



IDDSI:

A Global Initiative for Standardization of
Diets for Treatment of Dysphagia

Presented by:

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Learner Objectives

After this presentation, the participant will be able to:

1. Define the International Dysphagia Diet Standardization Initiative (IDDSI)
2. Understand the IDDSI Framework and Testing Methods
3. Compare IDDSI to the National Dysphagia Diet (NDD)
4. Understand IDDSI Adoption and Considerations/Risk Management



Introduction

A little about me...

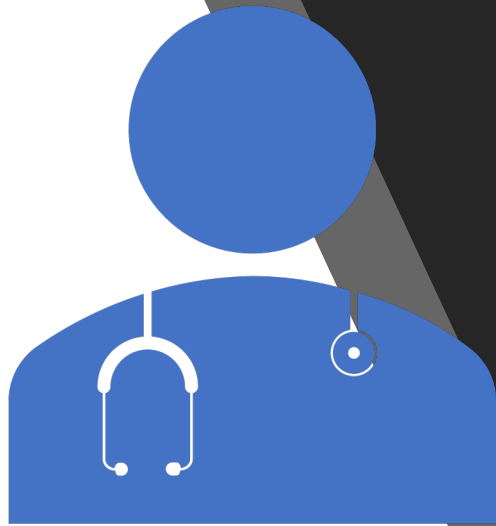
- Undergraduate Education: University of Delaware
 - Bachelor of Science in Cognitive Science
 - Minor in Psychology and Spanish
 - Concentration in Speech-Language Pathology
- Graduate Education: Towson University
 - Master of Science in Speech-Language Pathology
- American Speech-Language and Hearing Association (ASHA) Certificate of Clinical Competence (CCC) 2014
- Medical SLP Collective Member
- Clinical Experience:
 - Acute Care
 - Sinai Hospital (graduate intern)
 - Post-Acute
 - Inpatient/Outpatient Rehabilitation (SNF, ALF, OP)



International Dysphagia Diet Standardization Initiative

Goal: Standardizing Diet Terminology to Improve Safety

- Dysphagia: “a swallowing disorder... [which] may occur as a result of various medical conditions. **Dysphagia** is defined as problems involving the oral cavity, pharynx, esophagus, or gastroesophageal junction” (Asha.org, 2019)
- Speech-language pathologists (SLPs) diagnosis and manage oral and pharyngeal dysphagia
 - Treatment options include: biofeedback, maneuvers, compensatory strategies, postural techniques, exercises, prosthetics, and most commonly diet modification
- Malnutrition and dehydration, aspiration pneumonia, compromised general health, chronic lung disease, choking, and even death may be a consequence of dysphagia



Why do we need IDDSI?

Regular, puree, regular



.....Alexander, 59 gagging on toast at breakfast, died on chicken at lunch (2014, AU)...
Millie 9 months, choked on Shepherd's Pie at Nursery (Great Manchester UK)... Male 44, choked
on food Nottingham Mental Health Unit (2015, UK)... Male, 45 choked on hazelnut spread and
died... Mona Belle, 95 choked on carrots and peas (AU)... Woman 73 choked on Ondeh-ondoh
glutinous, lump-sized food (Singapore)... Eldon, 88 with poor dentition choked on partially
chewed food (Canada)... Brian, 84 on 'soft diet' choked on toast and died (AU)... Katie, 56 choked
on meat at a group home and died... Pamela, 78 with Alzheimer's choked on toast and
died(2016)..Male, 76 in aged care, choked on chocolate cake and died... Marjorie, 69 choked on
sandwich and died...

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Coroner's
Inquests

Why do we need IDDSI?

Many countries have a national dysphagia standard

- USA, UK, Australia, New Zealand, Ireland, Denmark, Sweden, Japan, etc.

USA: National Dysphagia Diet (NDD)



www.iddsi.org

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Why do we need a standardized system?



Safety

Multiple labels and definitions cause confusion

- Within and between institutions
- Individuals with swallowing difficulties
- Family/care-providers
- Healthcare professionals
- Food services

Clinical Efficiency

Avoids re-assessment to determine safe liquid and diet levels

Reduces need to confirm and clarify clinical information

Why do we need a standardized system?



Commercial implications

So that “ready to use”/ “off the shelf” items are consistent from manufacturer/supplier to manufacturer/supplier and similar to those products produced in hospitals/care facilities/at home



Development of clinical evidence and conducting research

Able to compare research/data across healthcare and research facilities throughout the world to create strong clinical evidence



Putting it
all
together...

Systematic Review (Steele et al., 2019)

There is evidence that...

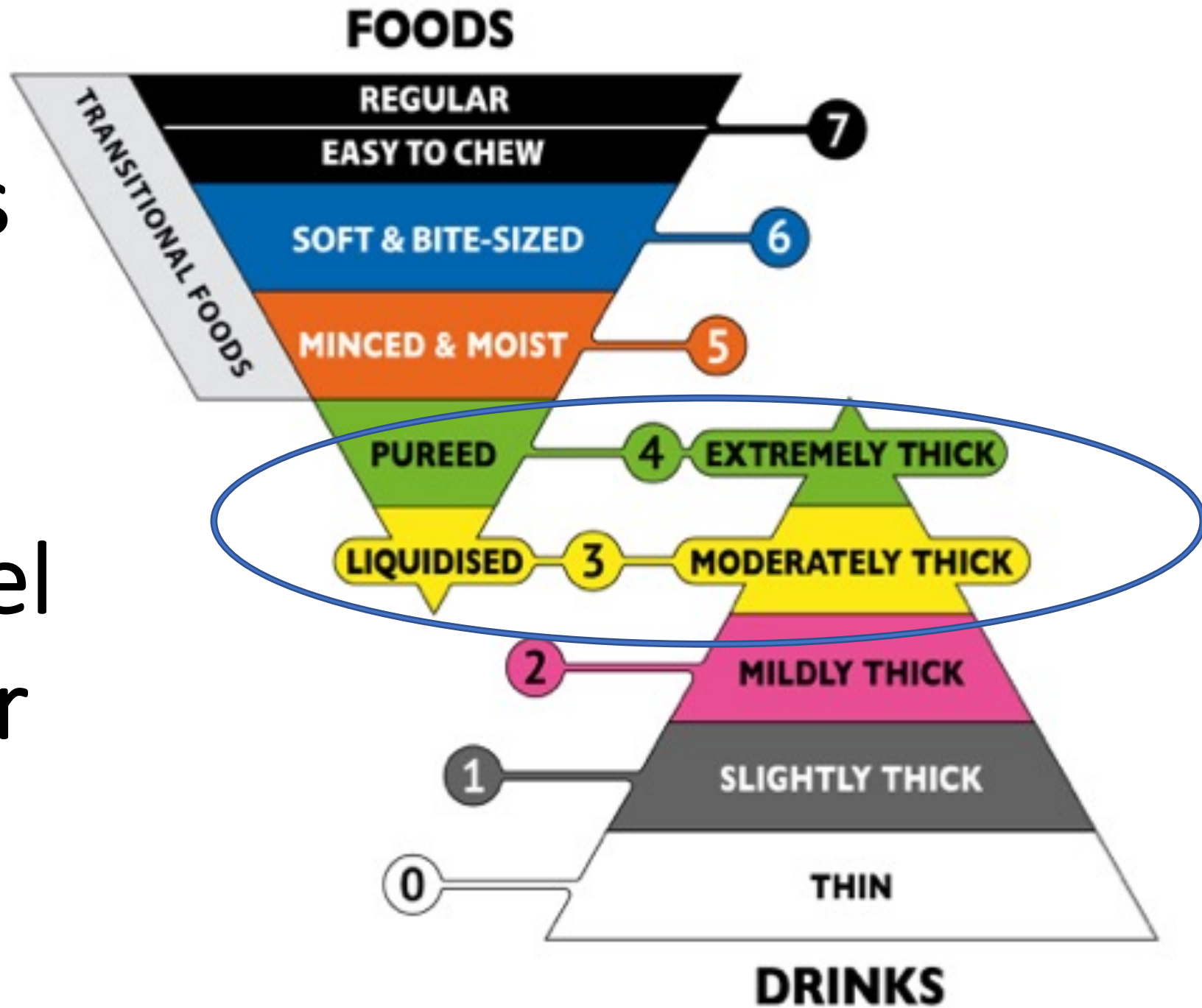
- Thickening liquids sometimes helps those who aspirate thin liquids
- Thicker liquids can sometimes be more harmful, resulting in accumulation of residue
- Solid food and thicker consistencies require greater effort in swallowing

There is no specific evidence to point to particular rheological values that define the boundaries of effective thickening/modification

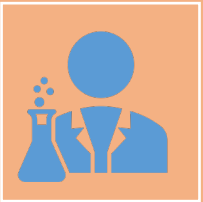
- How thick is too thick?
- How fine is minced?

8 levels
(0-7)

Text label
Number
Color



The Measurement Dilemma



Measuring viscosity using rheometers or viscometers is too complicated for use in kitchens as the basis for classifying liquid thickness

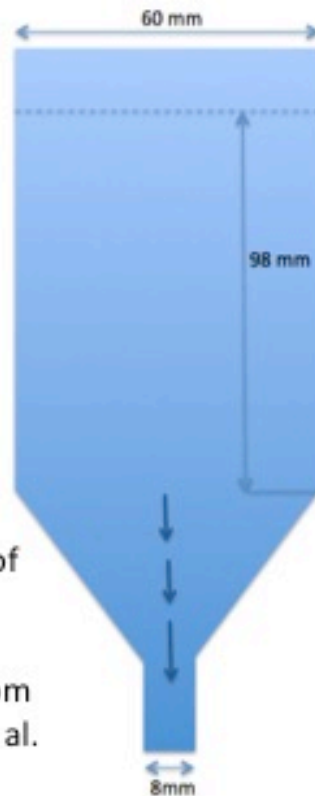


Need a simpler, but valid and reliable method for measuring thickness at the point of use

IDDSI Flow test

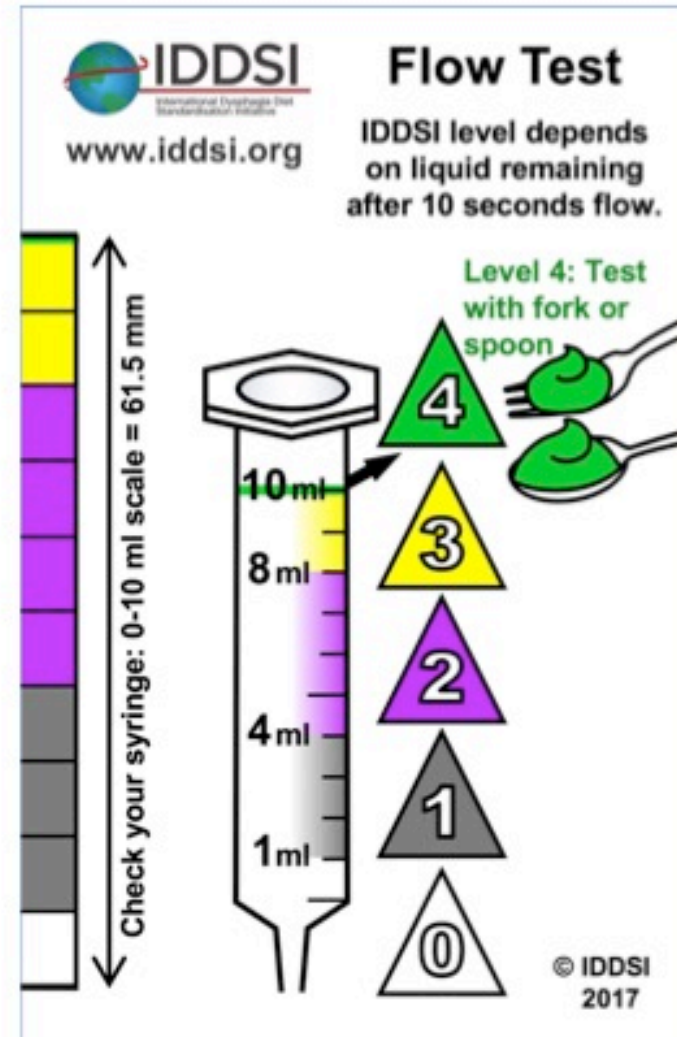
van Vliet et al. (2002), Food Quality and Preference, 13, 227-236; Kutter et al. (2011), 42: 217-227

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



Schematic of Posthumus Funnel adapted from van Vliet et al. (2002)

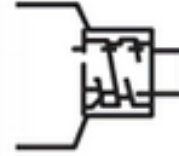
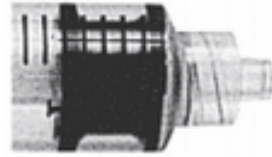
“Geometry allows for both shear and elongation that more closely matches flow conditions within the oral cavity”



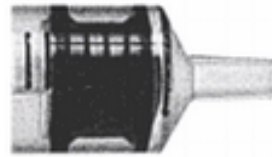
Syringes

- 10 mL syringe
 - Some syringes have a 12 mL capacity therefore results will be different
- Can use “BD Luer Slip Tip” syringe or “BD Luer-Lok”
- Tip of syringe is smooth and without locking system
 - Central or eccentric ok
- Syringe length measures 61.5mm from the zero line to 10mL line

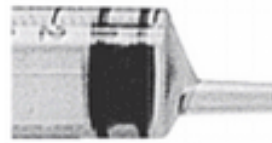
Types of Syringe Tips



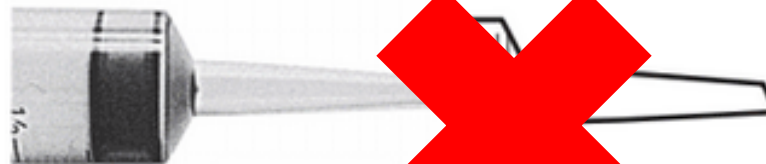
Luer Lok Tip - secure screw type connection.



Slip Tip - slip or push-on connection.



Eccentric Tip - off center tip used for surface veins or artery injections.

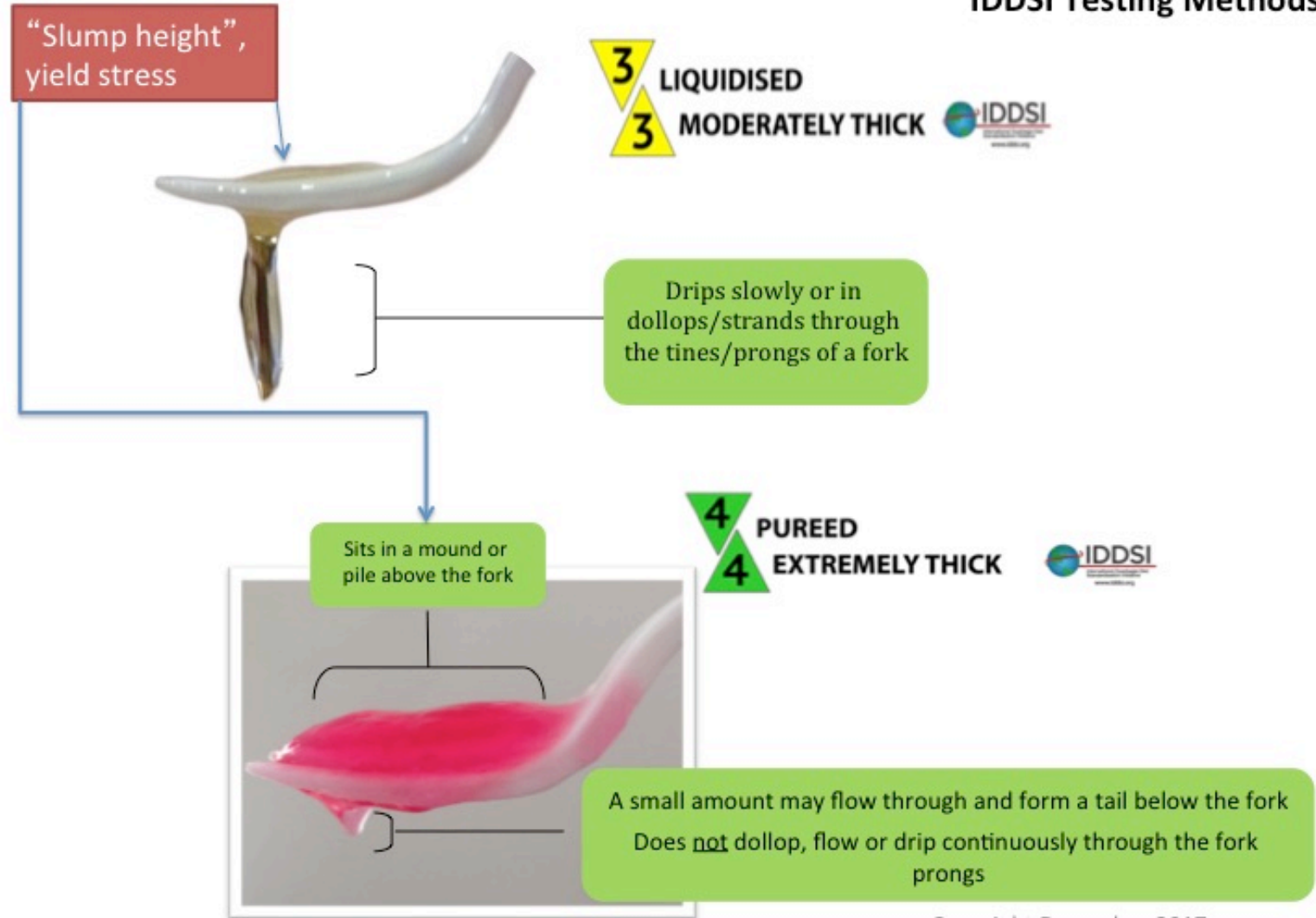


Catheter Tip - Long slip tip design used for irrigation or with tubing.

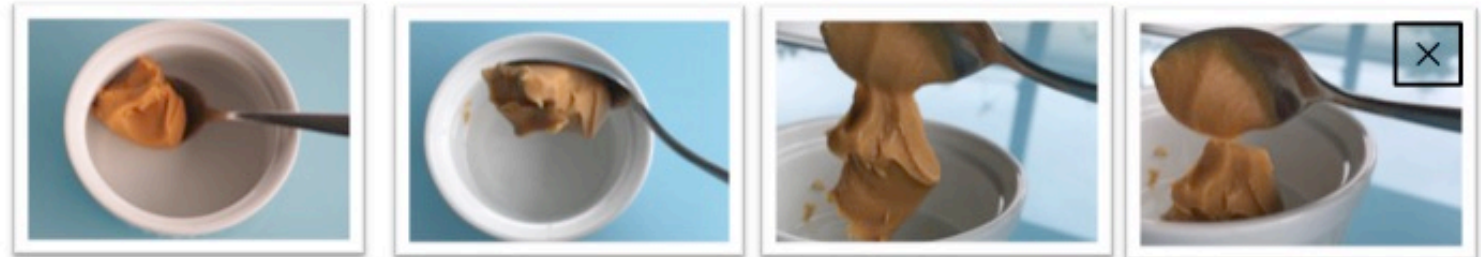
Testing Methods: Flow Test Video



Fork Drip Test



Spoon Tilt Test



IDDSI Spoon Tilt Test determines
Cohesion (ability to hold together) *and*
Adhesion (stickiness)

For safety the bolus should
be cohesive enough to hold
its shape but not sticky