Dysphagia Diet Solutions: Transitioning to the International Dysphagia Diet Standardisation Initiative Framework

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Speaker Bio and Disclosures

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Disclosures:
• Becky is owner of Becky Dorner & Associates, Inc. and a consultant to Hormel Health Labs
• However, there are no conflict of interest for this presentation

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

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The International Dysphagia Diet Standardisation Initiative 2016 @http://iddsi.org/framework/.

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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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Objectives

1. Describe the IDDSI international framework
2. Explain how the new IDDSI international standards map to the various terminologies and existing standards
3. Implement at least 3 strategies to transition to the new standardized terminology

Monitor-Aware-Prepare-Adopt

- Build awareness across facilities/sectors to all impacted divisions, professional associations and their boards, industry, administrators, government, supply chain and support staff.
- Communicate who, what, where, when, why & how impacted.
- Assess processes and protocols that may need to change.
- Approach product changes, prepare materials/inventory/computer management.
- Train clinicians, stakeholders and all staff involved.
- Introduce new IDDSI system to commercially ready-to-use, pre-packaged goods and at facility level and in food service chain.
- Transition and integration.

International Dysphagia Diet Standardisation Initiative

“Why IDDSI?”

www.IDDSI.org
History

- Choking deaths around the world in people of all ages
- 2002 NDD: standardization of terminology, definitions — meant to be a starting point
- 2012: SLPs, RDs, nurses, OTs, doctors, food technologists, and scientists from around the globe discussed development of international dysphagia diet standards to meet the needs of all individuals with dysphagia

Overriding goal: Patient safety

- 2013: IDDSI was officially formed
- All board members are volunteers and all are committed to improving the safety of people with dysphagia and sharing information freely around the world

History

- IDDSI review of standards available:
  - 8 sets of published standards from USA, UK, Australia, New Zealand, Ireland, Sweden, Denmark, Japan
  - Multiple sets of terminology, different diet levels and descriptions

History: 2013-14 IDDSI Stakeholder Survey

- Global Survey (>5000 responses) Findings:
  - 27 different labels to describe liquid thickness
  - 54 different labels to describe food textures
  - Few used colors, numbers or symbols to help identify each one
  - Only 40% of respondents reported they checked to be sure food texture and/or liquid thickness was accurate right before serving (a key point for ensuring patient safety)
  - IDDSI researched/developed a new global framework borrowing from the best evidence-based standards from around the world
Why do we need a standardised system?

Safety
- Multiple labels and definitions cause confusion
- Within and between institutions
  - Individuals with swallowing difficulties
  - Family/Care providers
  - Health care 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 standardised system?**

**Commercial implications**
- So that ‘ready to use/off-the-shelf’ items are consistent from manufacturer/supplier to manufacturer/supplier and, similar to those produced in hospitals/care facilities/at home.

**Why do we need a standardised system?**

**Development of clinical evidence and conducting research**
- To be able to compare research across healthcare and research facilities throughout the world to create strong clinical evidence.

**IDDSI Framework and Detailed Descriptors**
IDDSI's goal was to develop a culturally sensitive, age-span relevant framework for classifying texture modified foods and thickened drinks.

To achieve this, they integrated findings from the existing practice data including currently existing dysphagia diet standards, the results of their systematic review and global survey responses.

The draft framework was shared with the global community and the feedback from this survey was used to inform the final IDDSI framework which was published in September 2015; revised in August 2016.

The framework and accompanying materials are living documents that will be modified as new research becomes available.

### Background

- IDDSI Framework

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### Detailed Descriptors for Foods and Drinks

**Complete IDDSI Framework Detailed Definitions – Essential Document to review and understand**

This document outlines:

- the specific characteristic of the food or liquid of that level,
- the physiological rationale for the level,
- reference to any evidence supporting the level, and
- recommended testing methods to be used to ensure the food or liquid in question meets the criteria of that level.


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This document also includes the testing methods that are appropriate for each level.
‘Transitional foods’

- 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

Mapping to IDDSI - Foods

Current NDD Food Textures
- Regular
- Dysphagia Advanced
- Dysphagia Moderate
- Dysphagia Severe
- Dysphagia Pursed

IDDSI
- 7 Regular
- 6 Soft & Bite Size
- 5 Mixed & Moist
- 4 Puréed
- 3 Liquidised
Testing to Ensure the Food or Liquid Meets the Criteria of Each Level

IDDSI Framework Testing Methods

- Size, shape, and moisture level are crucial
- IDDSI provides simple point of service testing helps assure that foods are:
  - Appropriate size
  - Soft, cohesive, slippery (moist)
  - NOT: Hard, crumbly or sticky
**Fork Pressure Test: Levels 4-7**

- For hard or firm food, a Fork Pressure Test is used to assess foods in Levels 4-7, and transitional foods.


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**Texture Testing**

**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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**Testing Safety for Level 6: Soft & Bite Sized Foods**

- These recommendations are based on a review of the choking literature and relates to the size of endotracheal tubes and airways.

- Use a maximum food sample size of 1.5 x 1.5 cm for adults (~the size of an adult thumb nail)
  - Press a fork into the sample until the nail blanches white
  - This level of pressure has been quantified to be similar to the pressure the tongue uses to generate the swallow reflex
  - When the fork is lifted the sample should be squashed (not splintered), and should NOT return to its original shape

**IDDSI Fork Test**

- Helps measure the appropriate particle size for safety
  - Adults: Particle/lump size = 4 mm (millimeters)
  - Equal to width between 2 tines of a fork
  - This recommendation is based on the average particle size of chewed solids before swallowing


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**Texture Testing**

**IDDSI Fork Test**

The slots/gaps between the tines/prongs of a standard dinner fork typically measure 4 mm

Pediatrics 2mm; Adults 4mm

Compliance for particle size measurement (4mm)
For safety, the bolus should be cohesive enough to hold its shape, but not sticky.

A sticky bolus can adhere to the roof of the mouth or teeth and cause a choking risk.


IDDSI 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.

https://www.youtube.com/watch?v=tMowfeuzVY
Drink Testing Methods

Simple point of service testing to assure that drinks are at the correct thickness.

Detail Descriptors & Testing Methods (Drinks)

Fork Drip Test: Levels 3 & 4 (Moderate Thick and Extremely Thick)

- Thick drinks and fluid foods can be tested by assessing whether they flow through the slots/prongs of a fork, and
- Comparing against the detailed descriptions of each level.

Source:

Slide created by Becky Dorne 2018
IDDSI’s video illustrates the IDDSI flow test comparing thickened liquids Level 1-4.

After 10 seconds of flow, the volume remaining in the syringe can be read and compared to the IDDSI levels.

Note that at level 4 there is no flow. For Level 4, a spoon tilt test and fork drip test are required to ensure the sample meets IDDSI Level 4 requirements.

The Measurement Dilemma

Drinks:
• 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 – Comparison of Levels 1-4
When Do We Need to Implement?

- Academy of Nutrition and Dietetics and American Speech-Language Hearing Association (ASHA) support IDDSI
  - Unsure when – awaiting announcements from both organizations
  - Industry needs time to develop/test/label
- Expect a minimum 12-18 months/up to 2 years to implement in a facility
- Note: This is a recommendation, not a regulation, however, it will be considered best practice

How? Where Should We Begin?

- Find champions in your facility, team up, plan and prepare
  - Learn more
  - Educate (staff, residents/patients, families)
  - Use the IDDSI resources
  - Start dual labeling everything: Diet orders, forms, menu terms, tray cards (manufacturers are starting to dual label)
  - Preparation: Assess needed changes: Recipe testing, menu changes
- Remember patient safety balanced with quality of life, rights, person centered decision making
FAQ Category: Drinks

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

A: Soft foods are considered a level 5 on the IDDNI framework. This decision is based on a review of the literature, in which honey is frequently identified as a cause of choking (e.g., McAllister et al., 1979; Mangan et al., 1983). There are no specific guidelines on the use of nectar or similar terms in the IDDNI framework. It is important to note that the IDDNI framework is designed to provide a framework for clinicians to refer to when making decisions about food selection and presentation. It is not intended to be a comprehensive guide to all possible food products or methods of presentation. In some cases, modified foods or foods with similar characteristics may be included in the level 5 category. However, it is important to consult with a registered dietitian to determine the most appropriate approach for each individual case.

References:

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Sample Meal Tray Card

Minced and Moist

Mildly Thick
(Nectar)

Dual Labelling during transition period?

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Thank you!

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