Demystifying Dysphagia: Strategies, Recipes and Tips for Implementing IDDSI Guidelines







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Disclosures: General Mills is a client

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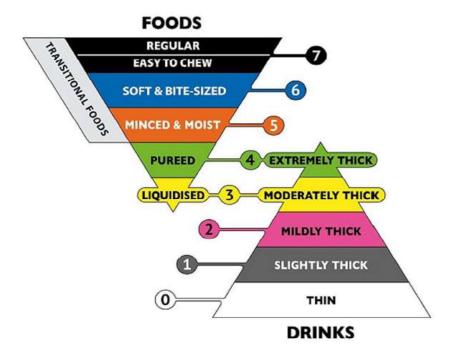
Disclosures

- Roche Dietitians, LLC consults to healthcare and companies that serve healthcare organizations including food companies
- Bell Institute
- Senior Dining Association
- Leading Age Illinois



Learning Objectives

- Identify key characteristics of dysphagia
- ☐ Understand the <u>rationale</u> for the new <u>IDDSI framework</u>
- ☐ List details on <u>each of the IDDSI levels</u> including <u>testing methods</u>
- Identify <u>specific strategies</u>, <u>tips</u> and <u>recipes</u> for IDDSI implementation



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What is Dysphagia?

Dysphagia (dis-fay-juh)

Difficulty or discomfort in swallowing

- takes more time and effort to move food or liquid from your mouth to your stomach
- ranging from mild difficulty to complete and painful blockage.



Concern:

- Malnutrition & Dehydration
- Aspiration Pneumonia
- Choking
- Death

Current Research on Dysphagia



HE Dysphagia: How Prevalent Is It?

1 in 25 adults experience swallowing problems

- · 30% or higher in inpatient care
- Research shows 33% of patients with dysphagia develop pneumonia
- 60,000 individuals die each year from complications

Dysphagia is more common among older adults

- · Up to 68% for residents in long-term care
- 13%-38% among those living independently
- Older adults have increased risk for dysphagiarelated complications such as pulmonary aspiration

Reference: American Speech-Language-Hearing Association: Adult Dysphagia

https://www.asha.org/PRPSpecificTopic.aspx?folderid=8589942550§ion=Incidence and Prevalence

www.RocheDietitians.com

Managing Dysphagia

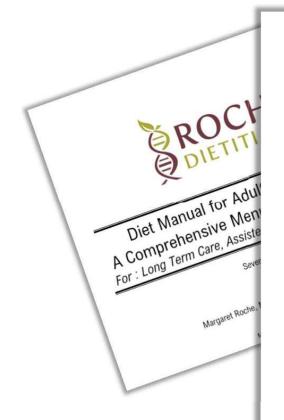


Remember: Dysphagia Diets are Therapeutic Diets

- ☐ Dietary Pattern used to treat a condition
- ☐ Prescribed by a physician
- □ Physician orders are followed
- ☐ Instructions are clearly defined
- ☐ Instructions are based on Professional Standards of Practice
- ☐ State licensing regulations apply



Dysphagia Diets are Based on the General Diet



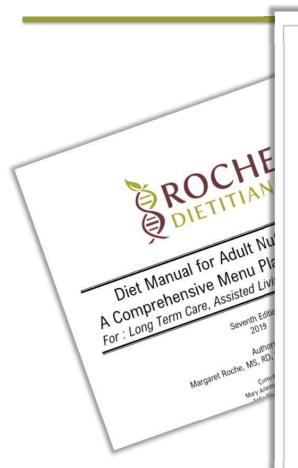
Menu Guidelines

- The General Diet for the Older Adult includes a variety of foods based on the USDA
 <u>MyPlate food plan for 75-year-old males and females.</u> However, it has been adjusted to
 meet the needs of the older adult who may not be able to consume the large volume of
 food recommended. Nutrient dense foods are encouraged in order to meet the DRI
 recommendations for the older adult.
- All food items are included, and no foods are excluded in this meal pattern.

Daily menus should include the following at minimum:

| Minimum Daily Servings ¹ | | |
|---|-------------------|--|
| Food Group | Servings/Day | |
| Grain | 6 servings | |
| Protein | 6 ounces | |
| Vegetable | 3 servings | |
| Fruit | 2 servings | |
| Dairy | 3 servings | |
| Fat | 3 servings | |
| Good Vitamin C Source (at least 60 mg/serving) ² | 1 serving | |
| Dark leafy greens and orange vegetables for Vitamin A' | 3-4 servings/week | |

IDDSI Diets are Clearly Defined



Texture Modified Diets

IDDSI Pureed Diet (Level 4)

IDDSI Pureed Diet (Level 4)

Overview

The Pureed diet (Level 4) is appropriate for individuals with chewing limitations and/or swallowing disorders (dysphagia). It is used to aid with reduced tongue control, pain on chewing or swallowing or with missing teeth or poorly fitting dentures. No biting or chewing is required on this diet. The Pureed Diet (Level 4) 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). This diet is consistent with the International Dysphagia. Diet Standardization Initiative (IDDSI) Framework and Descriptors for the Pureed Diet (Level 4).

The Pureed diet (Level 4) guidelines apply to food. For Extremely Thick Liquids (Level 4) see page 69.

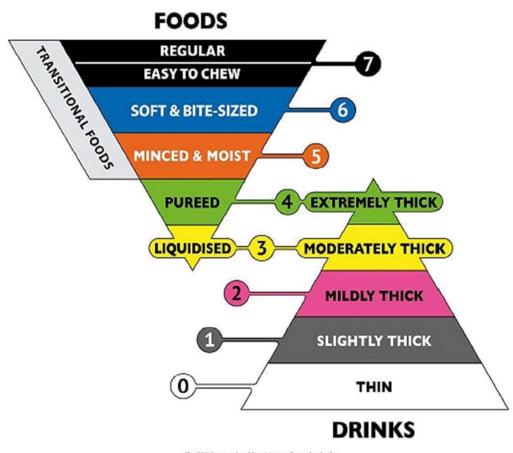
Characteristics of Pureed Diet (Level 4)

- . Smooth throughout, does not contain lumps or particles
- · Is not sticky
- · Liquids must not separate from solids
- . Gravies and sauces are integrated into the pureed item
- . Is usually eaten with a spoon but can be eaten with a fork
- · Can be piped, layered or molded
- Cannot be drunk from a cup
- . Cannot be sucked through a straw
- . Shows some very slow movement under gravity but cannot be poured
- Falls off the spoon in a single spoonful when titled and continues to hold shape on a plate (may spread out slightly or slump on the plate)

Foods Included/Excluded on the Pureed Diet (Level 4)

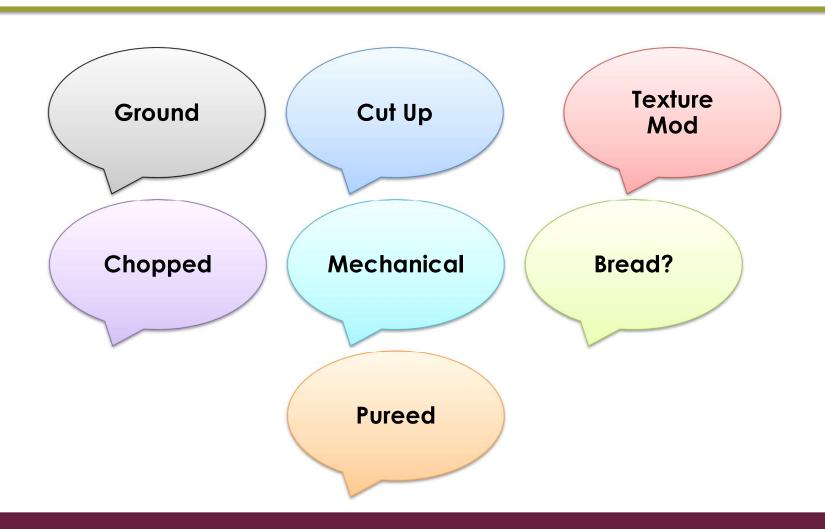
Items listed below as included in the Pureed Diet (Level4) are a general guideline. <u>All foods should be tested following the IDDSI testing methods to ensure the items meet the criteria for inclusion on the Pureed Diet (Level 4).</u>

International Dysphagia Diet Standardisation Initiative (IDDSI) Framework and Descriptors



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Why IDDSI?



Why IDDSI?

Safety

- ↓ Confusion
- + Research

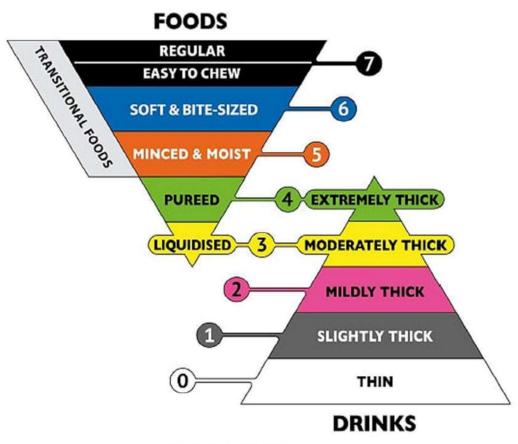
Clinical Efficiency

- Ø Re-assess
- Ø Verify

Commercial Implications

• ↑ Consistency

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Impact of Implementation





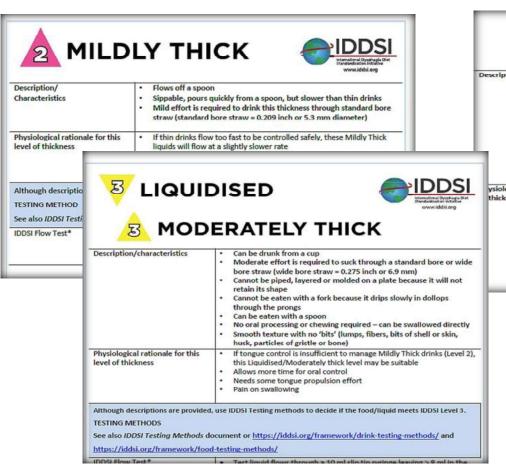
Food Service Professionals

- 1. Adapt to new terminology and descriptors
- 2. Embrace testing methods
 - Product Specifications
 - During Meal Preparation
 - At Point of Use



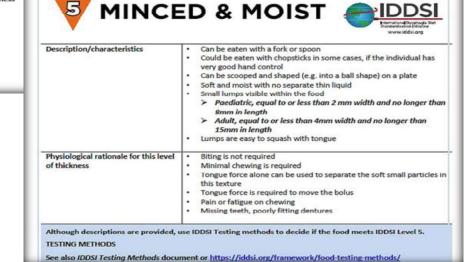
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Detail Descriptors & Testing Methods





- Cannot be drunk from a cup because it does not flow easily
- Cannot be sucked through a straw
- Does not require chewing
- Can be piped, layered or molded because it retains its shape, but should not require chewing if presented in this form
- Shows some very slow movement under gravity but cannot be
- Falls off spoon in a single spoonful when tilted and continues to hold shape on a plate

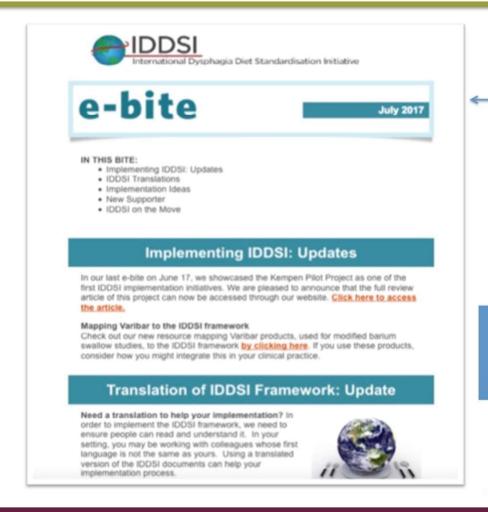


Visit the IDDSI.org Website



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IDDSI Resources



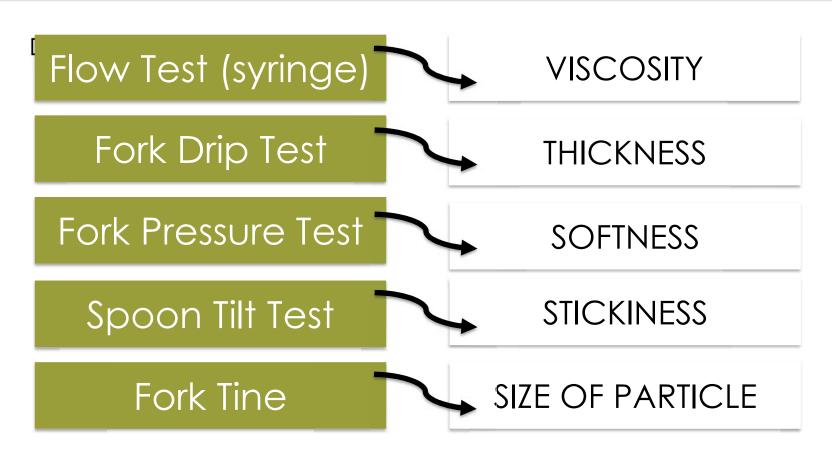
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Write to us at email: communications@iddsi.org

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Bird's Eye View: IDDSI Testing Methods

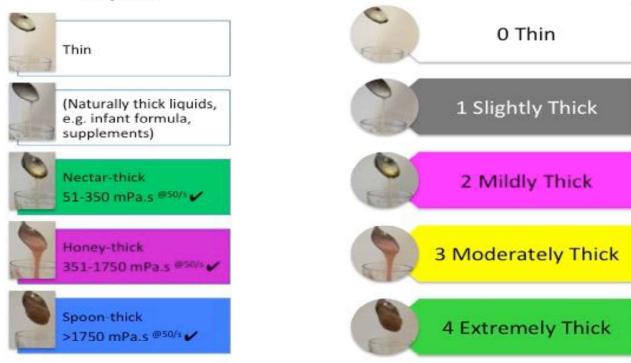


Compiled by Roche Dietitians

RocheDietitians.com

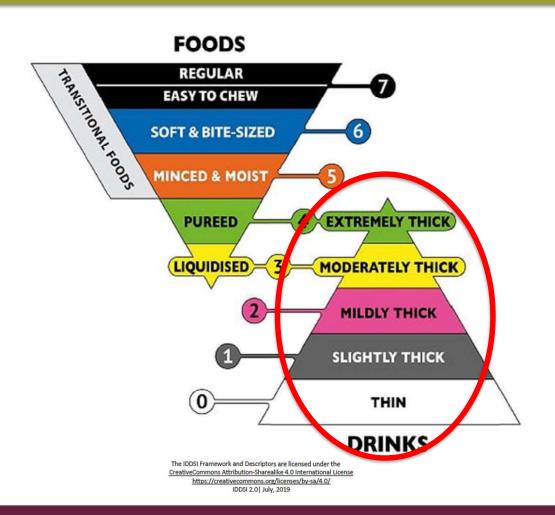
Mapping to IDDSI Drinks

Current NDD Liquids

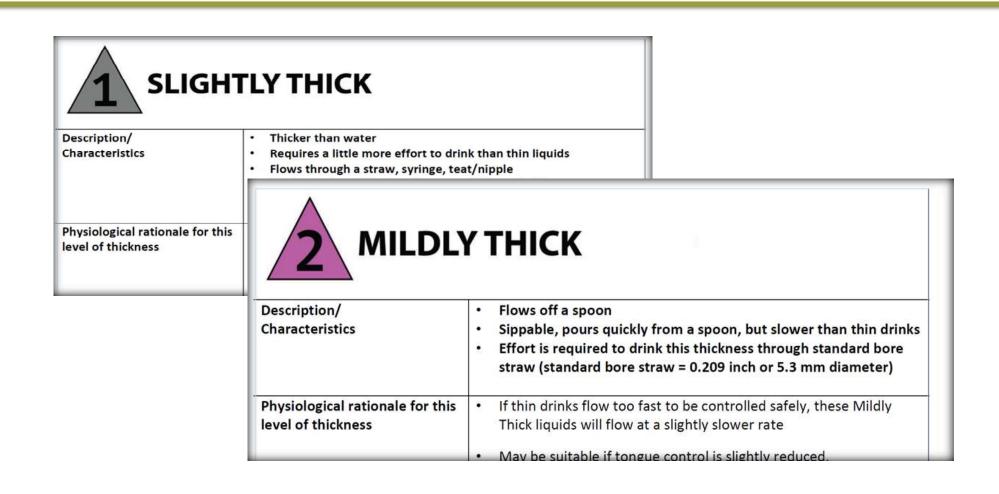


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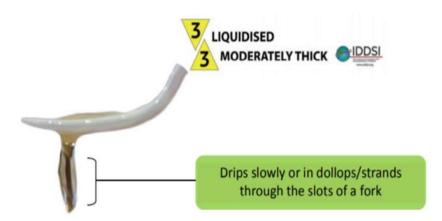
IDDSI Thickened Liquid Descriptors



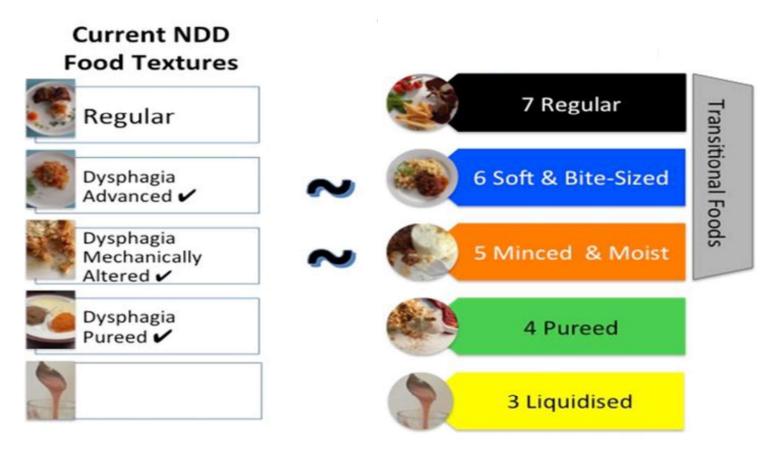
IDDSI Flow Test: Comparison of Levels 1-4

Testing Methods for Liquidised Diet



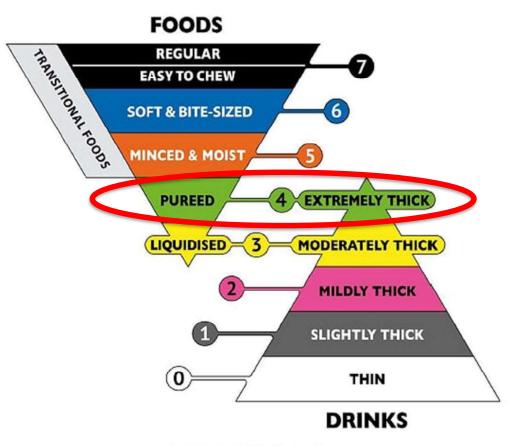


Mapping to IDDSI Food



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Level 4: Extremely Thick

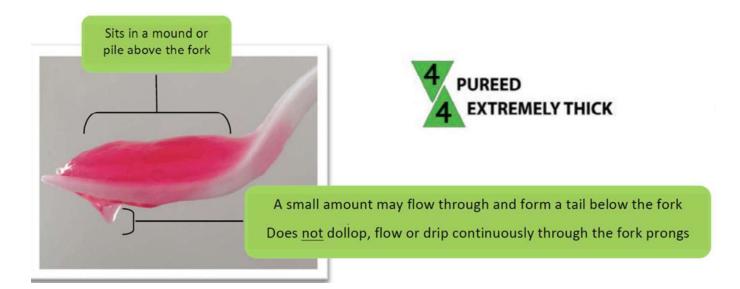


A EXTREMELY THICK

| Description/characteristics | Usually eaten with a spoon (a fork is possible) |
|--|---|
| | Cannot be drunk from a cup because it does not flow easily |
| | Cannot be sucked through a straw |
| | Does not require chewing |
| | Can be piped, layered or molded because it retains its shape, but should <u>not</u> require chewing if presented in this form |
| | 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 |
| Physiological rationale for this level | If tongue control is significantly reduced, this category may be easies |
| of thickness | to control |
| | Requires less propulsion effort than Minced & Moist (level 5), Soft & |
| | Bite-Sized (Level 6) and Regular and Regular Easy to Chew (Level 7) |
| | but more than Liquidised/Moderately thick (Level 3) |
| | |
| | Increased oral and/or pharyngeal residue is a risk if too sticky |
| | Any food that requires chewing, controlled manipulation or bolus |
| | formation are <u>not</u> suitable |
| | Pain on chewing or swallowing |
| | Missing teeth, poorly fitting dentures |
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Fork Drip Test





Spoon Tilt Test



Spoon Tilt Test: Holds shape on spoon; not firm and sticky; little food left on spoon

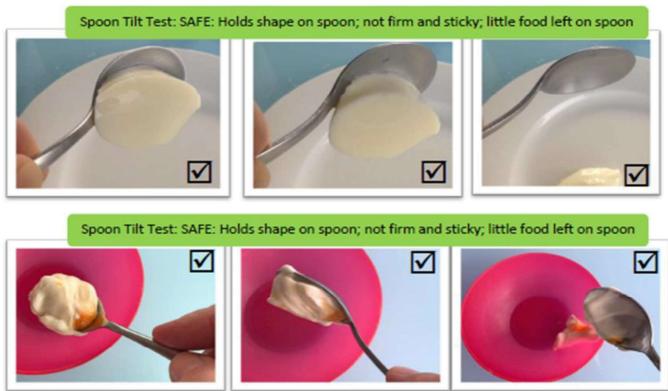






IDDSI Safe Spoon Tilt Test





IDDSI Un-Safe Spoon Tilt Test

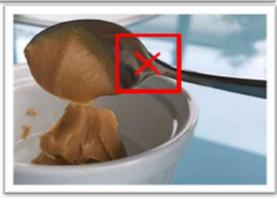


Spoon Tilt Test: UNSAFE:Holds shape on spoon; FIRM AND STICKY; LOTS OF food left on spoon









International Dysphagia Diet Standardisation Initiative (IDDSI) Framework and Descriptors



Level 5: Minced & Moist

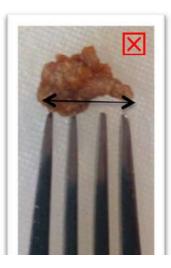
MINCED & MOIST Description/characteristics Can be eaten with a fork or spoon · Could be eaten with chopsticks in some cases, if the individual has very good hand control · Can be scooped and shaped (e.g. into a ball shape) on a plate · Soft and moist with no separate thin liquid · Small lumps visible within the food > Paediatric, equal to or less than 2 mm width and no longer than 8mm in length > Adult, equal to or less than 4mm width and no longer than 15mm in length Lumps are easy to squash with tongue Physiological rationale for this level Biting is not required of thickness Minimal chewing is required Tongue force alone can be used to separate the soft small particles in this texture · Tongue force is required to move the bolus Pain or fatigue on chewing · Missing teeth, poorly fitting dentures

Level 5: Minced & Moist



Use slot between fork prongs (4mm) to determine whether minced pieces are the correct or incorrect size



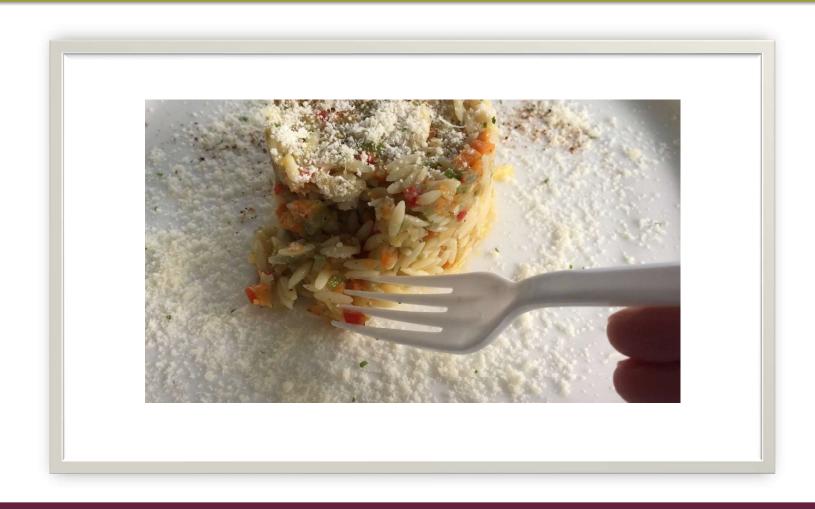


Fork Pressure Test

MINCED & MOIST

- ☐ Food is soft: easily mashed with fork
- ☐ Pressure without nail bed turning white

IDDSI Tests: Level 5 Minced & Moist Demonstration Video-Particle Size



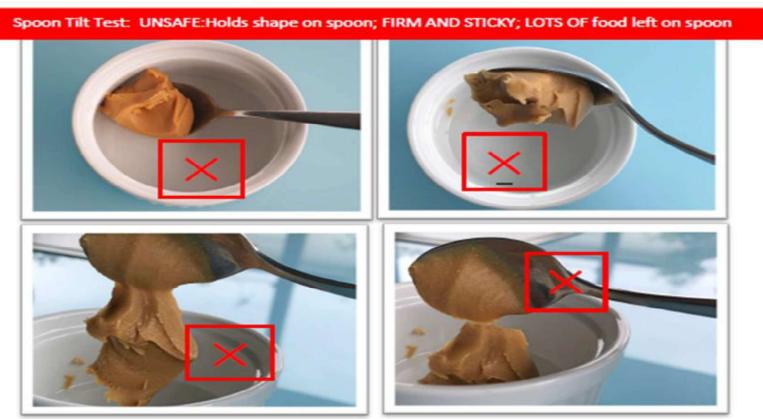
IDDSI Safe Spoon Title Test

MINCED & MOIST



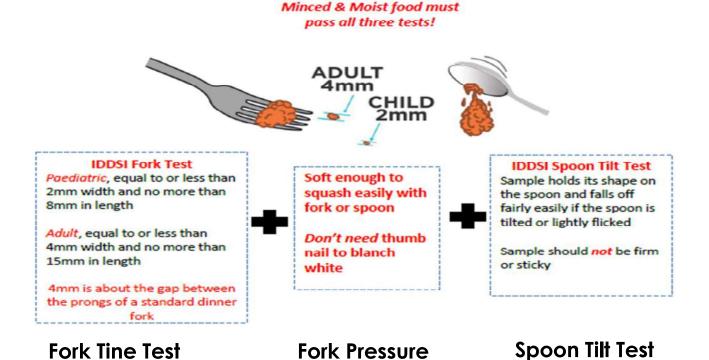
IDDSI Un-Safe Spoon Tilt Test





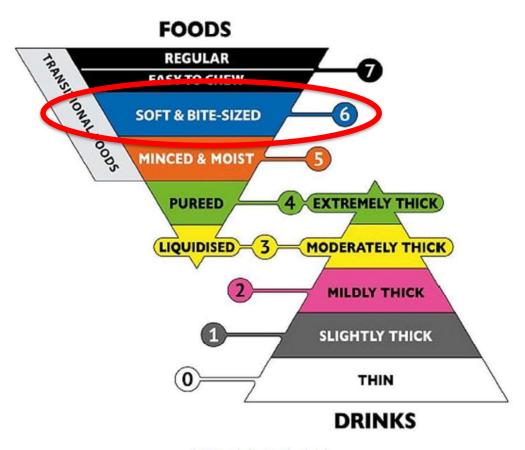
Level 5: Minced & Moist





Test

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Level 6: Soft & Bite-Sized

| SOFT & BITE-SIZED | | | | |
|---|--|--|--|--|
| Description/characteristics | 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 load a fork or spoon Soft tender and moist throughout but with no separate thin liquid Chewing is required before swallowing 'Bite-sized' pieces as appropriate for size and oral processing skills Paediatric, 8mm pieces (no larger than) Adults, 15 mm = 1.5 cm pieces (no larger than) | | | |
| Physiological rationale for this level of thickness | Biting is not required Chewing is required Food piece sizes designed to minimize choking risk Tongue force and control is required to move the food and keep it within the mouth for chewing and oral processing Tongue force is required to move the bolus for swallowing Pain or fatigue on chewing Missing teeth, poorly fitting dentures | | | |

Fork Pressure Test



- ☐ Food is mashed without returning to its original shape
- ☐ Pressure turns nail bed white
- ☐ Food can be broken into pieces with fork or side of spoon

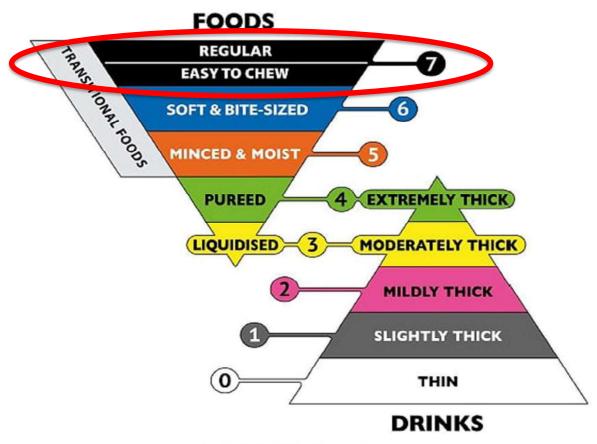
Level 6: Soft & Bite-Sized

SOFT & BITE-SIZED



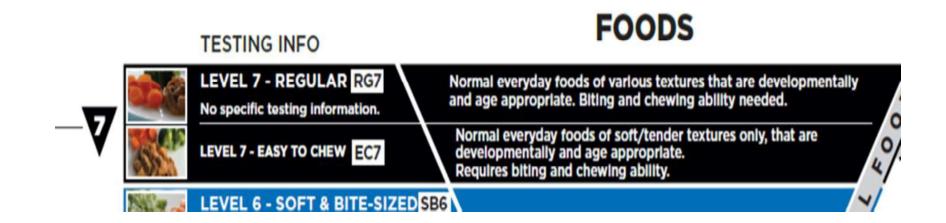


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Level 7: Easy to Chew



Level 7: Easy to Chew

REGULAR

- Normal everyday foods of various textures that are developmentally and age appropriate. Biting and chewing ability needed.
- ☐ No specific testing information

EASY TO CHEW

Normal everyday foods of soft/tender textures only, that are developmentally and age appropriate. Requires biting and chewing ability.



Bird's Eye View of IDDSI Testing

| ROCHE | S LIQUIDISED | PUREE | MINCED & MOIST | 6 SOFT & BITE SIZED | REGULAR EASY TO CHEW |
|-------------------------------|---|---|---|---|---|
| Appearance | Smooth; no bits | No Lumps | Fork Tine Size Test: 4mm x 15mm; no separate thin liquid | 15mm x 15mm (0.5 inch); no separate thin liquid | May be any size. |
| Fork Drip Test | Food drips slowly in dollops | Mound; slight tail; no drip | - | - | - |
| Spoon Tilt Test | - | Holds shape; slides; may spread slowly | Holds shape; slides; may spread slowly | - | - |
| Fork Pressure Test | Fork does not leave pattern, even briefly | Fork leaves clear pattern; food briefly retains indention | Easily mashed with fork; pressure w/o nail turning white; easily separates | Mashed w/o returning to original shape; pressure turns nail white; food can be broken up w/fork or side of spoon | Mashed w/o returning to original shape; pressure turns nail white; food can be broken up w/fork or side of spoon |
| Syringe Test (10 sec flow) | >8 ml remains; then fork drip | | | | |

Puree: If you can pick the sample up in your hands and could bite a piece of it; the sample is not a puree and poses a choking risk

Bird's Eye View of IDDSI Testing

| ROCHE | SLIGHTLY THICK | MILDLY THICK | MODERATELY THICK | EXTREMELY THICK | |
|-------------------------------|----------------|-----------------|---------------------------------|---|--|
| Appearance | | | Smooth; no bits | No Lumps | |
| Fork Drip Test | | | Food Drips Slowly in Dollops | Mound; slight tail; no drip | |
| Spoon Tilt Test | : | | S | Holds shape; slides; may spread slowly | |
| Fork Pressure Test | | | | Fork leaves clear pattern; food briefly retains indention | |
| Syringe Test (10 sec flow) | 1-4 ml remains | 4-8 ml remains | > 8 ml remains; then fork drip | | |

Telephone Number: 708-442-0123



Testing intended for

| 3 | | | |
|--------------------------|----------------------|-------------------------|-------------------------|
| Product or food tested | | | |
| Heating method(s) | | | |
| Temperature when tested: | ☐ at time of service | ☐ 15 mins after serving | ☐ 30 mins after serving |

Instructions:

- Level 5 Minced & Moist <u>critical</u> 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 (adults);
 Equal to or less than 2mm width and no longer than 8mm length (pediatrics).
- . The food item must pass or meet criteria for any row marked *.

| Tests | Meets criteria at | | |
|--|-------------------|---------------|---------------|
| | Time of service | 15 mins | 30 mins |
| Critical: Appearance | | after serving | after serving |
| * Lumps less than or equal to 4mm (adults); 2mm (pediatrics) | ☐ Yes ☐No | ☐ Yes ☐ No | ☐ Yes ☐No |
| * No separate thin liquid | ☐ Yes ☐No | ☐ Yes ☐ No | ☐ Yes ☐No |
| Critical: Fork Pressure Test (metal dinner fork needed) | | | |
| * Food can be easily mashed with little pressure from a dinner fork [pressure should not make thumb nail blanch to white] | ☐ Yes ☐No | ☐ Yes ☐No | ☐ Yes ☐No |
| * Easily separates and comes through prongs of a dinner fork | ☐ Yes ☐ No | ☐ Yes ☐ No | ☐ Yes ☐No |
| Critical: Spoon Tilt Test (teaspoon needed) | | | |
| * Holds shape on teaspoon | ☐ Yes ☐No | ☐ Yes ☐ No | ☐ Yes ☐No |
| * Food slides off spoon with little food left on teaspoon (i.e. not sticky) | ☐ Yes ☐No | ☐ Yes ☐ No | ☐ Yes ☐No |
| May spread or slump slowly on a flat plate | ☐ Yes ☐No | ☐ Yes ☐ No | ☐ Yes ☐No |
| Alternative if Fork or Spoon not available: Finger Test | | | |
| * Small soft smooth rounded particles can be easily squashed between fingers | ☐ Yes ☐No | ☐ Yes ☐ No | ☐ Yes ☐ No |
| * Food feels moist and will leave fingers wet | ☐ Yes ☐No | ☐ Yes ☐ No | ☐ Yes ☐ No |
| Optional: Chopstick Test | | | |
| Chopsticks can scoop or hold this texture if food is moist and cohesive | ☐ Yes ☐No | ☐ Yes ☐ No | ☐ Yes ☐No |
| OVERALL CONCLUSION: Does the sample meet the criteria for Level 5 Minced & Moist? | ☐ Yes ☐ No | ☐ Yes ☐ No | ☐ Yes ☐ No |

Notes: * Minimal chewing should be needed to eat this food texture (e.g. tongue force should be able to squash/break food).

* Please see also http://iddsi.org/framework/food-testing-methods/

Bread



Minced & Moist Sandwich Video: https://www.youtube.com/watch?v=W7bOufqmz18

FAQs

FAQ Category: Foods

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 (Minichoking literature, in which bread is frequently ide Ekberg & Feinberg, 1992; South Australia Coronial 1999, 2005; Food Safety Commission of Japan, 20 cut to fall below the maximum size guideline of Le to allow it for some patients on a case-by-case babroken down into particles of 4mm or smaller, du for inclusion at Level 5 (Minced & Moist). In some under the names "pre-gelled" or "soaked" bread. used to confirm whether or not these products fa

FAQ Category: Foods; choking; bread

Q: Do all foods at Level 6 – Soft & Bite-sized (adult guidelines) need to meet the 1.5 x 1.5cm particle size requirements?

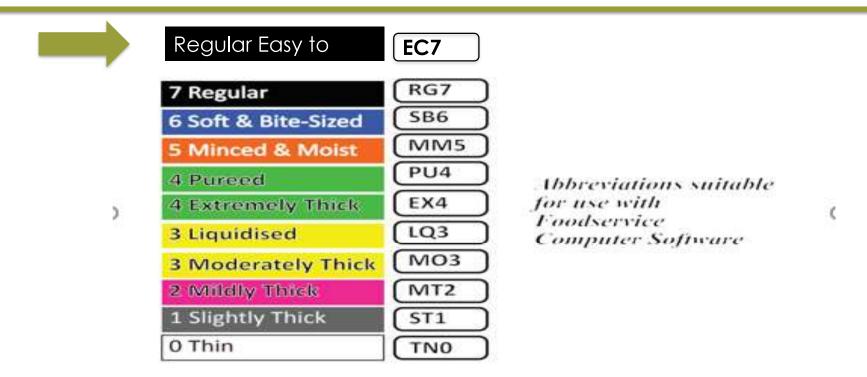
A: Yes, all foods (sandwiches included) need to meet the particle size requirements for Level 6 – Soft & Bite-sized. The relationship between particle size and risk of asphyxiation has been identified in the literature (Samuels & Chadwick, 2006; Kennedy et al., 2014). It cannot be assumed that nursing staff or carers will be able to chop food to the required size for swallow safety. In order to avoid asphyxiation, particles should be small enough to pass through rather than block the trachea. The average tracheal size for adult males is 22mm and for adult females is 17 mm (Brodsky et al., 1996). Particle sizes of 15 mm (i.e. 1.5cm) size are therefore more likely to pass through the trachea, than block it. IDDSI appreciates that provision of food like sandwiches is very difficult at this particle size and asks clinicians and carers to consider providing 'soaked' breads as an alternative. For example, finely chop bread and add equal amounts of water and butter (fat) to create a softened bread texture, re-shape and serve. The combination of water and fat content reduces stickiness and improves bolus cohesion.

If the person is able to chop their food into small pieces AND they do not need supervision AND they are *not* at risk of choking, consider advancing to a Level 7 – Regular Diet, beginning with softer items from that level.

Implementation: Key Tasks

- Get to know the IDDSI website and resources.
- 2. Form an interdisciplinary IDDSI implementation team
- Determine specific IDDSI implementation tasks and create your own IDDSI Implementation Calendar
- 4. Spread the word: Educate key stakeholders & enlist a champion
- Evaluate current diets, foods and drinks: Test and map existing products to determine their IDDSI level using IDDSI audit tools
- 6. Create all dietetic tools: diet manual, menu items, product specifications and recipes
- 7. Establish testing processes and training standards
- 8. Don't go it alone!

IDDSI Abbreviations



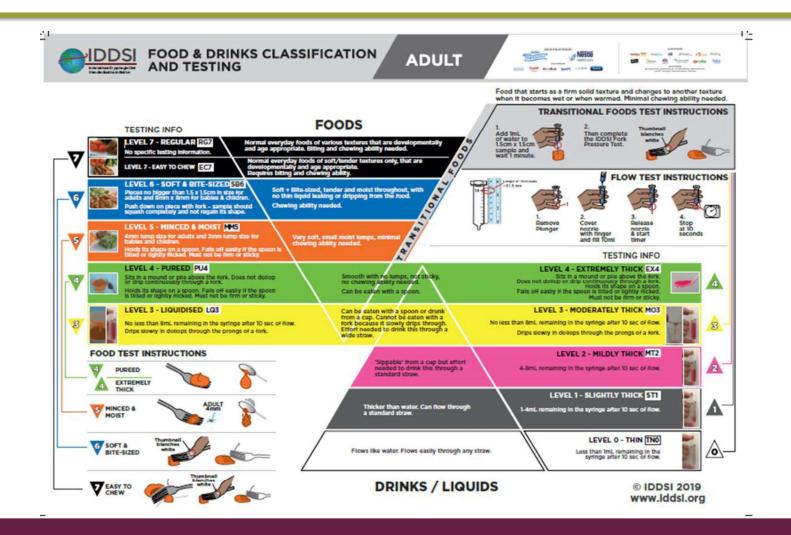
About the IDDSI abbreviations...

The IDDSI abbreviations have been checked against and are in accordance with the advice from the Institute for Safe Medical Practices List of Error-prone abbreviations, symbols and dose designations.

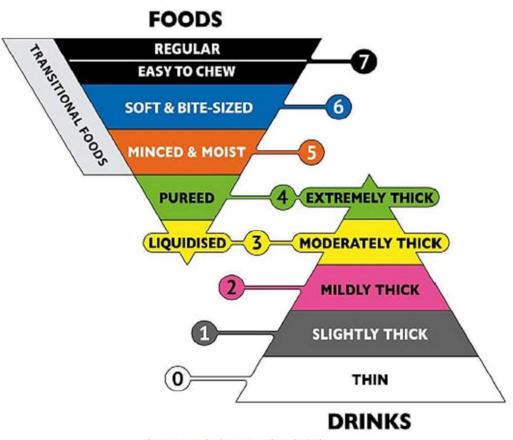
Potentially confusing abbreviations have been avoided (e.g. MD = Medical Doctor; ML = millilitre)

Numbers occur at the end of the abbreviations to ensure that they are not confused for 'number of meals or drinks ordered'.

IDDSI Handout



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Best Implementation Strategy



Registered Dietitian

- Makes it happen
- Complex translated through execution



Peace of Mind

- Safety
- Accuracy
- Regulatory



Distinguish your organization

- Thorough implementation = mastery
- Testing demonstrates authority

Thank You!

Be sure to visit RocheDietitians.com

- 1. Download our Top 17 IDDSI Tips
- 2. Learn about our training materials and posters
- 3. Get to know us a little better!



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www.RocheDietitians.com

Culinary



Culinary Video

Video Recipes: www.generalmillsCF.com/dysphagia

Orange Blossom Muffins



Level 7



Level 5



Level 6



Level 4

Peaches & Cream Parfait



Level 7



Level 5



Level 6



Level 4

Additional Recipes: www.generalmillsCF.com/dysphagia

Biscuits & Gravy

Level 6-5



Level 7



Level 4

Strawberry Overnight Oats



Level 7



Level 6-5

Brown Sugar Scone



Level 7



Level 6-5



Level 4

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