

## **Webinar Course: The International Dysphagia Diet Standardisation Initiative: The WHO, WHY, WHAT & HOW**

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### **Description:**

This presentation was developed for food and nutrition professionals. It will be presented by a Speech-Language Pathologist who is board certified in swallowing and swallowing disorders and is an IDDSI champion. We will discuss the Who, Why, What, and How of the International Dysphagia Diet Standardisation Initiative (IDDSI) framework and descriptors to build **awareness**, assist in our **preparation**, and guide us along the way to eventual **adoption** of the IDDSI standards.



Since 2013, IDDSI, which is a multidisciplinary-international group of researchers and clinicians, has been working to increase patient safety through the development of international dysphagia diet standards with:

- a common terminology for all diet and liquid consistencies (from regular textures to texture modified foods and from thin liquids to thickened liquids)
- across all ages,
- all care settings, and
- all cultures.

This presentation will explain how the IDDSI standards were developed, what the specific descriptors and testing methods are, and how the IDDSI framework maps to our prior standards (e.g., the National Dysphagia Diet). Implementation strategies and resources will be shared. Question and answer session will be guided by a registered dietitian nutritionist (RDN).

### **Course Objectives:**

After completing this continuing education course, participants will be able to:

1. Advocate for the International Dysphagia Diet Standardisation Initiative (IDDSI), by understanding IDDSI and why there is a global effort to standardize diets for people who have difficulty swallowing (dysphagia).
2. Classify foods and liquids according to the IDDSI Framework and Descriptors.
3. Demonstrate effective testing and analysis of foods and liquids, according to the IDDSI Framework Testing Methods.
4. Create individual and facility “to-do” lists in order to further the understanding of & connection to IDDSI.
5. Gain resources to create a plan to move from IDDSI awareness, to preparation and eventually to adoption.

### **Audience:**

Registered Dietitians (RD), Registered Dietitian Nutritionists (RDN), Dietetic Technicians Registered (DTR), Nutrition and Dietetic Technicians Registered (NDTR) and members of the interdisciplinary team

<b>Course CPE Hours:</b> 1.5	<b>CDR Level:</b> 2
<b>Suggested CDR Learning Needs Codes:</b> 3050, 5210, 8010, 9050	<b>Suggested CDR Performance Indicators:</b> 6.2.4, 8.3.1, 8.3.6, 13.2.2

**Speaker:** Karen Sheffler, MS, CCC-SLP, BCS-S, has over 20 years of experience as a medical speech-language pathologist, specializing in dysphagia since 1995, when she graduated from the University of Wisconsin-Madison. She obtained her Board Certification as a Swallowing Specialist (BCS-S) in 2012. In 2014, she started SwallowStudy.com, which is a dysphagia resource for patients and professionals. Karen has worked in acute care, rehabilitation centers, skilled nursing facilities, and in home health care. She currently works at two different hospitals in the Boston area, owns her own dysphagia consulting business, performs peer reviews and presentations, and provides dysphagia expert services to companies and law firms. Believing in constant continuing education, she has been awarded the ASHA Award for Continuing Education 5 times. She is a member of ASHA's Special Interest Group 13, the National Foundation of Swallowing Disorders (NFOSD), and the Dysphagia Research Society (where she is a member of the Website, Communications and Public Relations Committee).



**Disclosures:** Karen Sheffler, MS, CCC-SLP, BCS-S and Becky Dorner, RDN, LD, FAND disclose that they are consultants to Hormel Health Labs.


### **Questions about the Continuing Professional Education Program?**

Please contact Becky Dorner & Associates, Inc. at [info@beckydorner.com](mailto:info@beckydorner.com) or 1-800-342-0285.



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## Today's Webinar



**Audio and Webinar**

- Please refer to handout for instructions.

**Handouts**

- Emailed to the person who registered for the program.



**Questions**

- Use GoToMeeting to ask questions.

**The program will last approximately 90 min.**

**Credit Hours:**

- Please refer to your handouts for detailed information on about credit hours.

**Karen Sheffler, MS, CCC-SLP, BCS-S**

**Presenter**


Karen has over 20 years of experience as a medical speech-language pathologist, specializing in dysphagia since 1995, when she graduated from the University of Wisconsin-Madison. She obtained her Board Certification as a Swallowing Specialist (BCS-S) in 2012. In 2014, she started SwallowStudy.com, which is a dysphagia resource for patients and professionals. Karen has worked in acute care, rehabilitation centers, skilled nursing facilities, and in home health care. She currently works at two different hospitals in the Boston area, owns her own dysphagia consulting business, performs peer reviews and presentations, and provides dysphagia expert services to companies and law firms. Believing in constant continuing education, she has been awarded the ASHA Award for Continuing Education 5 times. She is a member of ASHA's Special Interest Group 13, the National Foundation of Swallowing Disorders (NFOSD), and the Dysphagia Research Society (where she is a member of the Website, Communications and Public Relations Committee).

**Disclosures**

- Dysphagia consultant for Hormel Health Labs
- Member of Advisory Board for Hormel Health Labs
- Volunteered as IDDSI Champion since 2014


## International Dysphagia Diet Standardisation Initiative (IDDSI): The Who, Why, What & How

By Karen Sheffler, MS, CCC-SLP, BCS-S  
Board Certified Specialist in Swallowing & Swallowing Disorders  
*IDDSI Champion*  
Founder of [www.SwallowStudy.com](http://www.SwallowStudy.com)  
[www.KarenSheffler.com](http://www.KarenSheffler.com)  
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## International Dysphagia Diet Standardisation Initiative



[www.IDDSI.org](http://www.IDDSI.org)

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## IDDSI Framework



The diagram illustrates the IDDSI Framework for Foods and Drinks, organized into two inverted triangles. The top triangle represents Foods, with levels 7 (Regular) at the top and 0 (Thin) at the bottom. The bottom triangle represents Drinks, with levels 0 (Thin) at the bottom and 7 (Regular) at the top. A central circle highlights levels 2 through 6. A side label 'TRANSITIONAL FOODS' points to levels 4, 5, and 6.

**FOODS**

- 7 REGULAR
- 6 SOFT
- 5 MINCED & MOIST
- 4 PUREED
- 3 LIQUIDISED
- 2 MILDLY THICK
- 1 SLIGHTLY THICK
- 0 THIN

**DRINKS**

- 0 THIN
- 1 SLIGHTLY THICK
- 2 MILDLY THICK
- 3 LIQUIDISED
- 4 PUREED
- 5 MINCED & MOIST
- 6 SOFT
- 7 REGULAR

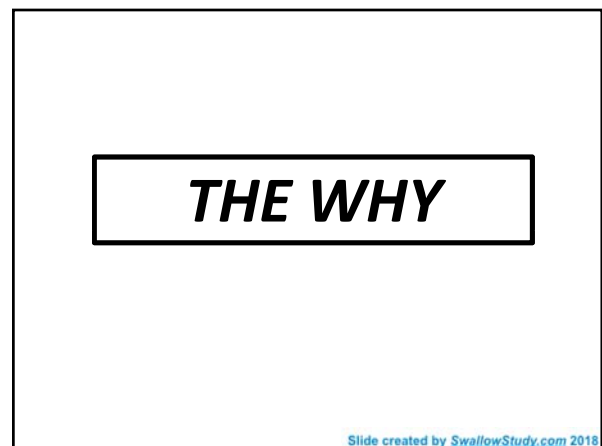
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## Learner Objectives

Participants will be able to:

1. Advocate for the International Dysphagia Diet Standardisation Initiative (IDDSI), by understanding IDDSI is and **why** there is a global effort to standardize diets for people who have difficulty swallowing (dysphagia).
2. Classify foods and liquids, according to the **IDDSI Framework and Descriptors**.
3. Demonstrate effective testing and analysis of foods and liquids, according to the **IDDSI Framework Testing Methods**.
4. Create individual and facility **"to-do"** lists in order to further the understanding of & connection to IDDSI.
5. Gain **resources** to create a **plan** to move from IDDSI awareness, to preparation, and eventually to adoption.

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### Let's talk about FOOD and...



**Quality of life!**

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### Why Modify Perfection?



Clearly some chokable foods here!

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### But what does a Regular Diet (Level 7) require?

- **Adequate Cognition:** Is there lethargy/sedation, poor attention to task/distractibility, impulsivity, lack of self & safety awareness?
- **Adequate Structure:** Teeth/dentures? Can they chew with their gums? Pain? Dry? Tumor, missing anatomy, scar tissue, fibrotic/stiff, edema?
- **Coordination:** Can they coordinate of breathing & swallowing?
- **Adequate Physiology or function:**
  - **Timing:** Are they slow to process the food in the mouth? Slow to trigger the swallow? Slow airway closure? Slow esophageal empty?
  - **Motility:** Weakness in lips, tongue, cheeks, jaw, palate can all lead to poor food/liquid processing in mouth. Weakness in back of tongue and throat squeezing muscles can prevent food/liquid from clearing through the throat safely & efficiently. Could lead to food/liquid dropping into airway OR food/liquid remaining stuck in the mouth, throat, and/or esophagus.
  - **Sensory:** You need to feel the food/liquid to start a good swallow, AND to know if food/liquid enters the airway or gets stuck. Poor sensory input can give poor motor output.

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### Oropharyngeal dysphagia & aspiration



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.....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...



Coroner's Inquests

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### So the world ended up with too many different diet modification systems!

- 8 sets of published standards from USA, UK, Australia, New Zealand, Ireland, Sweden, Denmark, and Japan.
- **Diverse terminology, diet levels and descriptions have created confusion.**
  - United States: National Dysphagia Diet (NDD) 2002.
  - New Zealand had different standards from Australia.
  - UK standards were directly inverse (set up opposite) to the Irish standards.
  - Japan: had 3 sets of national standards, but Japan did use the pyramid concept that was captured in the IDDSI framework.

*IDDSI got to work:  
researching, publishing, & developing a new global framework -  
which borrowed from the best-evidence-based standards  
from around the world.*

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**Publications: Milestones recorded in Open Access journal publications**

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**IDDSI 2013-2014 Stakeholder Surveys**

IDDSI started with a global survey about LABELS for food textures and liquid thicknesses (over 5000 responses).

- **Liquids:** 27 different labels to describe liquid levels!  
Typically 3-4 levels of thickness  
**Only 25%** used a color, number or symbol to help identify thickened liquids.
- **Food Textures:** 54 different labels for dysphagia diets!  
Typically 4-5 levels  
**Only 16%** used a color, number, or symbol to help identify the texture modified foods.

See *The IDDSI Framework* article in *Dysphagia* (2017) 32: 293-314 by Cichero, et al.  
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**IDDSI 2013-2014 Stakeholder Surveys**

Only 40% of respondents reported that they check if the food textures and liquid thickness is accurate right before serving!

**Point of serving is a KEY time to ensure correct texture and consistency.**

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*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

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*Why do we need a standardised system?*

**Clinical efficiency**

- Avoids re-assessment to determine safe liquid and diet levels
- Reduces need to confirm and clarify clinical information.

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*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

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*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

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**IDDSI** Systematic Review

Dysphagia  
DOI: 10.1080/20904259.2014.957874

**ORIGINAL ARTICLE**


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

Catrina M. Steele · Worood Abdulrahman Abamei · Soma Ayankalafu · Carly E. A. Barlow · Jianke Chen · Julie A. V. Cichero · Kim Cutts · Roberto O. Dantas · Janice Duvestein · Lidia Gioia · Ben Hanson · Peter Lam · Caroline Leeka · Chelsea Leigh · Ahmed Nagy · Ashwini M. Namasivayam · Weslania V. Nascimento · Inge Odendaal · Christina H. Smith · Helen Wang

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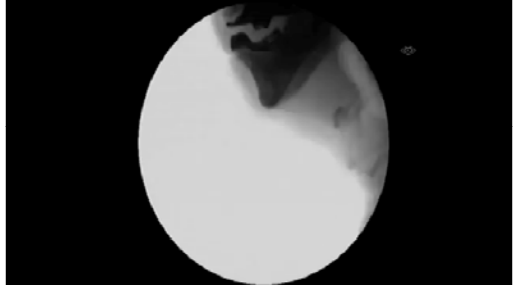


### Summary of Systematic Review (2015)

- There is evidence that: 😊
  - Thickening liquids does help those who aspirate thin liquids. Moves slower & allows time for the person to react if swallow is delayed. Thin liquids can be fast and unpredictable.
  - However, there is such a thing as “too thick,” where residue begins to accumulate in your throat.
  - Solid foods and thicker consistencies require more oral processing & greater effort to swallow.

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### Example of aspiration prevented when thicker



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### Summary of Systematic Review (2015)

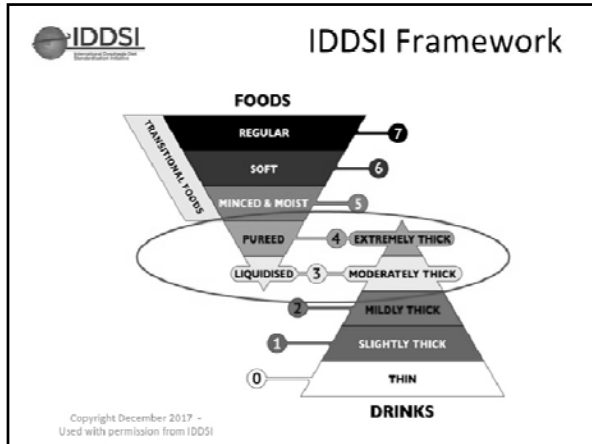
- Very little evidence for: 😞
  - Specific rheological values to define thickness boundaries
  - Specifics on types of modified foods that should be used for management of dysphagia.

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# THE WHAT

- See Cichero, et al. (2017). Development of International Terminology and Definitions for Texture-Modified Foods and Thickened Fluids Used in Dysphagia Management: **The IDDSI Framework**. *Dysphagia*, 32, 293-314.
- Download IDDSI Framework & Detailed Definitions; Testing Methods; Evidence Statement documents: <http://iddsi.org/framework/>

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### Detailed Descriptors & Testing Methods

#### 4 EXTREMELY THICK PUREED

**Pre-plate:** The food is a uniform, smooth, moist mass that is not sticky. It is not chunky, lumpy, or fibrous. It is not stringy or fibrous. It is not chunky or fibrous. It is not chunky or fibrous.

**Pre-drink:** The liquid is a uniform, smooth, moist mass that is not sticky. It is not chunky, lumpy, or fibrous. It is not stringy or fibrous. It is not chunky or fibrous. It is not chunky or fibrous.

**Pre-drink:** The liquid is a uniform, smooth, moist mass that is not sticky. It is not chunky, lumpy, or fibrous. It is not stringy or fibrous. It is not chunky or fibrous. It is not chunky or fibrous.

#### 3 MODERATELY THICK LIQUIDISED

**Pre-plate:** The food is a uniform, smooth, moist mass that is not sticky. It is not chunky, lumpy, or fibrous. It is not stringy or fibrous. It is not chunky or fibrous. It is not chunky or fibrous.

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#### 5 MINCED & MOIST

**Pre-plate:** The food is a uniform, smooth, moist mass that is not sticky. It is not chunky, lumpy, or fibrous. It is not stringy or fibrous. It is not chunky or fibrous. It is not chunky or fibrous.

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#### 2 MILDLY THICK

**Pre-plate:** The food is a uniform, smooth, moist mass that is not sticky. It is not chunky, lumpy, or fibrous. It is not stringy or fibrous. It is not chunky or fibrous. It is not chunky or fibrous.

**Pre-drink:** The liquid is a uniform, smooth, moist mass that is not sticky. It is not chunky, lumpy, or fibrous. It is not stringy or fibrous. It is not chunky or fibrous. It is not chunky or fibrous.

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### Mapping to IDDSI - Foods

Current NDD Food Textures	IDDSI Level	Category
Regular	7 Regular	Transitional Foods
Dysphagia Advanced ✓	6 Soft & Bite-Sized	
Dysphagia Mechanically Altered ✓	5 Minced & Moist	
Dysphagia Pureed ✓	4 Pureed	
	3 Liquidised	

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### Soft & Bite-Sized – Level 6

- Soft, tender & moist throughout. No separate thin liquid.
- Chewing is required. Biting is NOT required.
- Bite-Sized pieces, with particle size of:
  - Adults: 1.5cm squared (15mm or 0.6 inches or size of adult thumbnail)
  - Pediatric: 8mm (0.3 inches or child's pinky nail)
  - Sizes measured to diameter of trachea/prevent choking
- Can be eaten with fork, spoon, chopsticks, fingers.
- Knife not needed, as food pre-cut to bite sizes
- Tongue force & control are required to move food for chewing, keep in mouth for chewing, & to move food back for the swallow.
- Food squashes with "fork pressure test." Changes shape & does not return to original shape when fork lifted.

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### Minced & Moist – Level 5

- Soft & Moist with no separate liquid
- Small visible lumps, with particle sizes of
  - Adult: 4mm lump size
  - Pediatric: 2mm lump size
  - This is the size of food after it is chewed; "ready to swallow"
- Lumps are easy to squash **with tongue**
- Minimal chewing required. Biting is NOT required.
- Can be eaten with a fork or spoon
- Could be eaten with chopsticks, if good hand control
- Can be scooped and shaped (e.g., into a ball) on a plate

Again, see Framework & Descriptors document for some food examples for each diet & Food Texture Requirements.

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### Puree & Extremely Thick Liquid Level 4

- Usually eaten with a spoon, but 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 molded
- Shows some very slow movement under gravity, but cannot be poured
- Falls off spoon in a single spoonful WHEN TILTED
- Continues to hold shape on plate
- NO lumps -> smooth
- NOT sticky -> moist
- Liquid must not separate from solid

<https://youtu.be/EI1HG3ndo>

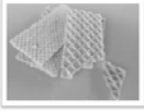


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### 'Transitional foods'

Gisel (1991) Dev 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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## Food Testing

Important Food Properties for simple POINT OF SERVICE testing:

DO	DON'T
Softness	Hardness
Cohesiveness	Crumbly
Slipperiness	Stickiness

Size & Shape of Food: crucial factors in choking risk

See Steele, et al. (2015). The Influence of Food Textures & Liquid Consistency Modification on Swallowing Physiology and Function: A Systematic Review. *Dysphagia*, 30, 2-26.

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## 1. Spoon Tilt Test

USED TO MEASURE LEVELS 4 AND 5 (PURE AND MINCED & MOIST)

- How sticky or **adhesive** is the sample?
- How well does the food hold together (**cohesiveness**)?

THE FOOD SAMPLE SHOULD:

- Be cohesive enough to hold its shape on the spoon, but not sticky.
- Be slippery enough so that the full spoonful slides/pours off the spoon when the spoon is tilted sideways (or shaken lightly).
- Very little food left on the spoon.
- A scoop mound may spread or slump over only slightly on a plate.

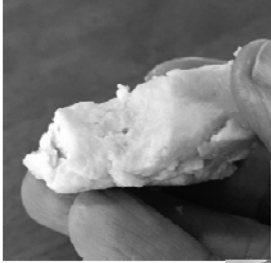
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Our barium pudding is a bit too sticky!





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### Other examples of *TOO STICKY*:



CHOKING  
RISKS





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## 2. Fork Drip Test

- Test for Levels 3 & 4: thick drinks (moderately & extremely thick) and smooth foods (liquidized & puree).
- Do they flow through the slots/tines of a fork.
  - **Level 3 – Liquidized/Moderately Thick**  
Drips slowly or in strands/dollops through the tines of a fork
  - **Level 4 – Puree/Extremely Thick**  
Sits in a mound or pile on top of the fork  
Only a small amount may flow through & form a tail below fork tines  
Does not flow or drip continuously through the fork tines

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**IDDSI Testing Methods**

3 LIQUIDISED MODERATELY THICK

4 PUREED EXTREMELY THICK

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### 3. Particle Size Compliance

**For SOFT & BITE-SIZED ADULT:**

- Bite-size = 1.5 x 1.5 cm
  - Adult thumb nail
  - About the width of fork
- AVERAGE ADULT AIRWAYS:
  - Male = 21.5 mm
  - Female = 17 mm

**PEDIATRIC:**

- Bite-size = 8 mm
- PEDIATRIC AIRWAY = 8 mm
- INFANT AIRWAY = 6.5 mm

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### 3. Particle Size Compliance (CONTINUED)

**For MINCED & MOIST:**  
Average particle size of chewed solids before swallowing

**ADULT:**

- Lump size = 4 mm
- Width between two tines of a fork

**PEDIATRIC:**

- Lump size = 2 mm

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**IDDSI Texture Testing**

**IDDSI Fork Test**

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

Compliance for particle size measurement (4mm)

5 MINCED & MOIST

Pediatrics 2mm; Adults 4mm

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**IDDSI** IDDSI tests – Level 5 Minced & Moist demonstration video – particle size

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### 4. Fork Pressure Test

Think about foods, like regular bread, that do not squash or change shape with fork pressure!

<https://www.youtube.com/watch?v=9tMowfeuzVY>


<https://youtu.be/9tMowfeuzVY>

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**IDDSI 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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**IDDSI**




**SOFT & BITE-SIZED**

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

Thumb nail blanched to white


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**Practice Fork Pressure Test**



Fork Pressure Test Fail:  
Example is too dry & sticky


**EPIC FAIL**



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**Practice Fork Pressure Test**

Fork Pressure Test PASS:  
Example is moist/cohesive



**EPIC PASS**

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**No fork or spoon? You can test all the food with fingers & chopsticks too!**

**Chopstick Test Rice**



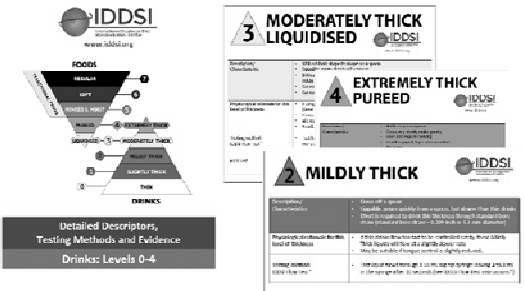
Screen shot only

<https://youtu.be/YoOA6Co8rFM>

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**Detailed Descriptors & Testing Methods (Drinks)**

**IDDSI**



Detailed Descriptors, Testing Methods and Evidence  
Drinks: Levels 0-4

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## Mapping to IDDSI - Drinks

**Current NDD Liquids**

- Thin
- (Naturally thick liquids, e.g. infant formula, supplements)
- Nectar-thick  
51-350 mPa.s @25°C ✓
- Honey-thick  
351-1750 mPa.s @25°C ✓
- Spoon-thick  
>1750 mPa.s @25°C ✓

**IDDSI**

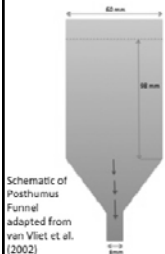
- 0 Thin
- 1 Slightly Thick
- 2 Mildly Thick
- 3 Moderately Thick
- 4 Extremely Thick

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## IDDSI Flow test

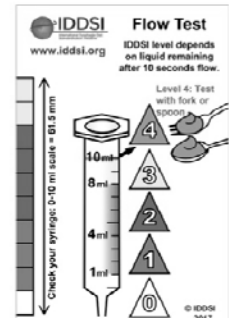
van Vliet et al. (2002), Food Quality and Preference, 13, 227-236; Kutter et al. (2011), 42: 217-227

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



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

**Flow Test**  
IDDSI level depends on liquid remaining after 10 seconds flow.



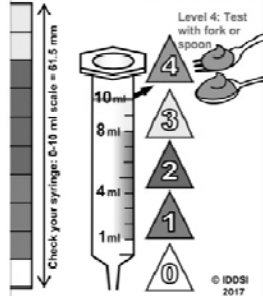
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*“Geometry allows for both shear and elongation that more closely matches flow conditions within the oral cavity”*

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## IDDSI Testing Methods

**Flow Test**  
IDDSI level depends on liquid remaining after 10 seconds flow.



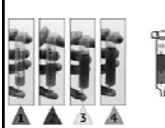
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Example videos of the IDDSI Flow Test can be found on YouTube and accessed through the resources page on the IDDSI website:

[www.iddsi.org](http://www.iddsi.org)

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## IDDSI Flow test – Comparison of Levels 1-4



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[Click for video](#)


## Liquidized/Moderately Thick 3

Fork Drip Test & Spoon Tilt Test also help with Level 3 (Moderately Thick) & Level 4 (Extremely Thick)

LIQUIDS: <https://www.youtube.com/watch?v=SiFwiGgIPHA>

SOLIDS: <https://youtu.be/r6TBnXfnBxc>

**Spoon Tilt Test**  
Bean Soup



**Fork Drip Test**  
Bean Soup



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## IDDSI Flow Test Good for Levels 1, 2, 3

**Mildly Thick Liquid 2**  
[https://youtu.be/XBqi\\_iOLLHw](https://youtu.be/XBqi_iOLLHw)

**Slightly Thick Liquid 1**  
<https://youtu.be/xyvDubBGJQU>

**Thin Liquid 0** (white background)

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**IDDSI Print & Post Posters**

**IDDSI flow test**

**What is IDDSI?**

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**IDDSI By App Data Store**

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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?**

**A:** The IDDSI framework is a global standard for food texture and thickness. It 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, 2000; Food Safety Commission of Japan, 2010; Looze, 2010). 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, Mullen M, Sim E, and Bauer G. Foreign body aspiration - an autopsy study. American Journal of Medicine. 1999; 107: 181-191.  
Berzlanovich AM, Faery-Dorner B, Wasthew T, and Faehling P. Foreign body aspiration: A preventable cause of death in the elderly. American Journal of Preventive Medicine. 2005; 28: 65-69

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**Risk management during transition to IDDSI**

**Time frame to change labels**

- Industry change to IDDSI labels is voluntary
- For other label change initiatives, including those legislated, a two year time frame is most common
- A change over period is to be expected

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**Labels & Triangles for download**

**6 SOFT & BITE-SIZED**

**5 MINCED & MOIST**

**4 PUREED**

**3 LIQUIDISED**

**4 EXTREMELY THICK**

**3 MODERATELY THICK**

**2 MILDLY THICK**

**1 SLIGHTLY THICK**

This will soon be called...  
**3 MODERATELY THICK**

Sticker jpegs available from [www.iddsi.org](http://www.iddsi.org)

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### IDDSI Colors Passed Color-Blind Testing

Must use same colors in all products and labels

RGB (for computer applications - web)	CMYK (for print applications)	Pantone	IDDSI number and colour in words
R:0 G:0 B:0	C:75% M:68% Y:67% K:90%	PANTONE P Process Black	7 Black
R:0 G:51 B:255	C:86% M:73% Y:0% K:0%	PANTONE P 102-8 C	6 Blue
R:255 G:102 B:0	C:0% M:74% Y:100% K:0%	PANTONE P 34-8 C	5 Orange
R:51 G:204 B:51	C:70% M:0% Y:100% K:0%	PANTONE P 151-8 C	4 Green
R:255 G:255 B:0	C:6% M:0% Y:97% K:0%	PANTONE P Process Yellow C	3 Yellow
R:255 G:0 B:255	C:0% M:93% Y:0% K:0%	PANTONE P Process Magenta C	2 Pink
R:102 G:102 B:102	C:60% M:51% Y:51% K:20%	PANTONE P 169-11 C	1 Grey
R:255 G:255 B:255	C:0% M:0% Y:0% K:0%	White	0 White

[http://iddsi.org/wp-content/uploads/2013/07/IDDSI\\_One-page\\_RGB\\_CMYK\\_Pantone-colours\\_24August2016.pdf](http://iddsi.org/wp-content/uploads/2013/07/IDDSI_One-page_RGB_CMYK_Pantone-colours_24August2016.pdf)  
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### Sample Meal Tray Card

Dual Labelling during transition period?

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### Example of Audit Sheets (WWW.IDDSI.ORG)

**5 MINCED & MOIST**

Testing intended for:  Product of food testing

Heating method:  at time of service  10 mins after serving  30 mins after serving

Instructions:

- Level 5 Minced & Moist critical tests include Appearance + Fork Pressure Test + Spoon Tilt Test OR if these are not available Finger Test.
- For particle size, food intended to mimic a chewed bolus - must be equal to or less than 4mm width and no longer than 15mm in length (width).
- Equal to or less than 2mm width and no longer than 5mm length (width).
- The food must pass or meet criteria for any you marked.

Tests	Meets criteria at		
	Time of service	15 mins after serving	30 mins after serving
<b>Critical: Appearance</b>			
• Example less than or equal to 4mm (width), 2mm (height)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
• No separate thin liquid	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Critical: Fork Pressure Test (metal dinner fork needed)</b>			
• Food can be easily mashed with little pressure from a dinner fork. [pressure should not crush chunk/meal block to white]	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
• Easily separates and comes through 3mm of a dinner fork	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Critical: Spoon Tilt Test (teaspoon needed)</b>			
• Holds shape on teaspoon	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
• Food slides off spoon with little food left on teaspoon (i.e. not sticky)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
• May spread or slump slowly on a flat plate	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

Information from IDDSI website  
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7 Regular	RG7
6 Soft & Bite-Sized	SB6
5 Minced & Moist	MM5
4 Pureed	PU4
4 Extremely Thick	EX4
3 Liquidised	LQ3
3 Moderately Thick	MO3
2 Mildly Thick	MT2
1 Slightly Thick	ST1
0 Thin	TNO

*Abbreviations suitable for use with Foodservice Computer Software*

Information from IDDSI website  
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### IDDSI Product Labelling

Recommendations for Industry Partners

**DO**

- 0 THIN
- 1 SLIGHTLY THICK
- 2 MILDLY THICK
- 3 MODERATELY THICK
- LIQUIDISED
- EXTREMELY THICK
- PUREED
- MINCED & MOIST
- SOFT & BITE-SIZED
- REGULAR

**DON'T**

Information from IDDSI website  
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### SWALLOW GUIDE

Name: \_\_\_\_\_ Date: \_\_\_\_\_ SLP pager: \_\_\_\_\_

DIET ORDER:

SOLIDS	Old National Dysphagia Diet label	New IDDSI diet label
<input type="checkbox"/>	Regular	<input type="checkbox"/> Regular
<input type="checkbox"/>	Dysphagia Advanced/Chopped	<input type="checkbox"/> Soft & Bite Sized
<input type="checkbox"/>	Dysphagia Mechanically Altered or Ground	<input type="checkbox"/> Minced & Moist
<input type="checkbox"/>	Dysphagia Pureed	<input type="checkbox"/> Pureed

LIQUIDS	Old National Dysphagia Diet label	New IDDSI diet label
<input type="checkbox"/>	Thin liquid	<input type="checkbox"/> Thin
<input type="checkbox"/>		<input type="checkbox"/> Slightly Thick
<input type="checkbox"/>	Nectar Thick Liquid	<input type="checkbox"/> Mildly Thick
<input type="checkbox"/>	Honey Thick Liquid	<input type="checkbox"/> Moderately Thick
<input type="checkbox"/>	Pudding Thick Liquid	<input type="checkbox"/> Extremely Thick

MEDICATION DELIVERY: \_\_\_\_\_

LEVEL OF SUPERVISION: \_\_\_\_\_


SAFE SWALLOW STRATEGIES: \_\_\_\_\_

Start dual-labeling in your reports.

Here is an idea for dual-labeling on swallow guides.

Swallow guide created by SwallowStudy.com  
Slide created by SwallowStudy.com 2018

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Allows cultural fine tuning...

Porridge... vs Oatmeal..

"Recommended foods and those to avoid (example)" can be generated

Allows translation...

**Translations Underway**

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## References

**IDDSI Documents from IDDSI.org (more references in these documents):**

- Complete IDDSI Framework Detailed Definitions: <http://iddsi.org/Documents/IDDSIFramework-CompleteFramework.pdf>
- IDDSI Framework Testing Methods: <http://iddsi.org/Documents/IDDSIFramework-TestingMethods.pdf>
- IDDSI Framework Evidence Statement: <http://iddsi.org/Documents/IDDSIFramework-EvidenceStatement.pdf>
- IDDSI Framework Translations: <http://iddsi.org/translations/>
- Please see the IDDSI.org Resources page for more tools: <http://iddsi.org/resources/>

## References

**IDDSI Publications:**

Cichero, J.A.Y., Steele, C., Duivestijn, J., et al. (2013). The Need for International Terminology and Definitions for Texture-Modified Foods and Thickened Liquids Used in Dysphagia Management: Foundations of a Global Initiative. *Current Physical Medicine and Rehabilitation Reports*, 1(4), 280-291. <https://doi.org/10.1007/s40141-013-0024-z>

Steele, C.M., Alsanei, W.A., Ayanikalath, S., et al. (2015). The Influence of Food Texture and Liquid Consistency Modification on Swallowing Physiology and Function: A Systematic Review. *Dysphagia*, 30(1), 2-26. <https://doi.org/10.1007/s00455-014-9578-x>

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Kutter, A., Singh, J.P., Rauh, C. & Delgado, A. (2011). Improvement of the prediction of mouthfeel attributes of liquid foods by a posthumus funnel. *Journal of Texture Studies*, 41, 217-227.

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**References noted on Transitional Foods slide:**

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Dovey, T.M., Aldridge, V.K. & Martin, C.I. (2013). Measuring oral sensitivity in clinical practice: A quick and reliable behavioural method. *Dysphagia*, 28(4), 501-510. <https://doi.org/10.1007/s00455-013-9460-2>



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