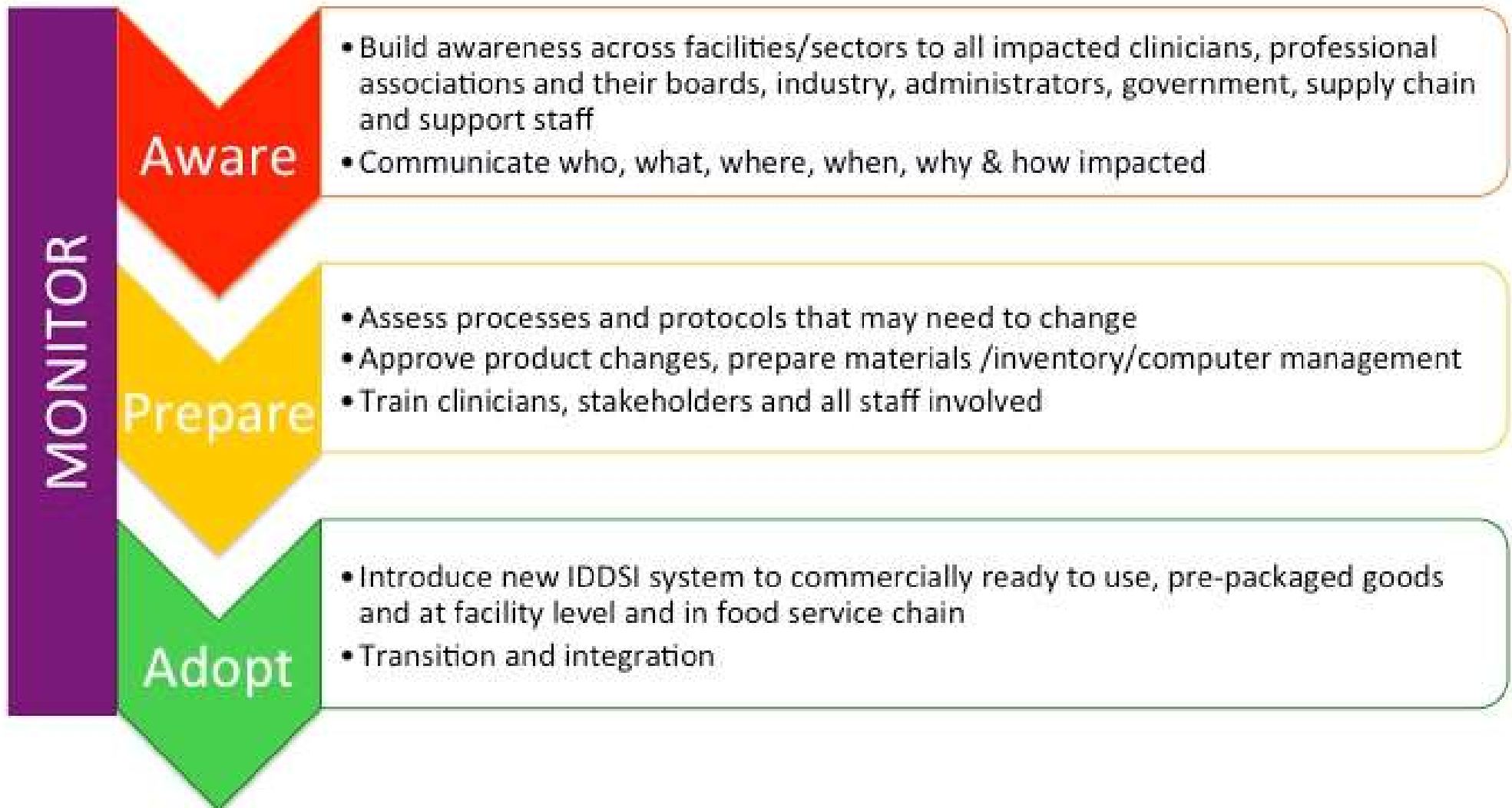


**Catriona
Steele**
Canada



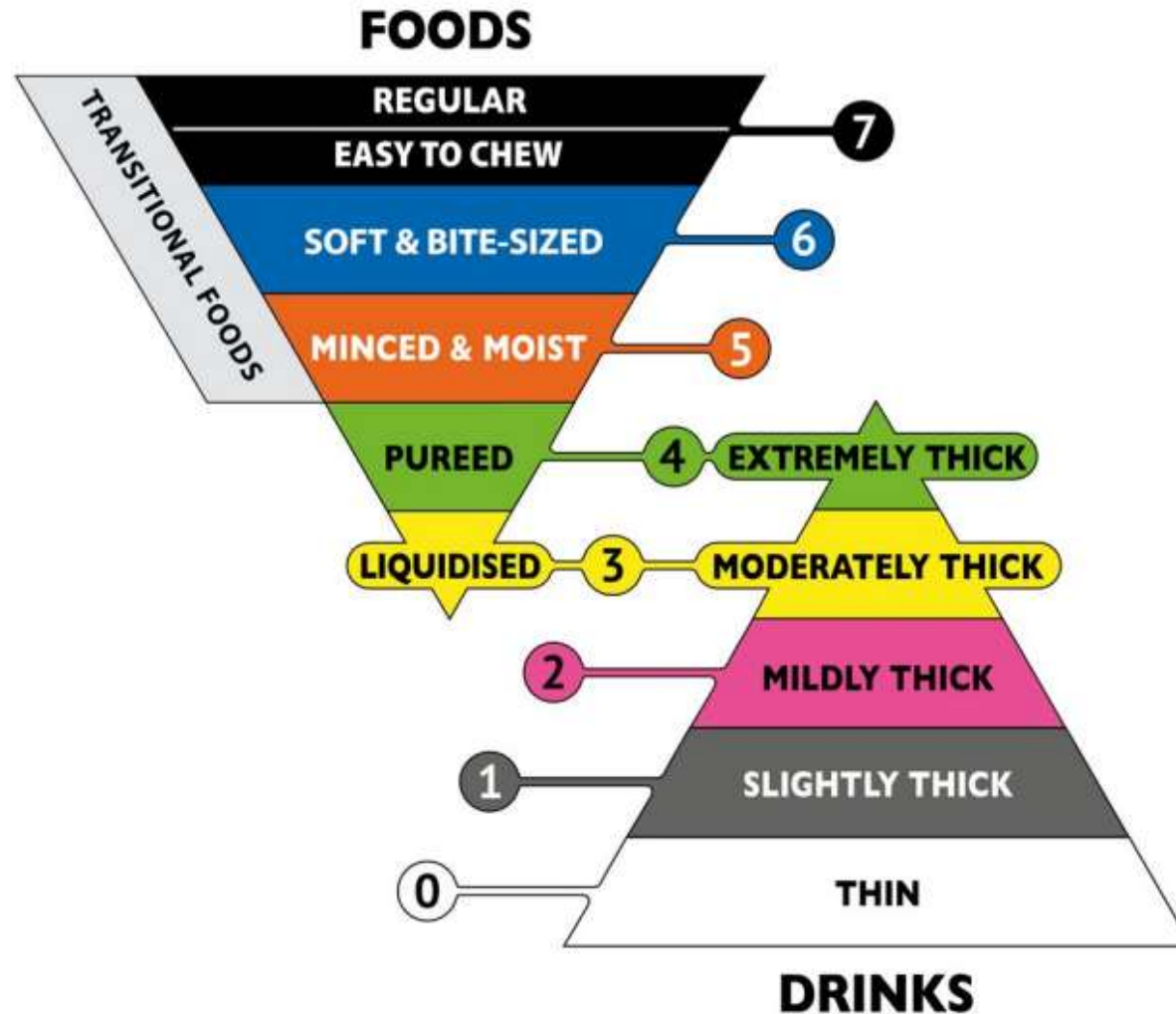
**Jan
Vanderwegen**
Belgium

Monitor-Aware-Prepare-Adopt



IDDSI Framework

Cichero et al. (2017) Dysphagia, 32: 293-314

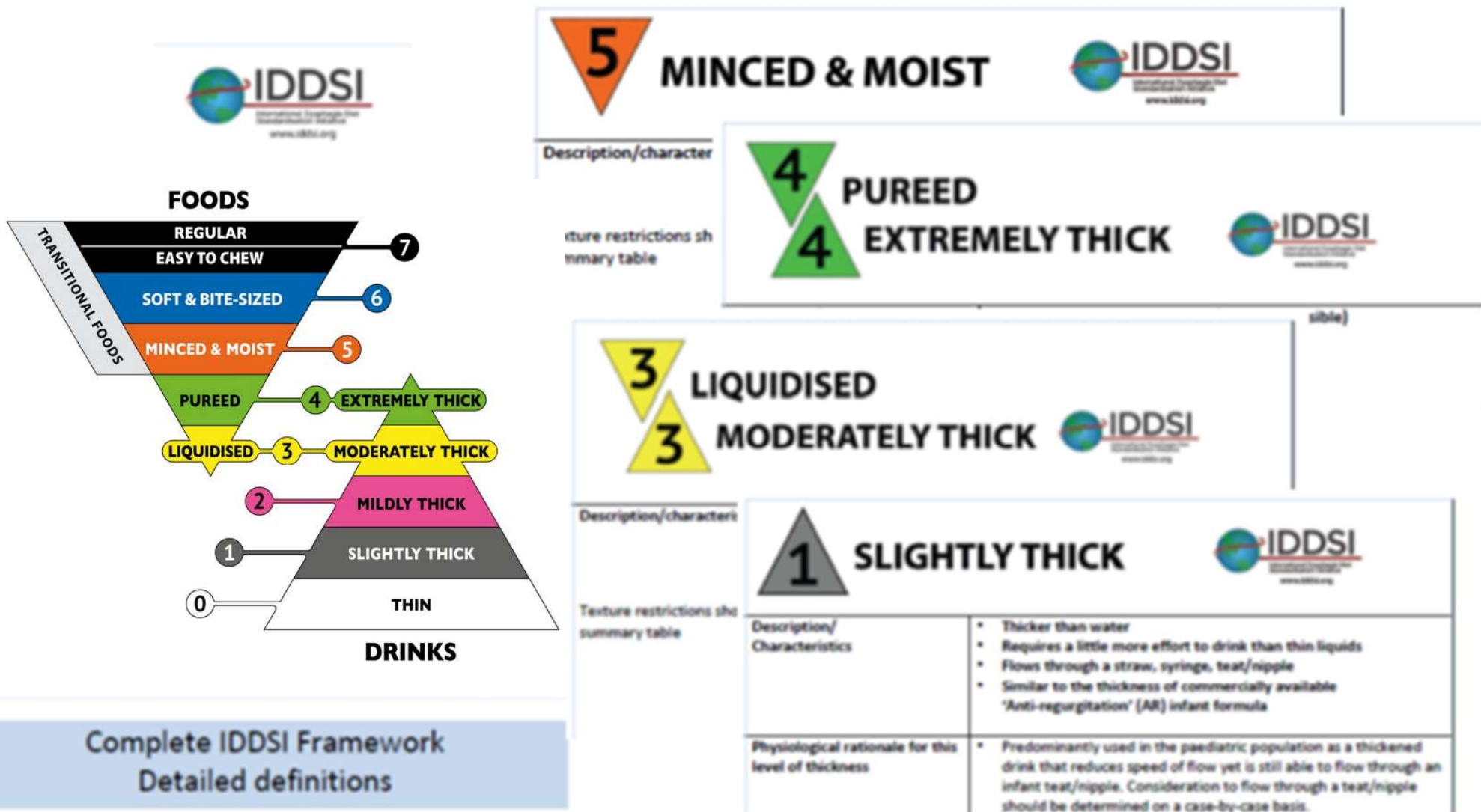


Foods and liquids on a single continuum
Relevant across the age span
For all cultures and all care settings

IDDSI Framework



Detailed Descriptors & Testing Methods





SLIGHTLY THICK



Description/ Characteristics

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

Physiological rationale for this level of thickness

- Predominantly 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.

Testing method

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

IDDSI Flow Test*

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

The Measurement Dilemma: **LIQUIDS**

- Measuring viscosity is TOO complicated to use in kitchens as the basis for classifying thickness
- Need a simpler, but valid and reliable method for measuring thickness at the point-of-use

IDDSI Flow Test

van Vliet et al. (2002), Food Quality and Preference, 13, 227-236; Kutter et al. (2011), 42: 217-227

Similar to Posthumus Funnel
used in dairy industry to
measure liquid thickness

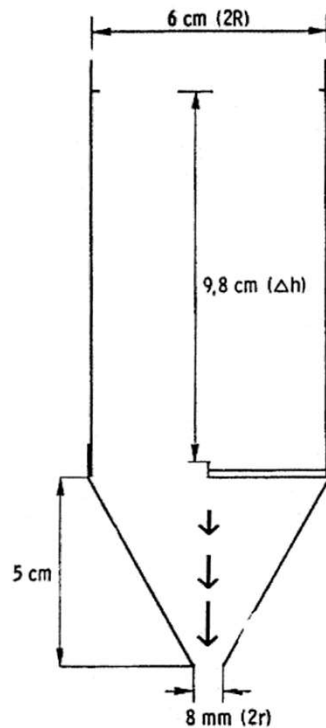
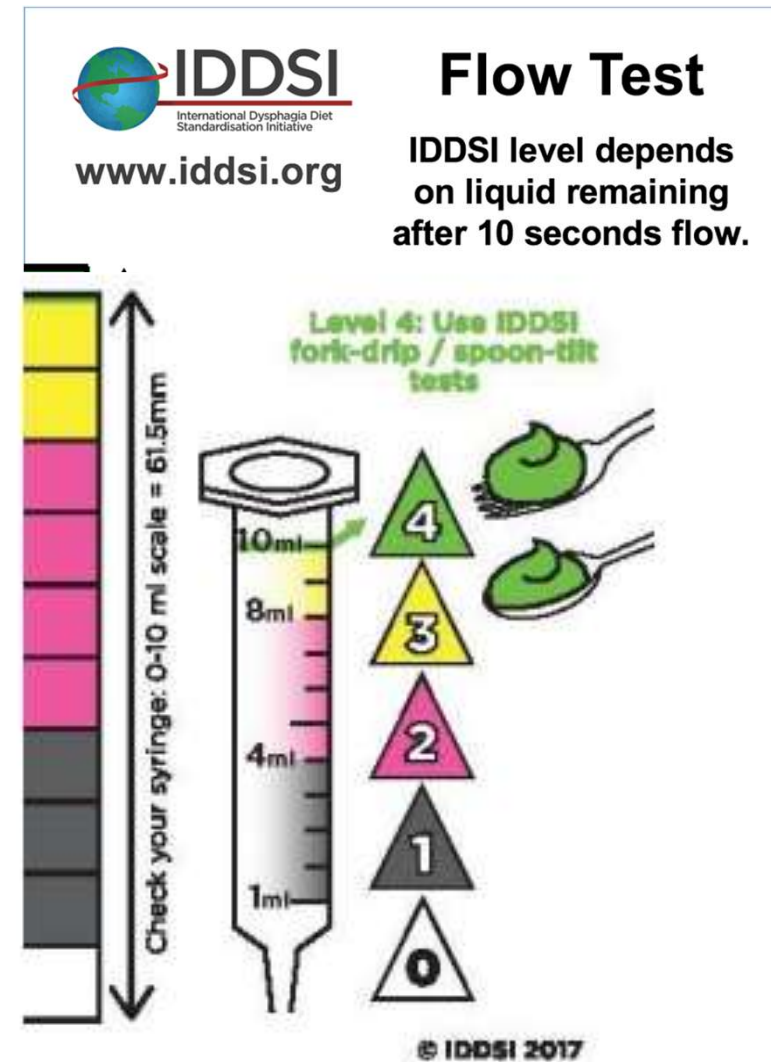
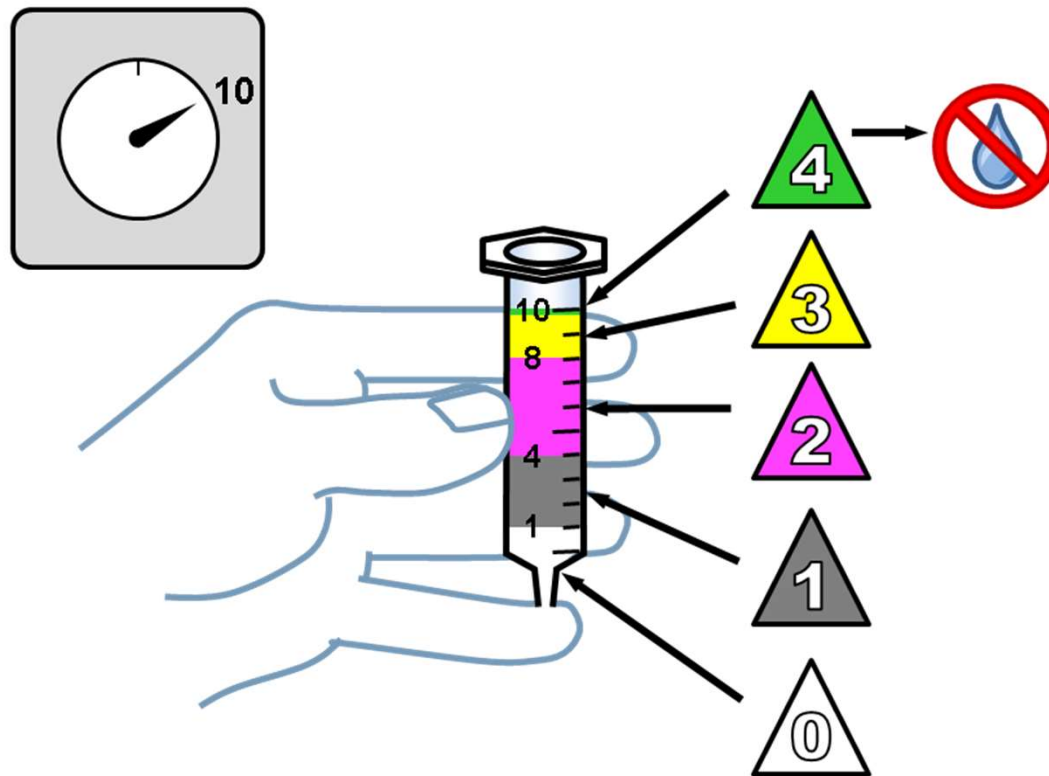


fig. 2. Sketch of a Posthumus funnel. In the conus the flow rate increases in the direction of flow implying an elongational flow component (after van Hooydonk et al., 1984).

***“Geometry allows
for both shear and
elongation that
more closely
matches flow
conditions within
the oral cavity”***



IDDSI Flow Test



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

IDDSI Level classifications based on liquid remaining after 10 seconds:

Level 0: All liquid has flowed through syringe.

Level 1: There is between 1 and 4ml remaining.

Level 2: There is between 4 and 8ml remaining.

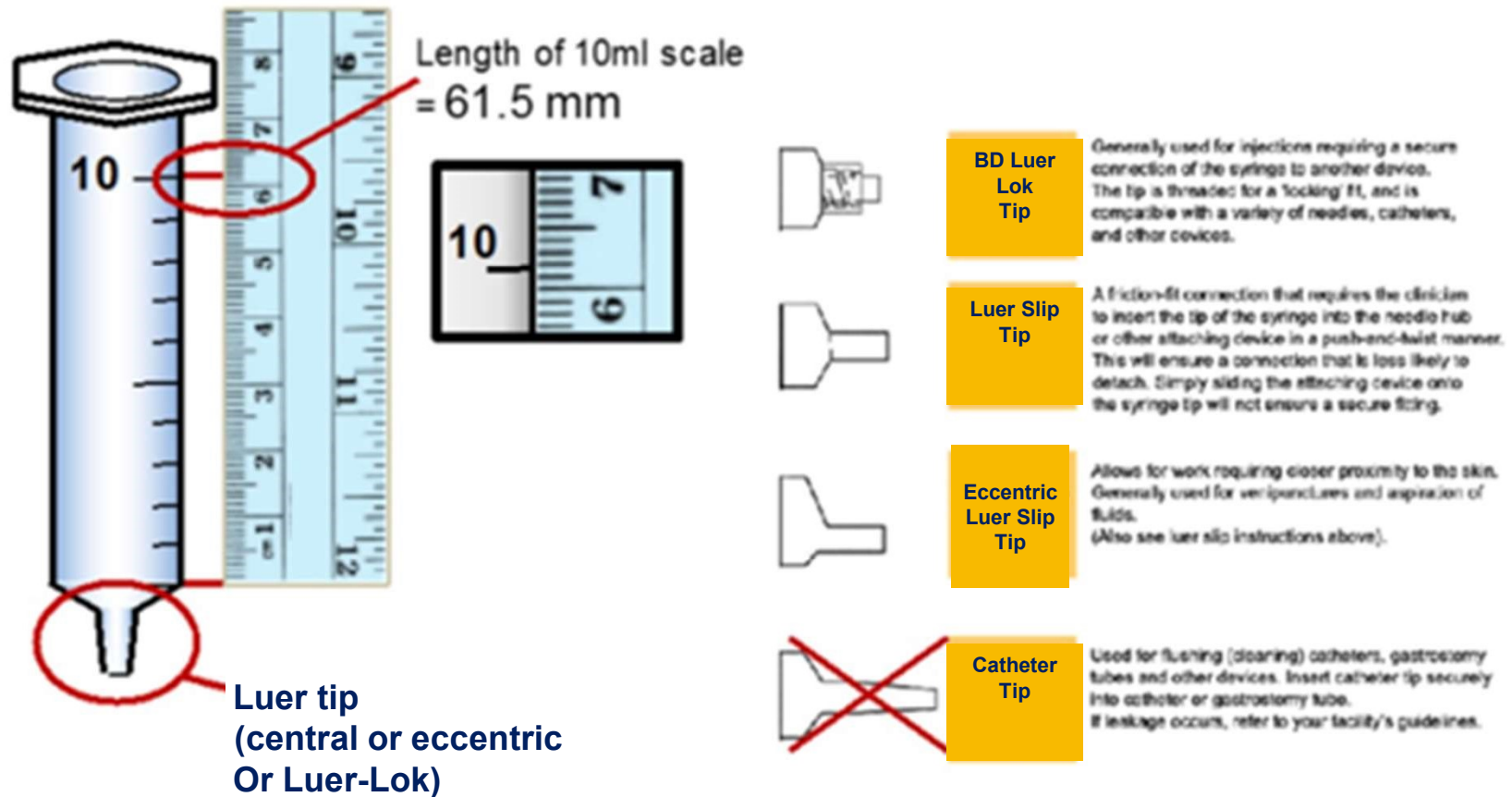
Level 3: There is more than 8ml remaining, but some liquid still flows through.

Level 4: If no liquid flows at all, the category is Level 4 or above.

Level 4 can also be easily identified without a syringe test: Material holds its own shape; small peaks remain on the surface. Too thick to be drunk from a cup or a straw, should be taken with a spoon. A full spoonful must drop off a spoon if turned sideways; a very gentle flick may be necessary but the material should not be firm, nor sticky.

© Ben Hanson 31/3/2015

IDDSI 10 mL Syringe Specifications



Before use, check the nozzle to make sure it is clear and free from any plastic residue or manufacturing defects that occasionally occur.

© Ben Hanson 8/4/20*



MINCED & MOIST



Description/characteristics

Texture restrictions shown in summary table

- 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
 - *Paediatric, 2 mm lump size*
 - *Adult, 4mm lump size*
- Lumps are easy to squash with tongue

Physiological rationale for this level of thickness

- 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

The Measurement Dilemma: FOODS

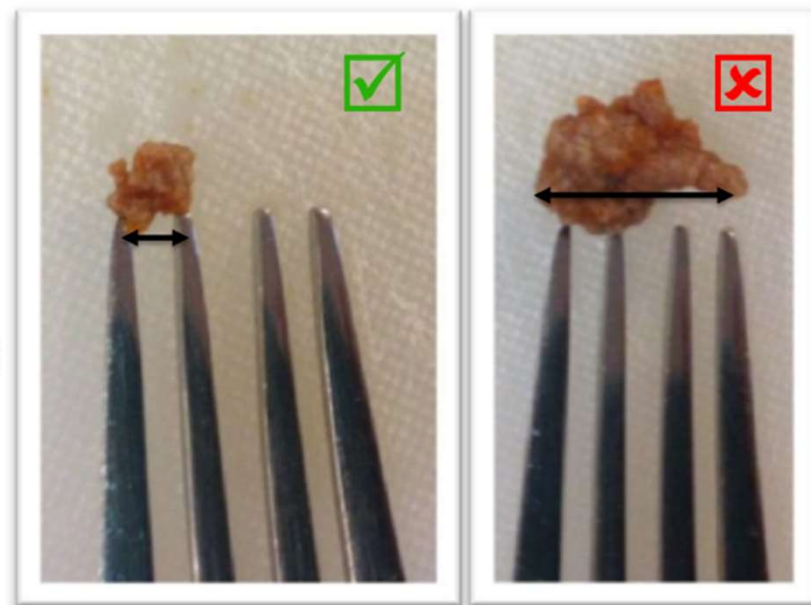
Particle Size:

- For *hard and soft solid* foods, a maximum food sample size of ~1.5 x 1.5 cm is recommended, which is the approximate size of the adult human thumb nail (Murdan, 2011).
- For *minced and moist* foods, a maximum particle size of **4 mm** for adults and children 5 years and older is recommended.
- For under 5 years, **2 mm** max particle size is recommended.

The Measurement of FOODS

IDDSI Fork Test:

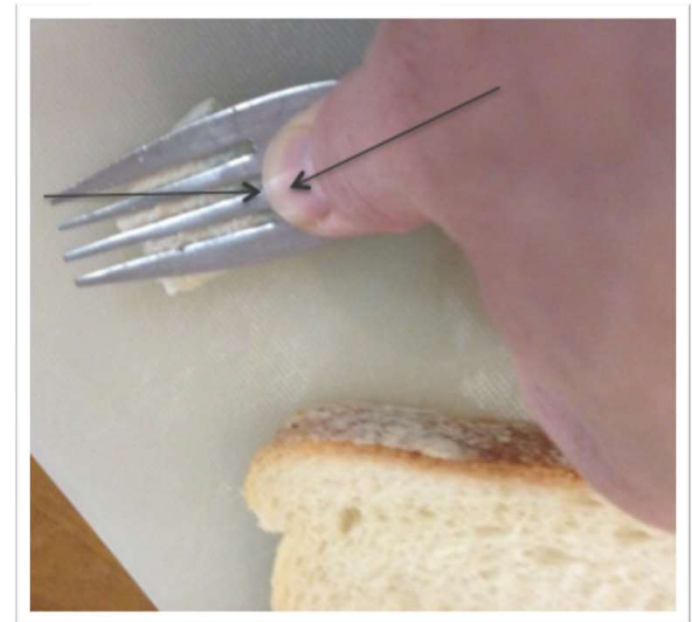
- The slots/gaps between the tines/prongs of a standard metal fork typically measure **4 mm**.
- This provides a useful compliance measure for particle size of foods at Level 5 - Minced & Moist.

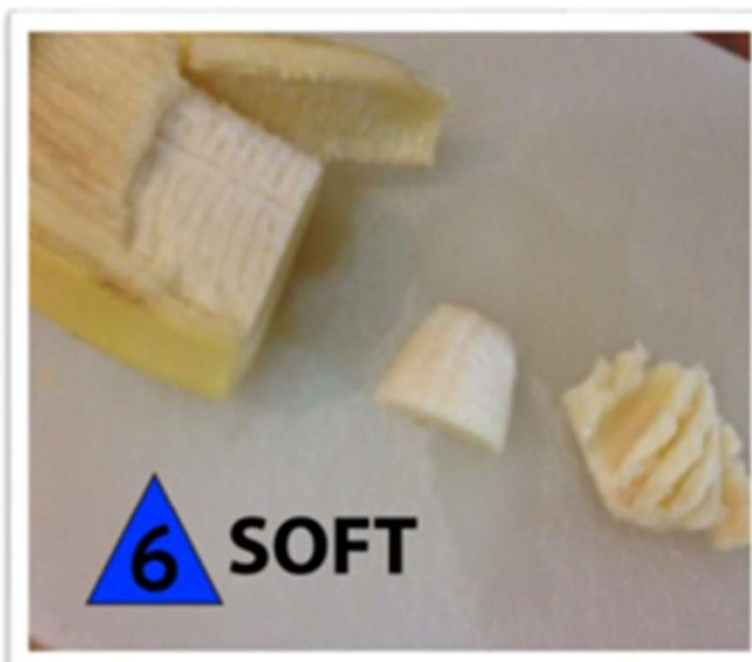
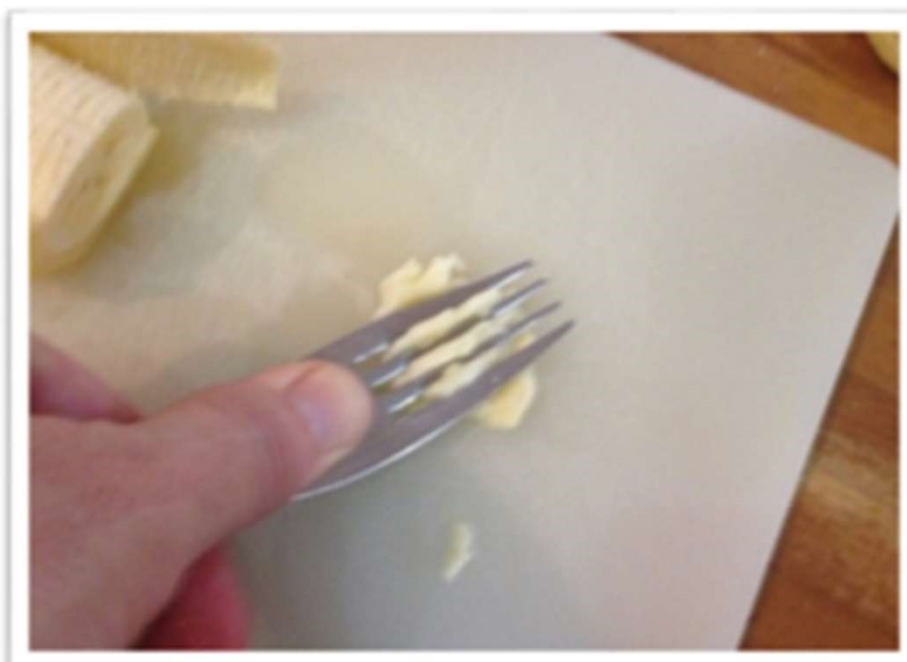
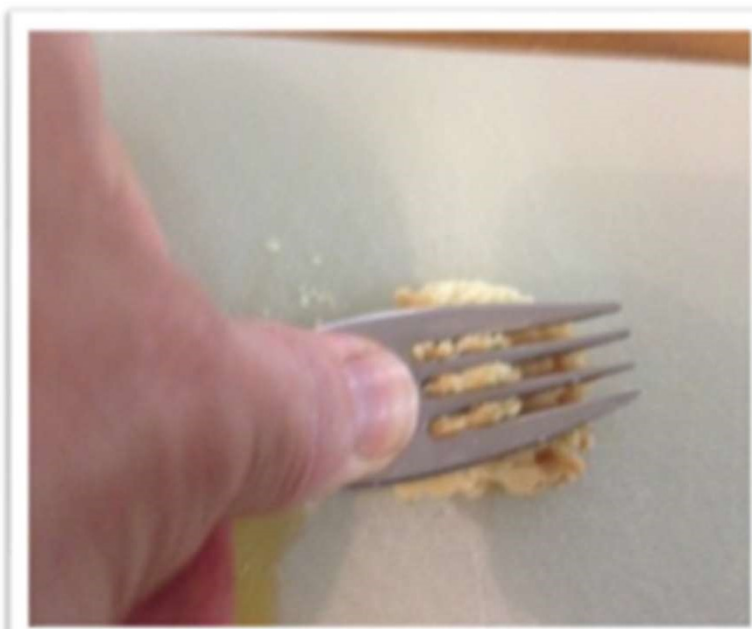
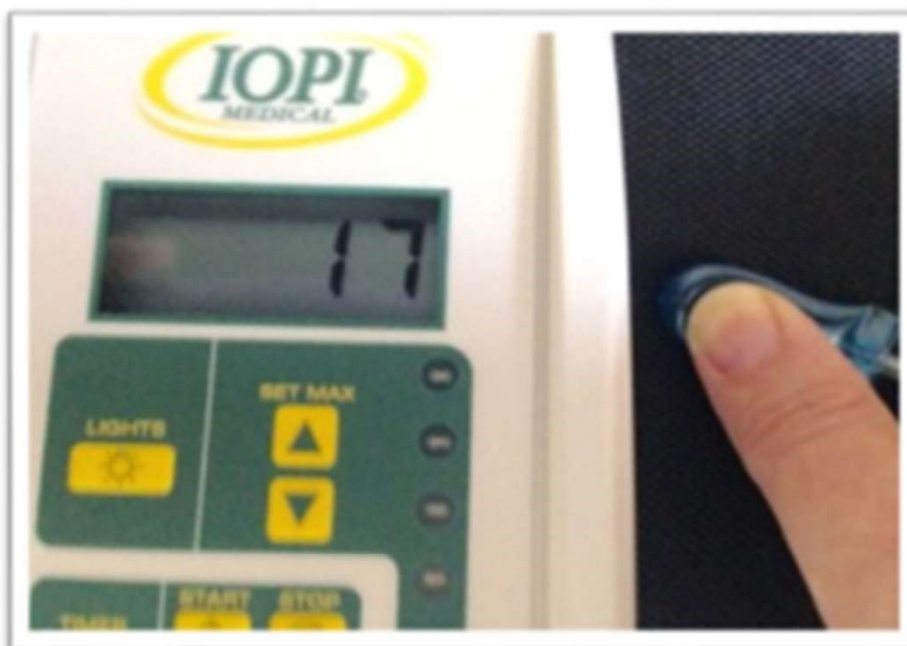


The Measurement of FOODS

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.





What are Transitional Foods?

- Foods that start as one texture and change into another with moisture or temperature
- Minimal chewing required
- Tongue pressure may be sufficient to break food down after alteration in moisture or temperature

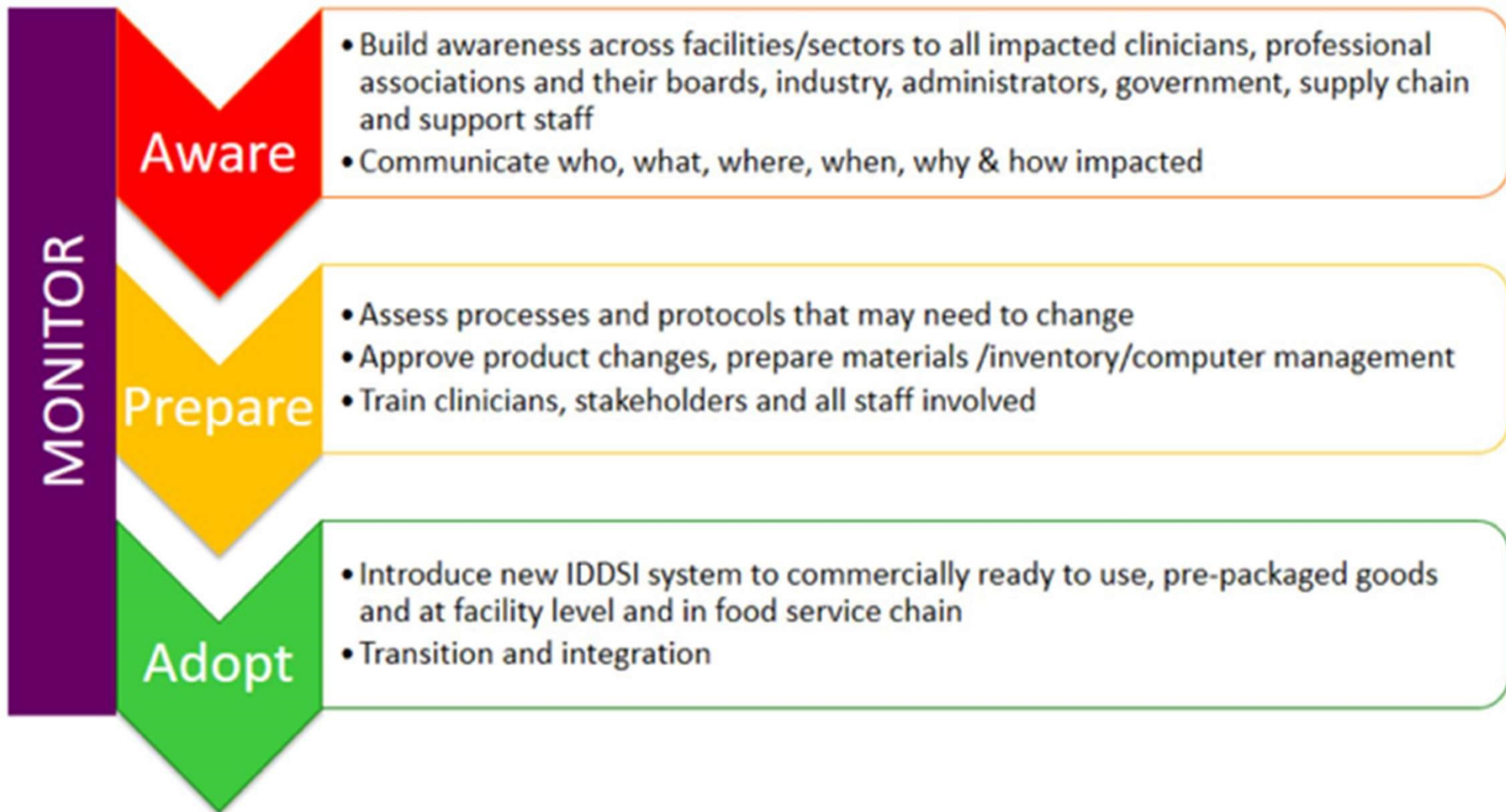




IDDSI Food Texture Test Videos

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

Monitor-Aware-Prepare-Adopt



Visit the website



IDDSI

International Dysphagia Diet Standardisation Initiative

A global initiative to improve the lives of over 590 million people worldwide living with dysphagia

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Helping People with Dysphagia Around the World

IDDSI IMPLEMENTATION

Learn about the process of Implementation.

Click below to see news about IDDSI, important updates about the IDDSI Framework, and additions to our website.

[What's New?](#)[! Important Updates](#)

International
Dysphagia Diet
Standardisation
Initiative

Webinar Series

Implementation in an Academic Hospital setting –
University of Michigan.

March 11 – 5 pm (EST/GMT-5:00). [Register](#)

March 12 – 12pm (EST/GMT-5:00). [Register](#)

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IN THIS BITE

- Successful and exciting events across the globe
- Reminder Notice: Use of IDDSI Logo and IDDSI Framework
- New IDDSI Resources for 2019
- Updating our Website
- Webinar Series 2019 - University of Michigan
- IDDSI Translations
- IDDSI on the Move

Sign up to
receive
updates via
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EXCITING EVENTS ACROSS THE GLOBE

London, United Kingdom:

The **UK IDDSI Festival and Congress** in London on February 18, 2019 was a great success. The event was interactive to promote discussion and learning between professional bodies (RCSLT, BDA and NHS-I), 8 commercial exhibitors, and over 200 participants. On-stage presentations featured implementation stories, live cooking & testing demonstrations, and there were plenty of samples of excellent texture modified foods & drinks to try. The event was supported by UCL's Institute of Healthcare Engineering. The UK are fully adopting IDDSI from April 2019, with many settings already implementing IDDSI.

Ben Hanson's presentation from this event is available on youtube through [this link](#).

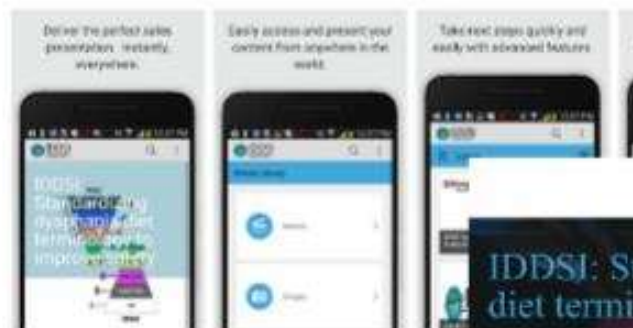
Titled ***How Thick? Being specific with measurements***, it covers the rationale for testing, reviews different methods and describes the IDDSI measurements including the flow test, fork pressure test and spoon tilt test.

The presentation concludes with recommendations on how to get the most from measurement in practice: use IDDSI as a tool for communication of clinical decisions, **it is not an instruction manual or rule book.**

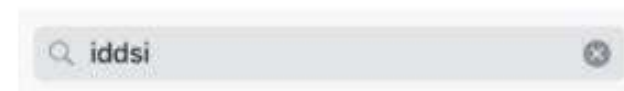
Share your stories!

Write to us at:
communications@IDDSI.org

IDDSI Apps



Have the IDDSI Framework at your fingertips - get access to the description of IDDSI food texture and drink thickness tests easily within the full, offline app. The IDDSI Framework is culturally sensitive, measurable and applicable to all groups in all care settings designed in an effort to help those with dysphagia.





IDDSI

International Dysphagia Diet Standardisation Initiative

A global initiative to improve the lives of over 590 million people worldwide living with dysphagia



Let's Talk...

Implementation



IDDSI

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Resources

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The International Dysphagia Diet Standardisation Initiative 2016 @<https://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.

[General Resources](#)[Country-specific Resources](#)[IDDSI 101 \(Print and Post\)](#)[IMPLEMENTATION](#)[PRESENTATIONS](#)

Note: Not following these instructions might lead to misprints. If you are still unable to print the documents successfully, please talk to an IT professional.

General Resources

Country-specific Resources

IDDSI 'Print and Display' (posters)



Consumer Handouts (Paediatric)



Consumer Handouts (Adults)



Implementation



Presentations



Publications



E-bites (monthly newsletters)



Newsroom



Videos



Webinar Recordings



Resources from other IDDSI users



Implementation

Adoption Posters

—

Conversion Charts

—

Audit Sheets

—

Labels of IDDSI Levels

—

MAPA Logos (by Country)

—

Foodservice

—

Implementation Guides

—

Flow Test Cards

—

Food Test Cards

—

Testing Reference Cards

—

Implementation

Adoption Posters

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Conversion Charts

—

Audit Sheets

—

Labels of IDDSI Levels

—

MAPA Logos (by Country)

—

Foodservice

—

Implementation Guides

—

- [Clinicians and Health Care Providers](#)
- [Food Service and Catering](#)
- [Industry](#)
- [Master guide: Cross-Sector](#)

Flow Test Cards

—

Food Test Cards

—

Testing Reference Cards

—

IDDSI-Aware

- Who to team-up with? Who leads team?
 - Manager of RDs + Head of SLPs?
 - Manager of RDs + Food Service Manager?
 - Others?
- Who “approves” the move to assess the potential for change?
 - Vice President?
 - Director?
 - Other?
- Who are the next level of target supporters?
 - Entire SLP and RD team + Food Service
 - Others?

IDDSI-Aware

- How to conduct training for mapping teams(s)?
- How to map current menus to the IDDSI Framework?
 - One group volunteers to map entire menu?
 - Create teams and divide menus?
 - Create teams and only map parts of menus?
 - Others?
- How to coordinate the testing? Ensure interrater reliability?



Potential Transition/Implementation Steps

- Map thickened liquids (names and definitions) to the IDDSI standards
- Involve all front line staff and evaluate existing recipes, menus and diet breakouts: FS, RD, SLP?
- Take one food group at a time; or meal at a time; and ***gradually*** map to IDDSI standards
 - Provides built-in awareness & training
 - Allows adjustment of procedures and sustainable changes

Examples of IDDSI Diet Orders

 **SOFT & BITE-SIZED** +  **THIN**

 **PUREED** +  **MILDLY THICK**

 **MINCED & MOIST** +  **MODERATELY THICK**

 **PUREED** +  **EXTREMELY THICK**

Dinner

WED 01/04/17

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

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
<u>2 pkt</u>	<u>Smart Balance</u>	4

Dinner

WED 01/04/17



SOFT & BITE-SIZED



SLIGHTLY THICK



Hot Food

3 ounce
1/2 cup
1/2 cup
1/4 cup
6 ounce

Chopped Roast Beef

Diced Carrots

Mashed Potatoes

Beef Gravy

Blended Veg Soup LS

Trayline

1 each
1/3 cup
1 each
6 ounce
2 pkt

LS Veg Juice (V8)

Cottage Cheese

FF Chocolate Pudding

Nectr Thk Decaf Coff

Smart Balance

IDDSI Prepare



**Develop a
plan to
introduce
IDDSI**

**Communicate
plan & consult
all
stakeholders**

**Review
Revise
Monitor**

**Determine
launch date
and prepare
all
stakeholders**

IDDSI Implementation Plans

Once mapping is complete, PLAN should include:

- Can kitchen handle transition? Tray assembly?
- Food Service computer system?
- Electronic medical records – diet orders?
- When are other stakeholders brought in?
Medicine. Nursing.
- Roll-out on one unit or entire facility?
- Roll-out entire menu or parts of it?

IDDSI Print & Post Posters



What is IDDSI?

International Dysphagia Diet Standardisation Initiative

The International Dysphagia Diet Standardisation Initiative (IDDSI) is a global standard with terminology and definitions to describe texture modified foods and thickened liquids used for individuals with dysphagia of all ages, in all care settings, and for all cultures.

The IDDSI framework consists of a continuum of 8 levels (0-7). Levels are identified by text labels, numbers, and colour codes to improve safety and identification. The standardised descriptors and testing methods will allow for consistent production and easy testing of thickened liquids and texture modified foods.

How thick is thick?
How fine is minced?

IDDSI Testing methods will help to ensure correct textures and thicknesses.

DISCOVER MORE ABOUT IDDSI

Visit: [IDDSI.org](https://iddsi.org)

Follow on Twitter: @IDDSI_org

Download the IDDSI App:



IDDSI Detailed Descriptors & Testing Methods
<https://iddsi.org/framework/>

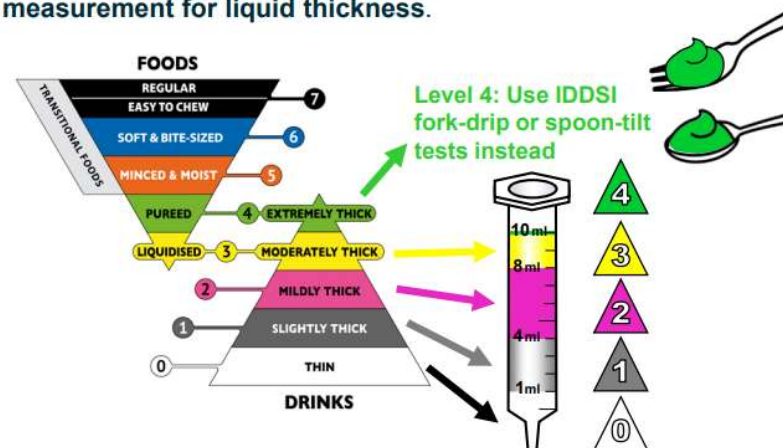
SIGN UP TODAY TO STAY INFORMED OF IDDSI UPDATES

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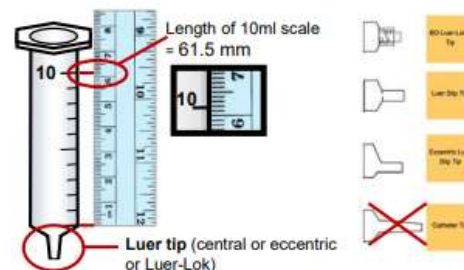


Flow Test

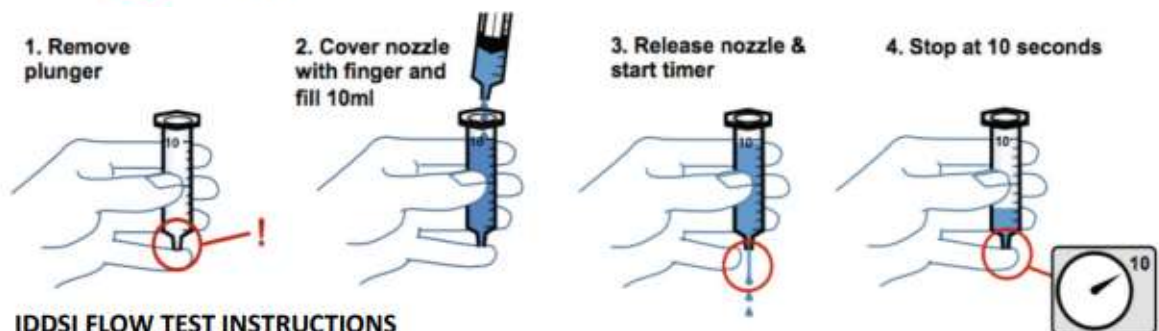
The International Dysphagia Diet Standardisation Initiative (IDDSI) framework of terminology and definitions includes an **objective measurement for liquid thickness.**



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



Videos of IDDSI flow test can be found here: <https://iddsi.org/framework/drink-testing-methods/> or in the IDDSI App



IDDSI FLOW TEST INSTRUCTIONS

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- Initial training session: all SLPs, all RDs, Food Service supervisors
- Mapping
 - 6 groups: SLP + RD
 - Created Worksheets
- Kitchen tools
- Menu issues
- Next steps...

Spreading the news: Newsletter?



NewYork-Presbyterian
Brooklyn Methodist Hospital

Implementation Project Update May 2017

Luis F. Riquelme, Ph.D., CCC-SLP, BCS-S
Director, Center for Swallowing & Speech-Language Pathology
Karen L. Kupinski, MPH, RD
Director, Clinical Nutrition and Patient Services

Greetings!

In efforts to maintain all stakeholders aware of the progress being made as our facility moves forward with the implementation of the IDDSI Framework, we offer this newsletter as a vehicle of communication. Serving as the pilot site for the NewYork-Presbyterian network is an honor, and we hope to serve as a model as we move forward, learn from our mistakes and develop a process to better serve our patients and ensure their safety.

Karen and Luis

MARCH 2017

We held an information meeting (in-service style) with all speech-language pathologists (SLP) and dietitians (RD) at our facility. Several leaders from the Food Service area also joined our group. Dr. Riquelme introduced everyone to IDDSI via a power point presentation that included the history and rationale for moving forward with this initiative. NYU students Alexandra Aldeborgh and Austin D. Fernández presented their experience in mapping several food items from our current menus at NYPBMH. A lively discussion ensued and several clinicians engaged in the demonstrated syringe flow testing.

APRIL/MAY 2017

Volunteers from among the RDs and SLPs have been gathered and Mapping Teams created. Each Mapping Team is composed of an RD + SLP. Luis, Karen and the NYU students are dividing the current NYPBMH menus into workable spreadsheets to facilitate the IDDSI



Contact us: communications@iddsi.org

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