

International Dysphagia Diet Standardisation Initiative (IDDSI)

Australian Training slides

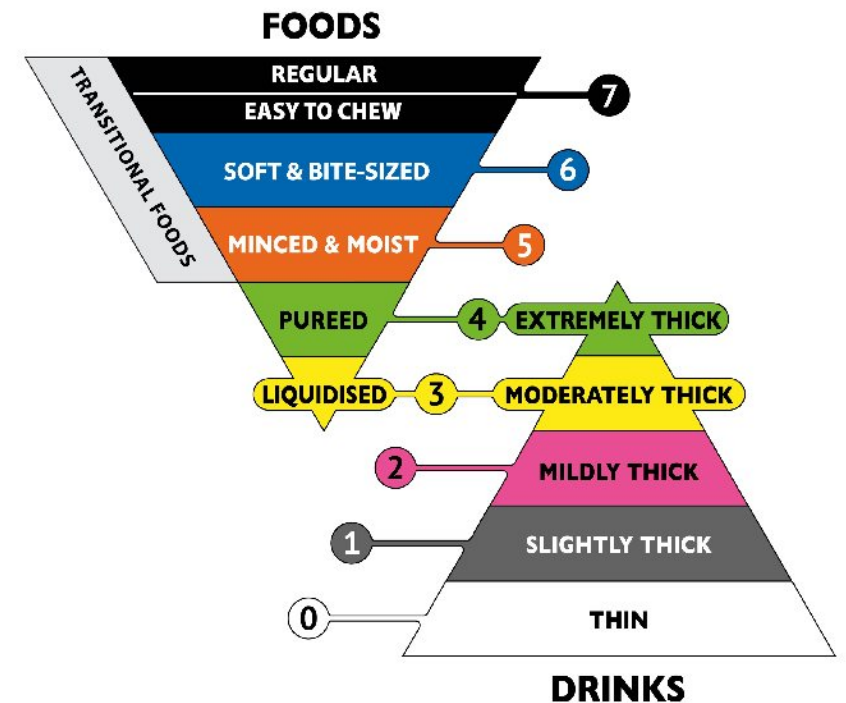
March 2019



prepared by Dr Julie Cichero PhD,
Australian IDDSI Project Officer, IDDSI and Co-Chair

What is IDDSI?

- Published online November 2015 www.iddsi.org and free from the Dysphagia Journal: Cichero et al. (2017) Dysphagia, 32: 293-314
- Global standardised framework that provides terminology and definitions for texture modified foods and thickened liquids
- A continuum of 8 levels (0-7)
- Colour-coded model
- Culturally neutral terminology
- Includes descriptors, testing methods and evidence for both drink thickness and food texture levels



Australia - Professional adoption

In 2016 the IDDSI Framework was formally adopted by these professional associations, with implementation planned for 1 May 2019



In lieu of government regulations, Professional Associations provide leadership on professional practice

The evolution of IDDSI in Australia



Australian IDDSI Steering Committee has representation from:



Australia ...why are we changing?

Ability to classify thickened liquids that flow through infant teats*



*Identified by Australian clinicians as needed (2012, Jukes et al. *Int J Sp-Lang Path*)

Australian Standards for Texture Modified Foods and Fluids

The provision of thickened fluids and texture modified foods is a routine part of the assessment and management of feeding and swallowing difficulties (dysphagia).

If you need assistance with the level of fluid and food texture modification required, contact your Speech Pathologist.

To find a Speech Pathologist, go to www.speechpathologyaustralia.org.au

If you require support to determine whether a textured modified diet is meeting nutrition and hydration needs, contact your dietitian.

To find an Accredited Practising Dietitian (APD), go to www.daa.asn.au

| FLUID | | |
|--|---|---|
| Mildly Thick Level 150 Fluid runs freely off the spoon but leaves a mild coating on the spoon. | Moderately Thick Level 400 Fluid slowly drips in dollops off the end of the spoon. | Extremely Thick Level 900 Fluid sits on the spoon and does not flow off it. |
| FOOD | | |
| Texture A - Soft Food may be naturally soft or may be cooked or cut to alter its texture. | Texture B - Minced and Moist Food is soft, moist and easily mashed with a fork; lumps are smooth and rounded. | Texture C - Smooth Pureed Food is smooth, moist and lump free: may have a grainy quality. |

Objective measurement with IDDSI increases safety



For more information call 1800 671 628 or visit www.nestlehealthscience.com.au
Nestlé Healthcare Nutrition, a division of Nestlé Australia Ltd, 20/24 Howleys Road, Notting Hill VIC 3168, Australia
For healthcare professional use only. Last updated March 2015.



Published in 2007, the Australian standards are more than 10 years old...

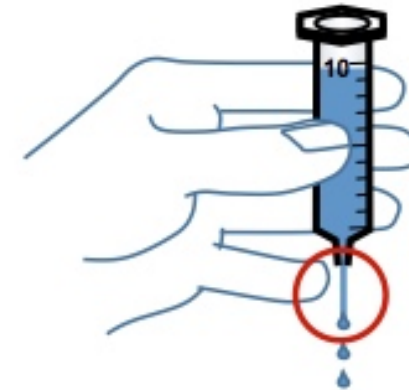
Objective measures

? **How thick is “thick”?**
How soft is “soft”?
How small is “small”?

! IDDSI includes specific measurements which minimise the need for personal subjective judgement.






For foods & drinks there are specific tests which can be performed without the need for lab equipment

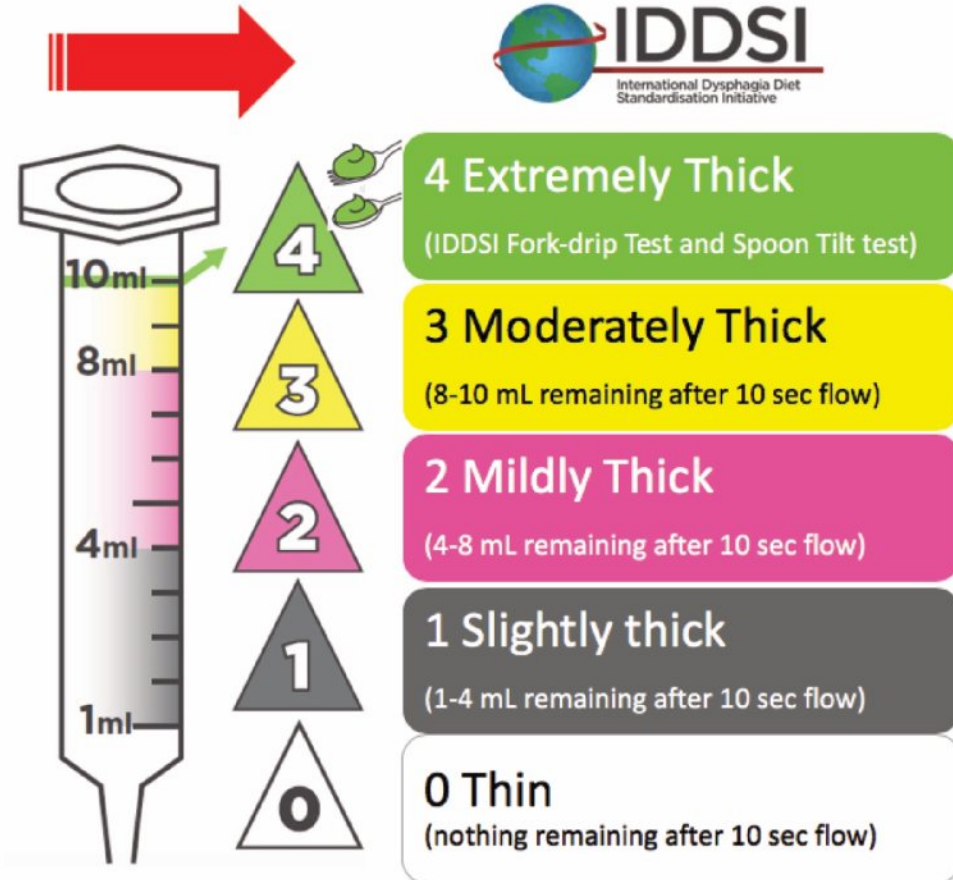
- Tests chosen to be simple, quick, portable, reliable.
- **It’s *possible* to perform these at any time...
... but testing won’t be needed *every* time!**
- Tests are most useful for:
 - Initial staff training
 - Auditing
 - Industry use to develop & test products
 - Kitchen use to develop & test recipes



Mapping to IDDSI- Liquids

Australian Standards

| | |
|---|-------------------------------|
|  | Level 900 Extremely Thick |
|  | Level 400 Moderately Thick |
|  | Level 150 Mildly Thick |
|  | |
|  | Unmodified regular |



Different
colours

Why?
International
framework and
Red-Green
colour blindness

New thickness level

New numbers

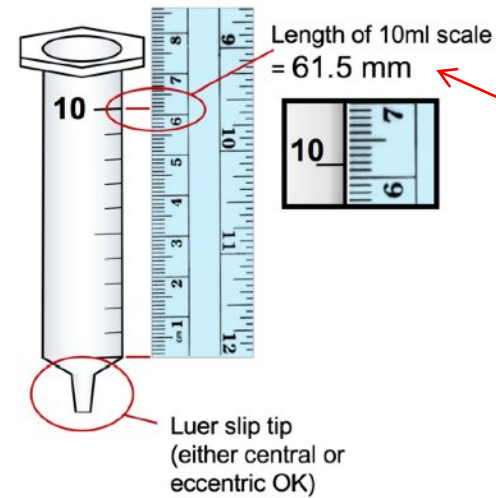


The IDDSI Flow Test

The IDDSI Flow test was designed to test liquids the way they move when they are swallowed

INSTRUCTIONS

IDDSI 10ml syringe specifications



Before you test... it is important to **check** your syringe length because there is some variation....

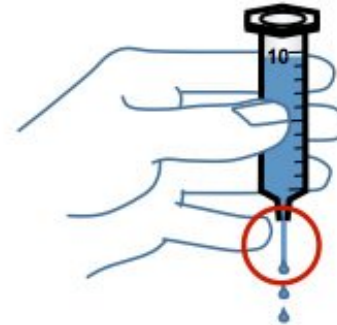
1. Remove plunger



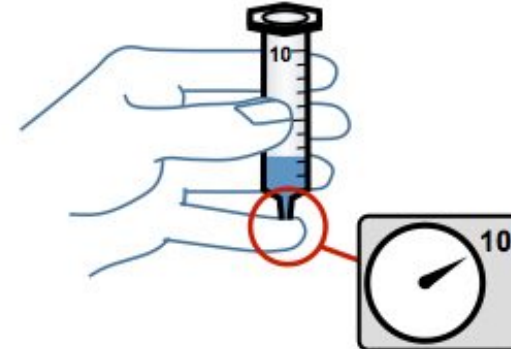
2. Cover nozzle with finger and fill 10ml



3. Release nozzle & start timer



4. Stop at 10 seconds

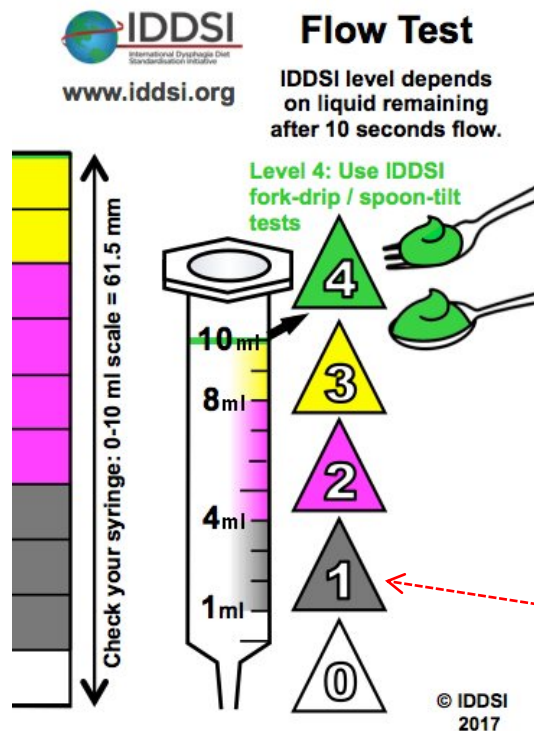


1 SLIGHTLY THICK

Most often used in paediatrics, palliative care, and cancer care but may also be suitable for other populations

IDDSI Flow TEST Link to Level 1 Slightly Thick video example

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

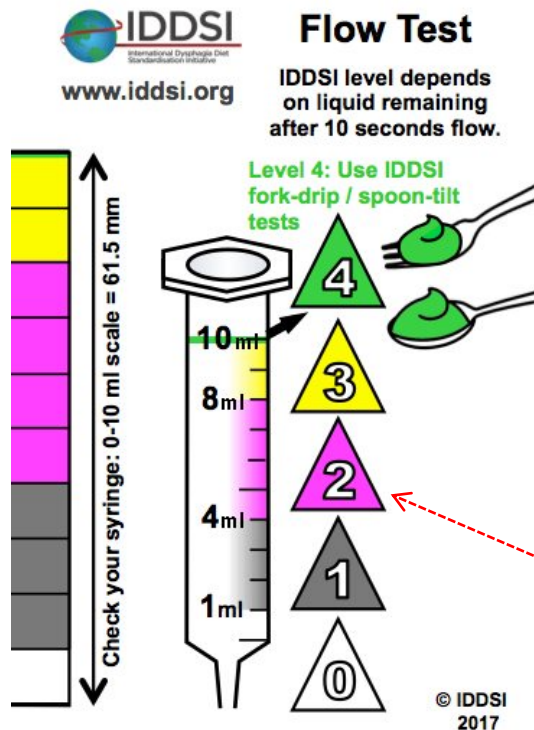


1-4 ml remaining
after 10 seconds flow

2 MILDLY THICK

IDDSI Flow TEST Link to
Level 2 Mildly Thick video example

https://www.youtube.com/watch?v=XBqi_iOLLHw



4-8 ml remaining
after 10 seconds flow

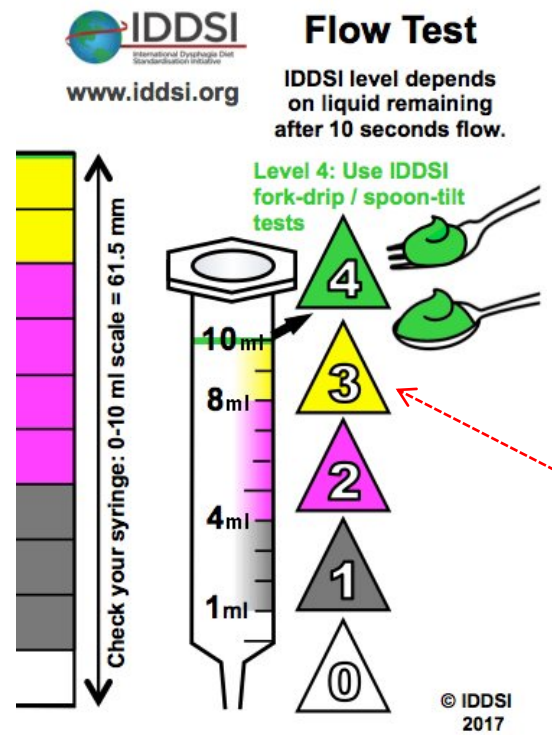


MODERATELY THICK



LIQUIDISED

IDDSI Flow TEST Link to
 Level 3 Moderately Thick video example
<https://www.youtube.com/watch?v=SiFwiGgIPHA>



↓

**8-10 ml remaining
 after 10 seconds flow**

3 LIQUIDISED

3 MODERATELY THICK

Step 1: Flow test

IDDSI
International Dysphagia Diet Standardisation Initiative
www.iddsi.org

Flow Test

IDDSI level depends on liquid remaining after 10 seconds flow.

Level 4: Test with fork or spoon

Check your syringe: 0-10 ml scale = 61.5 mm

10 ml
8 ml
4 ml
1 ml

© IDDSI 2017

10 mL remaining or 1-2 drips after 10 s flow time



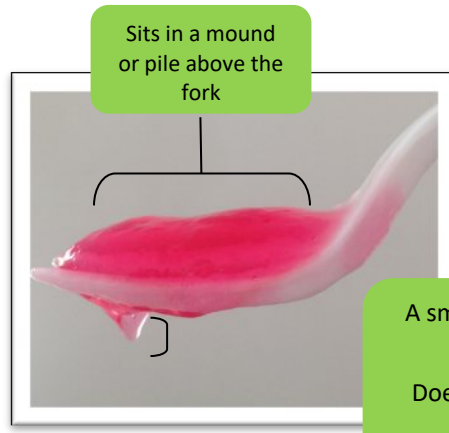
Step 2: IDDSI Fork Drip Test



3 LIQUIDISED
3 MODERATELY THICK

Drips slowly or in dollops/strands through the slots of a fork

OR



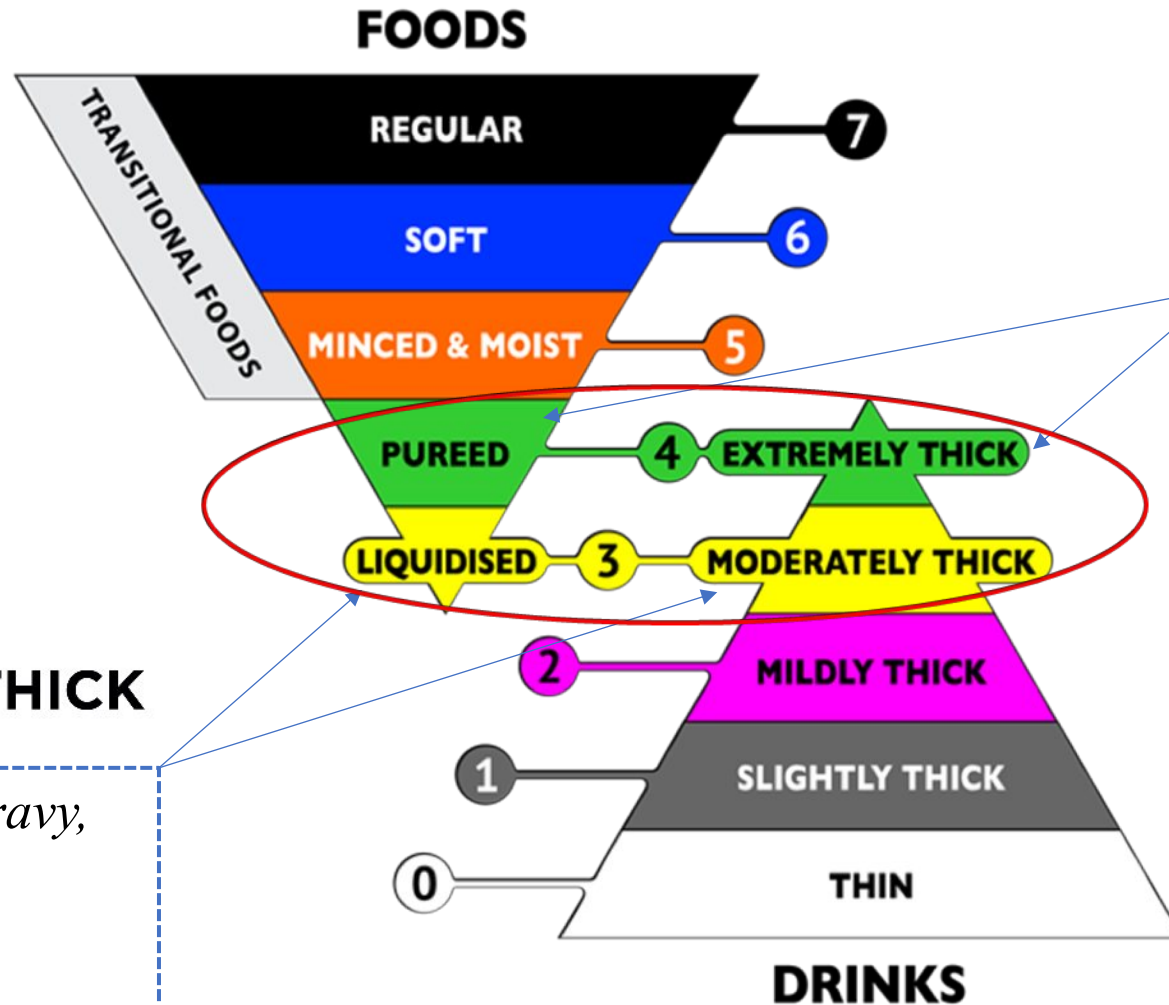
Sits in a mound or pile above the fork

4 PUREED
4 EXTREMELY THICK

A small amount may flow through and form a tail below the fork

Does not dollop, flow or drip continuously through the fork prongs

The IDDSI Overlap zone



Extremely thick liquid, pudding, mousse, pureed meat, pureed vegetables.....

- 4 PUREED
- 4 EXTREMELY THICK

- 3 LIQUIDISED
- 3 MODERATELY THICK

Moderately thick soup, gravy, sauce, liquid medicine, moderately thick drink, smoothie.....

Same number and colour because texture and flow properties are alike

4

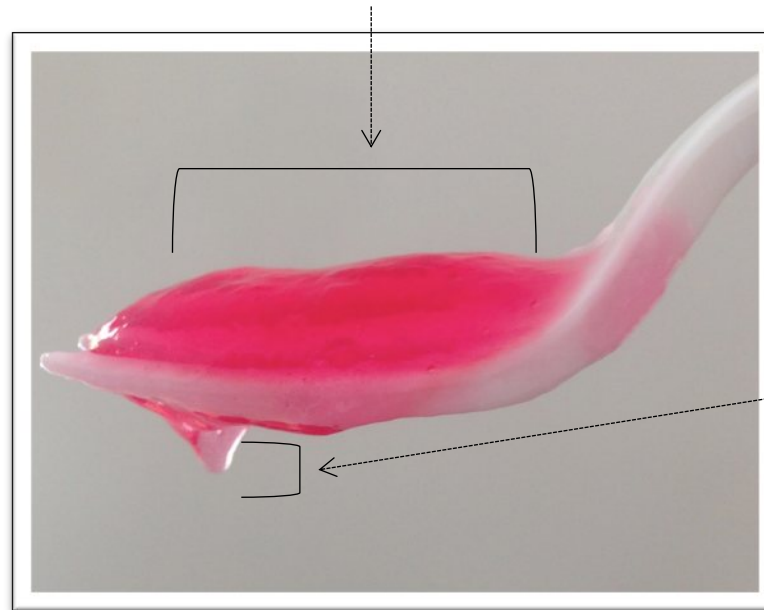
EXTREMELY THICK

4

PUREED

- ✓ No Lumps
- ✓ Does ***not*** require chewing
- ✓ Not sticky
- ✓ Holds shape on a spoon
- ✓ Falls off in a single spoonful when tilted and holds shape on plate with slight slumping or slow spreading

Extremely Thick liquid or Pureed Diet sits in a mound or pile above the fork



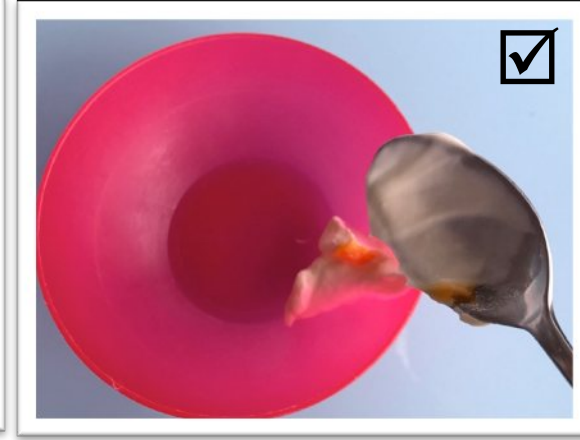
A small amount may flow through and form a tail below the fork

It does ***not*** dollop, flow or drip continuously through the fork prongs



IDDSI
International Dysphagia Diet
Standardisation Initiative

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

February 2018

Used with permission from IDDSI

GREEN LABEL CHANGE!

BE AWARE OF THE NEW INTERNATIONAL COLOUR CLASSIFICATIONS FOR THE DYSPHAGIA DIET.



Level 900
Extremely Thick

Level 400
Moderately Thick

Level 150
Mildly Thick

Unmodified
regular

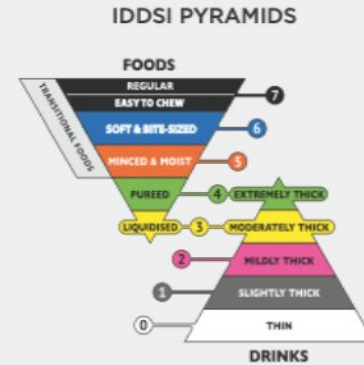
4 **EXTREMELY THICK**
(IDDSI Fork-drip Test and Spoon Tilt Test)

3 **MODERATELY THICK**
(8-10mL remaining after 10 sec flow)

2 **MILDLY THICK**
(4-8mL remaining after 10 sec flow)

1 **SLIGHTLY THICK**
(1-4mL remaining after 10 sec flow)

0 **THIN**
(less than 1 mL remaining after 10 sec flow)



IDDSI ABBREVIATIONS

| | |
|---------------------|-----|
| 7 Regular | RG7 |
| 7 Easy To Chew | EC7 |
| 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 | TN0 |

© IDDSI 2019

For more information got to: www.iddsi.org

Supported by the Australian IDDSI Steering Committee



Australian poster available for download from the Australia specific section of the IDDSI resources page:

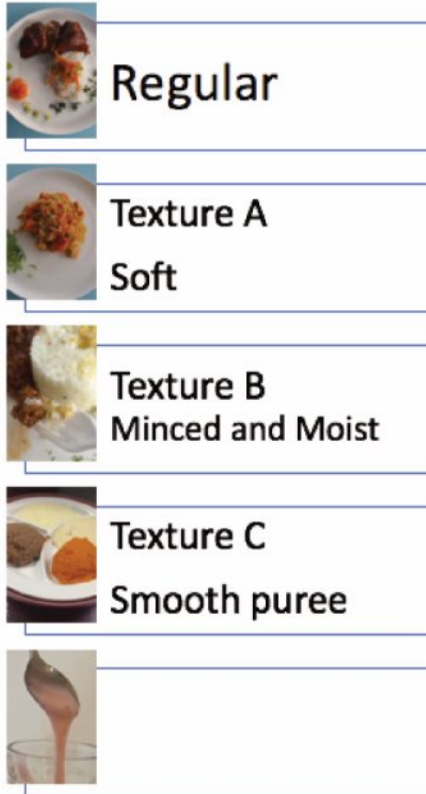
<https://iddsi.org/resources/>






What do we do with thick fluid recipes we currently use?


- Answer:
 - You don't need to change them, please just use the IDDSI Flow Test to categorise them
 - Also be aware of changes to thickness associated with temperature
 - Note: thick liquids have always changed thickness with a change in temperature – you now have a tool that is sensitive enough to show that change

Mapping to IDDSI- Foods

Australian Standards



-  Regular
-  Texture A
Soft
-  Texture B
Minced and Moist
-  Texture C
Smooth puree
- 



7 Regular

6 Soft & Bite-Sized

5 Minced & Moist

4 Pureed

3 Liquidised

Transitional Foods

New texture description

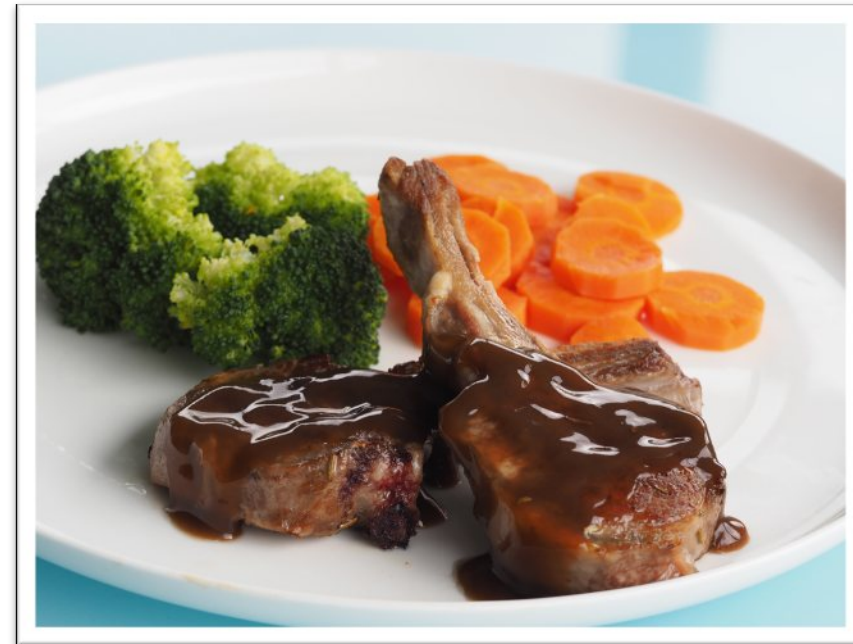
Numbers not letters

New texture level

The diagram shows a vertical stack of seven IDDSI levels. Levels 7, 6, and 5 are grouped under a grey arrow labeled 'Transitional Foods'. A red box 'New texture description' points to level 7. A red box 'Numbers not letters' points to level 4. A red box 'New texture level' points to level 3. To the left of level 3 is a small graphic of a measuring cup with levels 3, 4, and 5 marked.

7 REGULAR

- ✓ No particle size restrictions
- ✓ Includes all textures
- ✓ Chewing is necessary
- ✓ Tongue strength and control needed to move food for chewing and for swallowing



7 EASY TO CHEW

Important

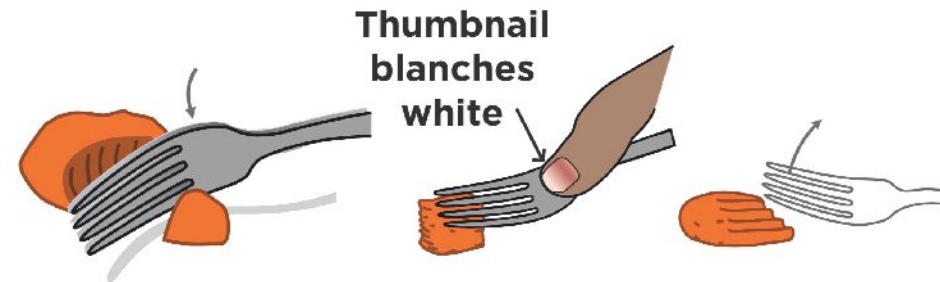
- *No increased risk of choking*
- *No meal time behaviours that increase risk*



Do **NOT** use foods that are

Hard, tough chewy, fibrous, have stringy textures, pips/seeds, bones or gristle

- ✓ Normal, everyday foods of soft/tender texture
- ✓ Food piece size is not restricted so food may be a range of sizes
- ✓ Ability to bite off soft/tender food pieces
- ✓ Ability to choose bite-sizes that are safe to swallow
- ✓ Chewing is necessary
- ✓ Tongue strength and control needed to move food for chewing and for swallowing
- ✓ Ability to remove food pieces from the mouth that cannot be swallowed safely without help or direction from others



- ✧ Should be able to easily cut or flake the food with light pressure just from the side of a fork

- ✧ Press into a bite-sized piece of food with your thumb in the bowl of a fork hard enough that the thumbnail turns white
- ✧ The food should break apart easily and **not** return to its original shape

7 EASY TO CHEW

This texture is **NOT** appropriate if there are any concerns about choking risk related to chewing ability.

It is **NOT** appropriate if there are mealtime behaviours that make eating unsafe.

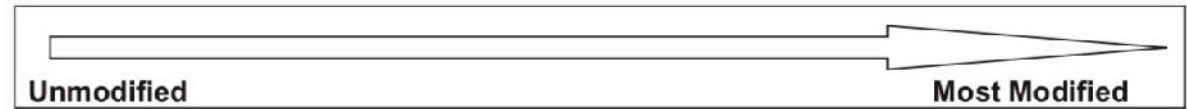
- Examples of unsafe mealtime behaviours include: not chewing much, putting too much food into the mouth, eating too fast or swallowing large mouthfuls of food.

Australian Guidelines Texture A Soft –

Atherton, 2007,
Nutrition &
Dietetics, 64, S53-
S76

IDDSI

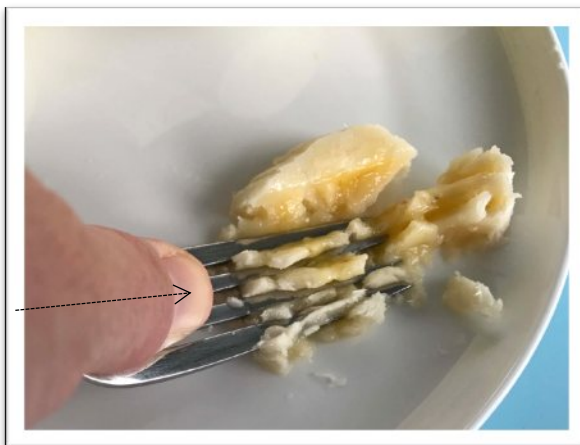
- NO CHANGE to particle size
- IDDSI Fork pressure test for softness



| | | | |
|----------------------------|------------------|------------------------------|---------------------------|
| Unmodified - Regular Foods | Texture A – Soft | Texture B – Minced and Moist | Texture C – Smooth Pureed |
|----------------------------|------------------|------------------------------|---------------------------|

| NAME | TEXTURE A – SOFT |
|----------------------------|---|
| Description | <ul style="list-style-type: none"> • Food in this category may be naturally soft (eg ripe banana), or may be cooked or cut to alter its texture |
| Characteristics | <ul style="list-style-type: none"> • Soft foods can be chewed but not necessarily bitten • Minimal cutting required – easily broken up with a fork • Food should be moist or served with a sauce or gravy to increase moisture content (NB: Sauces and gravies should be served at the required thickness level) • Refer to <i>Special Notes</i> (page S72) |
| Testing Information | <ul style="list-style-type: none"> • Targeted particle size for infants and children = less than half that for adults and children over 5 years or equal to 0.8 cm (based on tracheal size)²⁸ • Targeted particle size for children over 5 years and adults = 1.5 × 1.5 cm^{10,27,30} |

- ✓ Bite-sized pieces of
 - ✧ **1.5 x 1.5cm for adults**
(about the size of an adult thumb nail)
 - ✧ **8mm x 8mm for children**
- ✓ Chewing is necessary
- ✓ Tongue strength and control needed to move food for chewing and for swallowing
- ✓ Should be able to easily cut this texture with just the side of a fork



- ✧ Press into a bite-sized piece of food with your thumb in the bowl of a fork hard enough that the thumbnail turns white
- ✧ The food should squash easily and **not** return to its original shape

Both elements are critical

Particle size

6 **SOFT & BITE SIZED**


Thumb nail blanches white

Fork Pressure Test

Adult
15 mm

Child
8 mm

Bite size


www.iddsi.org
©IDDSI 2018

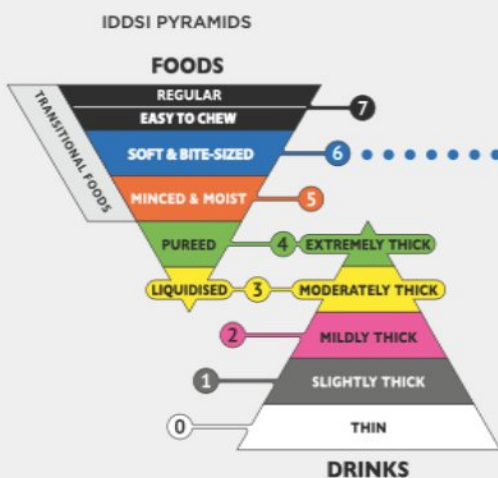


Soft enough to squash + come apart with *pressure from fork or spoon

*thumb nail needs to blanch white

LEVEL 6 | SOFT & BITE-SIZED

DUE TO DEATHS FROM CHOKING, BREAD & SANDWICHES ARE NOT INCLUDED IN LEVEL 6 SOFT & BITE-SIZED



6 SOFT & BITE-SIZED

**NO BREAD
NO SANDWICHES**



=



Australian poster available for download from the Australia specific section of the IDDSI resources page:

<https://iddsi.org/resources/>

Why aren't sandwiches on the Level 6 Soft & Bite-Sized diet?

- Bread and sandwiches appear frequently on autopsy data from people who have choked and died (see Table on following slides)
- Bread types – not all breads are equal
 - White bread, brown bread, baguette, bread roll, brioche bread, multigrain bread, whole meal bread, gluten free bread etc.
- Bread moisture from the bread and as added by saliva are important in being able to break it down safely so that it is not a choking risk
- Bread is fibrous– you can't 'fork mash' bread

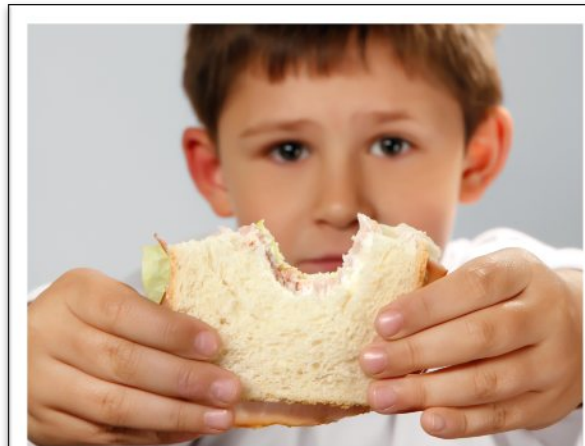
Autopsy data: Food people have died from choking on

Cichero 2016, Journal of Texture Studies, 47:277-283

| | |
|--|--|
| Irwin, 1977, JAMA, 237, 2744-2745 | Cheese, lima beans, peas, semi-solid cereal, bread , orange |
| Ekberg & Feinberg, 1992, Dysphagia 7, 205-208 | Solis 40% (meat , poultry), complex bolus 14% (hamburger, hot dog, sandwich , meat, potato, meatball, spaghetti, chicken soup, pizza), small hard solid (peanut, popcorn, hard candy), dry (bread , toast , cracker, donut, breadstick), semi-solid (mashed banana), cooked egg, ground meat |
| Wick, 2006, J of Clinical Forensic Medicine, 13, 135-138 | Meat , banana, bread , pasta, scrambled egg, peanut butter sandwich , potato chips, grape |
| Berzlanovich 1999, Am J Medicine, 107, 351-355 | Unchewed meat , sausage, fruit, vegetables, bread , cookies, pastries, cheese, egg |
| Berzlanovich, 2005, Am J Preventive Medicine, 28, 65-69 | Meat , fish, sausage, bread , pizza, cookies, pastry, puree, ground meat, mashed fruit , fruit, vegetables, noodles, cheese, egg |

Autopsy data continued

| | |
|---|---|
| Dolkas 2006, J Forensic Sci, 52, 176-179 | Meat (17% - esp. steak and chicken), peanut butter & jelly sandwich (4%); All other foods (~2% - carrot, pancakes, broccoli, burrito, hot dog, meat ball, pizza, toast, hamburger, shrimp and others) |
| Food Safety Commission of Japan, 2010 | Sticky rice cake, steamed rice, bread , meat , fish, fruit, candy, Konjac mini-cup jelly |
| Deaths of people with disability in residential care 2012-2013, NSW Ombudsman, 2015 | Sandwiches , crepes, carrot, steak , cheese, dim sims |



What if our patients are already eating bread and sandwiches?

Answer:

If they have been assessed as 'safe' by a speech pathologist for bread and sandwiches, then these can continue to be included.

- The Australian guidelines always had them coded for inclusion only 'after clinical assessment', **not** as a regular inclusion for Texture A - Soft

Changing from paediatric to adult particle sizes: Autopsy data: food particle size, textures and shapes

Brodsky et al. (1996) Anesth Analg, 82:861-864; Berzlanovich et al. (1999) A J Med, 107: 351-355; Markenson (2002) Pediatric Pre-Hospital Care

Minimise choking risk:
Food pieces small enough to *pass through*, rather than occlude the airway



Tracheal diameter ranges

Pediatrics:
20 months, 4-6.5mm
18-36 months, 7-8mm

Adult male, 15-27mm
Adult female, 13-25mm



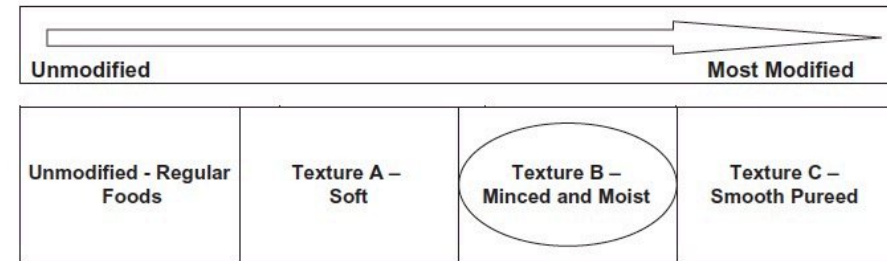
When do you change from paediatric to adult particle sizes?

- When they are physically big enough (like weight for changing car seat orientation)
 - Example: puberty (Girls 10-14 yrs; Boys 12-16 yrs)
- On Doctor recommendation of sufficient tracheal growth to minimise choking risk

Level 5 – Minced & Moist, what changes?

Nutrition & Dietetics 2007; 64 (Suppl. 2): S53–S76

- Current:
 - ‘Recommended particle size for ... adults = 0.5cm’ and ... infants and children 0.2-0.5cm’
- IDDSI:
 - Adults
 - 4mm lump size
 - 4mmx4mmx *no larger than 15mm*
 - Paediatrics
 - 2mm lump size’
 - 2mm x 2mm x *no larger than 8mm*
 - Or at Doctor's discretion

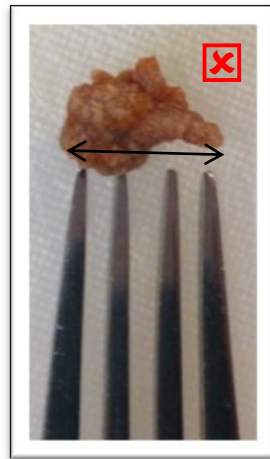
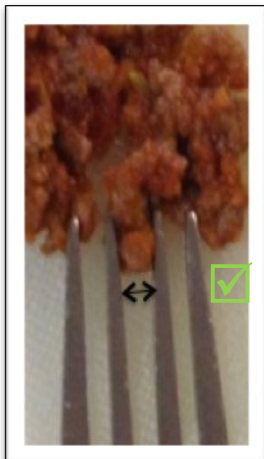


| NAME | TEXTURE B – MINCED AND MOIST |
|---------------------|---|
| Description | <ul style="list-style-type: none"> • Food in this category is soft and moist and should easily form into a ball |
| Characteristics | <ul style="list-style-type: none"> • Individual uses tongue rather than teeth to break the small lumps in this texture • Food is soft and moist and should easily form into a ball • Food should be easily mashed with a fork • May be presented as a thick puree with obvious lumps in it • Lumps are soft and rounded (no hard or sharp lumps) • Refer to <i>Special Notes (page S72)</i> |
| Testing Information | <ul style="list-style-type: none"> • Recommended particle size for infants and children = 0.2–0.5 cm (based on tracheal size)²⁸ • Recommended particle size for children over 5 years and adults = 0.5 cm^{10,29} |

5

MINCED & MOIST

- ✓ **Soft and moist** with no separate thin liquid
- ✓ Minimal chewing required
- ✓ Lumps can be mashed with tongue
- ✓ Food can be easily mashed with just a little pressure from a fork
- ✓ Should be able to scoop it onto a fork with no liquid dripping and no crumbs falling off the fork



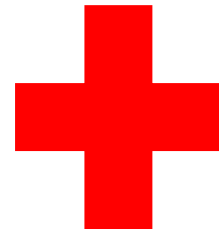
Small particle size
4mm for adults
2mm for children

4mm is the measurement between the prongs of a typical fork

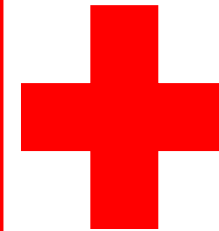
5 MINCED & MOIST

All three elements are critical

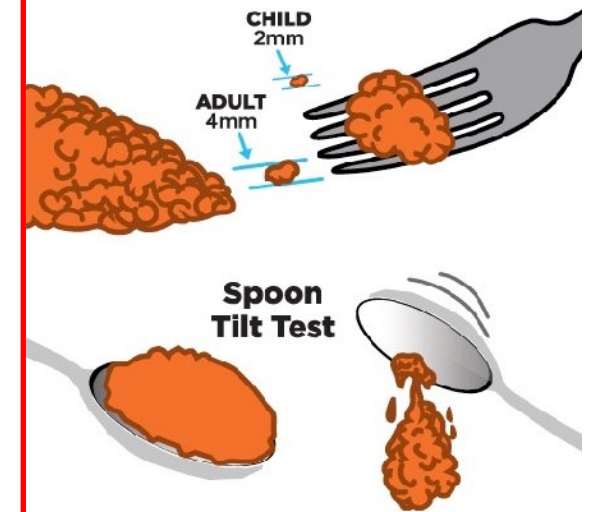
Particle size



Soft enough
to squash
easily with
fork or spoon
don't need thumb
nail to blanch white



Moisture
not too sticky,
not too runny



5 MINCED & MOIST



Adults: 4mm “lump size”



Paediatrics: 2mm “lump size”

Better images to educate about presentation



*Q: For Level 5 Minced & Moist, why does the IDDSI Framework say '4mm lump size' and the audit sheet say 'equal to or less than 4mm and no longer than 15mm'? *[adult particle size example]*

- *A:* The framework document states '4mm lump size', however clarification was requested as people came to put the definitions into practice
 - Did the lumps need to be exactly 4mmx4mm?
 - If 'yes', rice (8-10mm long, but less than 4mm wide) or similar products would not be suitable without food processing to reduce the size
 - If 'no' then how was it best to describe the particle size?
 - Not necessarily equal in all dimensions –
 - 4x4x "no more than 15mm" (like a 'chewed bolus')



Mexican chilli and rice

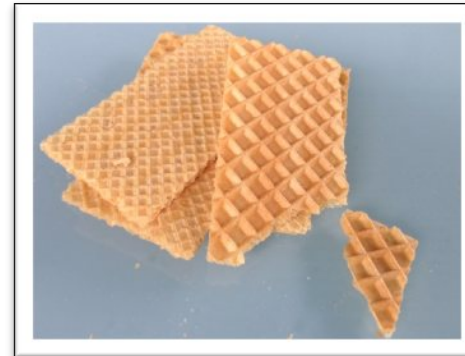


Spiced lamb and pearl couscous



Transitional Foods

- ✓ Start as one texture (e.g. solid) and change to another when moisture is applied (saliva, water) or temperature change occurs (heat)
- ✓ Minimal chewing required
- ✓ Tongue pressure may be enough to break food down after food becomes moist or changes temperature
- ✓ Used for developmental teaching of chewing skills, or rehabilitation of chewing
- ✓ May be used with:
 - ✧ Level 5 Minced & Moist
 - ✧ Level 6 Soft & Bite-Sized
 - ✧ Level 7 Regular





Clinician can add these to the diet after assessment or use them in therapy





As always, patients require
a prescription for food and drink, on clinical advice

Examples...

 **6 SOFT & BITE-SIZED** +  **0 THIN**

 **4 PUREED** +  **2 MILDLY THICK**

 **5 MINCED & MOIST** +  **3 MODERATELY THICK**

 **4 PUREED** +  **4 EXTREMELY THICK**

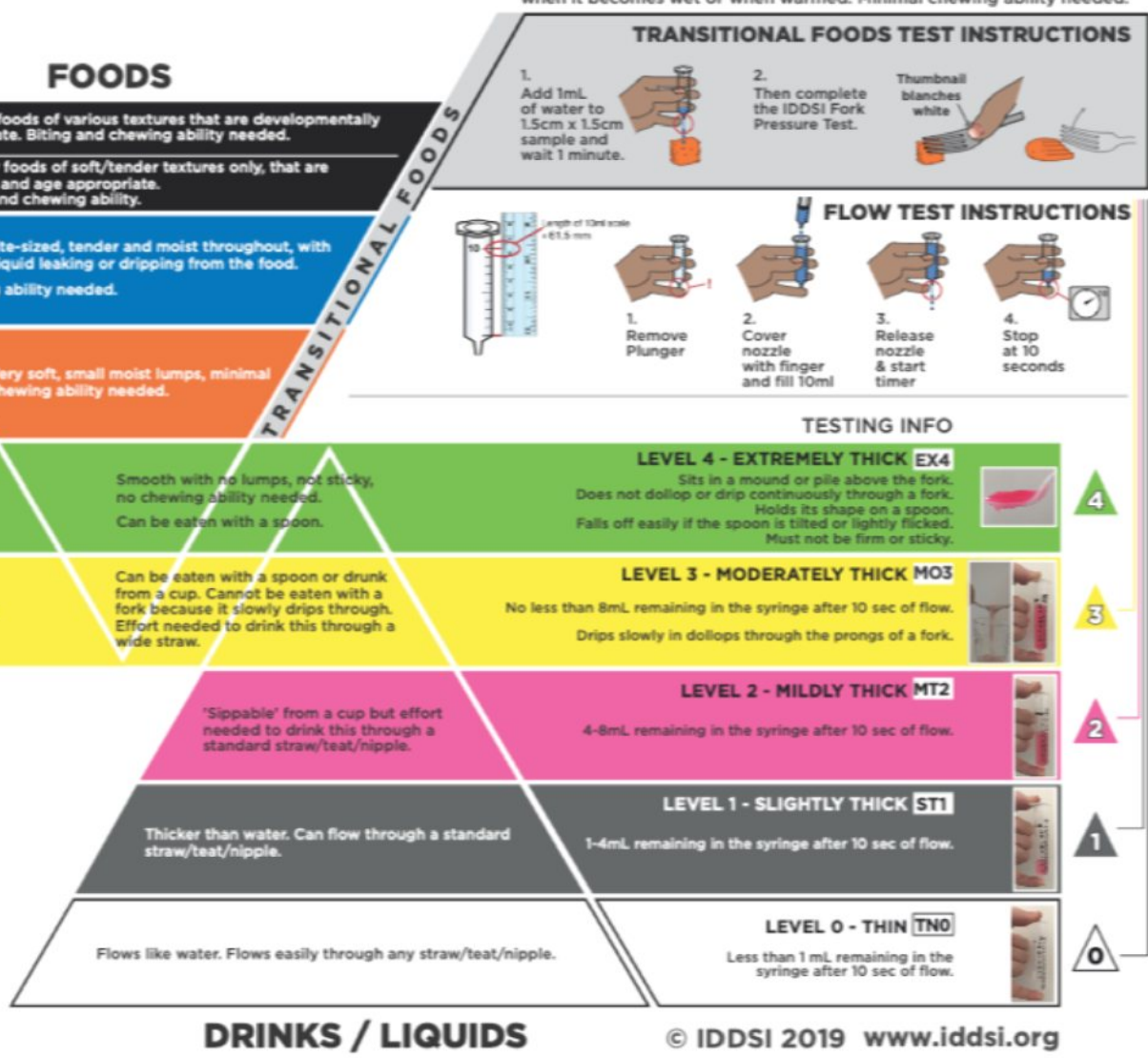
IDDSI ABBREVIATIONS

| | |
|--------------------------------|------------|
| 7 Regular | RG7 |
| 7 Easy To Chew | EC7 |
| 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 | TN0 |

For groups who need to use abbreviations for computer codes, please use the IDDSI approved abbreviations here.

The 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.

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



Food that starts as a firm solid texture and changes to another texture when it becomes wet or when warmed. Minimal chewing ability needed.

TRANSITIONAL FOODS TEST INSTRUCTIONS

1. Add 1mL of water to 1.5cm x 1.5cm sample and wait 1 minute.
2. Then complete the IDDSI Fork Pressure Test.

Thumbnail blanches white

FLOW TEST INSTRUCTIONS

1. Remove Plunger
2. Cover nozzle with finger and fill 10ml
3. Release nozzle & start timer
4. Stop at 10 seconds

TESTING INFO

LEVEL 7 - REGULAR [RG7]
No specific testing information.

LEVEL 7 - EASY TO CHEW [EC7]

LEVEL 6 - SOFT & BITE-SIZED [SB6]
Pieces no bigger than 1.5 x 1.5cm in size for adults and 8mm x 8mm for babies & children. Push down on piece with fork - sample should squash completely and not regain its shape.

LEVEL 5 - MINCED & MOIST [MMS]
4mm lump size for adults and 2mm lump size for babies and children. Holds its shape on a spoon. Falls off easily if the spoon is tilted or lightly flicked. Must not be firm or sticky.

LEVEL 4 - PUREED [PU4]
Sits in a mound or pile above the fork. Does not dollop or drip continuously through a fork. Holds its shape on a spoon. Falls off easily if the spoon is tilted or lightly flicked. Must not be firm or sticky.

LEVEL 3 - LIQUIDISED [LQ3]
No less than 8mL remaining in the syringe after 10 sec of flow. Drips slowly in dollops through the prongs of a fork.

FOOD TEST INSTRUCTIONS

4 PUREED

4 EXTREMELY THICK

5 MINCED & MOIST

6 SOFT & BITE-SIZED

7 EASY TO CHEW

Normal everyday foods of various textures that are developmentally and age appropriate. Biting and chewing ability needed.

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

Soft + Bite-sized, tender and moist throughout, with no thin liquid leaking or dripping from the food. Chewing ability needed.

Very soft, small moist lumps, minimal chewing ability needed.

Smooth with no lumps, not sticky, no chewing ability needed. Can be eaten with a spoon.

Can be eaten with a spoon or drunk from a cup. Cannot be eaten with a fork because it slowly drips through. Effort needed to drink this through a wide straw.

"Sippable" from a cup but effort needed to drink this through a standard straw/teat/nipple.

Thicker than water. Can flow through a standard straw/teat/nipple.

Flows like water. Flows easily through any straw/teat/nipple.

LEVEL 4 - EXTREMELY THICK [EX4]
Sits in a mound or pile above the fork. Does not dollop or drip continuously through a fork. Holds its shape on a spoon. Falls off easily if the spoon is tilted or lightly flicked. Must not be firm or sticky.

LEVEL 3 - MODERATELY THICK [MO3]
No less than 8mL remaining in the syringe after 10 sec of flow. Drips slowly in dollops through the prongs of a fork.

LEVEL 2 - MILDLY THICK [MT2]
4-8mL remaining in the syringe after 10 sec of flow.

LEVEL 1 - SLIGHTLY THICK [ST1]
1-4mL remaining in the syringe after 10 sec of flow.

LEVEL 0 - THIN [TNO]
Less than 1 mL remaining in the syringe after 10 sec of flow.

Australian poster available for download from the Australia specific section of the IDDSI resources page:

<https://iddsi.org/resources/>

Getting ready

Visit www.IDDSI.org



International Dysphagia Diet Standardisation Initiative

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

- Home
- About IDDSI
- IDDSI Framework
- Implementation
- Translations
- Resources
- FAQ
- Contact Us



IDDSI Framework

See the IDDSI Framework, testing methods and evidence statement.



Implementation

Learn about the process for implementing IDDSI in your home, setting or community. Share your implementation story with us.



Resources

Find resources developed by IDDSI related to dysphagia.

Review

the detailed definitions, testing methods, resources, FAQ's

International newsletters

SIGN UP for newsletters



e-bite

April 2018

IN THIS BITE:

- IDDSI Implementation Guides
- Webinar Series continues
- Translations
- New Sponsors
- IDDSI on the Move

Download the FREE IDDSI app for ios and android



Resources

The following documents have been developed by IDDSI and are for public use. You do not need to seek permission from IDDSI to share these documents and images as long as you cite the CreativeCommons BY-SA 4.0 license as follows:

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

Australia

- [Mapping to IDDSI - Foods \(Australia\) - pdf, August 2018](#)
- [Mapping to IDDSI - Drinks \(Australia\) - pdf, August 2018](#)

- [August 2018 Newsletter \(Australia\) - pdf, Aug 2018](#)
- [September 2018 Newsletter \(Australia\) - pdf, Sept 2018](#)



IDDSI 101 (Print and Post) +

IMPLEMENTATION +

PRESENTATIONS -

- [Why IDDSI](#) (Power Point presentation, updated Dec 2017)
- [IDDSI Framework, Descriptors, and Testing Methods](#) (Power Point presentation, updated Dec 2017)
- [Implementation Resources and Tools](#) (Power Point presentation, updated Dec 2017)
- [From Framework to Food: Implementing IDDSI in a Long-Term Care facility](#) (PDF presentation, from Webinar March 29 and April 11, 2018)
- [The More We Know, the More We Grow: A Pediatric Hospital's Developmental Progression with the IDDSI](#) (PDF presentation, from Webinar May 24, 2018)
- [Using the IDDSI Flow Test in Clinical Practice: How Thick is Think and does Thickness Really Matter?](#) (PDF presentation, from Webinar Sep 18 & 19, 2018)

PUBLICATIONS +

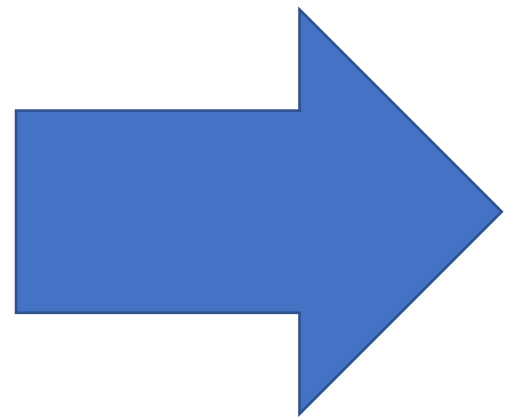
E-BITES (newsletters) +

NEWSROOM +

VIDEOS +

WEBINAR RECORDINGS +

Resources from other IDDSI users +



Review what you currently have

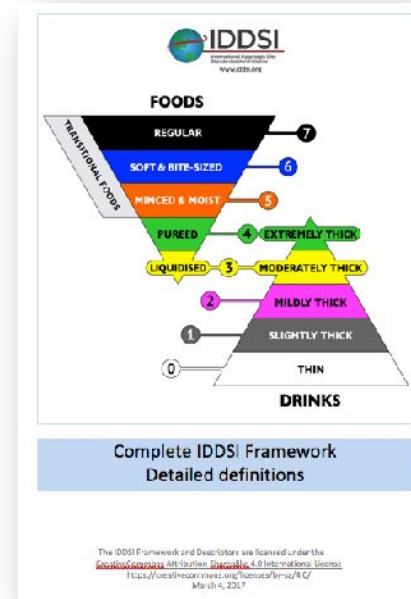
1

Take a look at the client's current food textures and thickened liquids



Compare them to the IDDSI detailed descriptors

2



Make a list of the items that will need modification to meet IDDSI descriptors

3

| Product Name | Texture on Label | Temperature | Trial 1 | Trial 2 | Trial 3 | Trial 1 | Trial 2 | Trial 3 |
|--|------------------|-------------|---------|---------|---------|---------|---------|---------|
| 4 Ardmore Farms Grape Juice | Thin | Cold | 0 ml | 0 ml | 0 ml | 0 ml | 0 ml | 0 ml |
| 5 Milk | Thin | Cold | 0 ml | 0 ml | 0 ml | 0 ml | 0 ml | 0 ml |
| 6 Monarch 100% Prune juice | None | Cold | 0 ml | 0 ml | 0 ml | 0 ml | 0 ml | 0 ml |
| 7 OceanSpray Cranberry Juice Cocktail | None | Cold | 0 ml | 0 ml | 0 ml | 0 ml | 0 ml | 0 ml |
| 8 Ardmore Farms 100% Orange Juice | None | Cold | 0 ml | 0 ml | 0 ml | 0 ml | 0 ml | 0 ml |
| 9 Ardmore Farms 100% Grape Juice | None | Cold | 0 ml | 0 ml | 0 ml | 0 ml | 0 ml | 0 ml |
| 10 Chicken broth (kitchen produced) | None | Hot | 0 ml | 0 ml | 0 ml | 0 ml | 0 ml | 0 ml |
| 11 Beef broth (kitchen produced) | None | Hot | 0 ml | 0 ml | 0 ml | 0 ml | 0 ml | 0 ml |
| 12 Anderson Erickson lowfat milk 1% | None | Cold | 0 ml | 0 ml | 0 ml | 0 ml | 0 ml | 0 ml |
| 13 Ensure | Naturally Thick | Cold | 0.2 ml | 0.4 ml | 0.4 ml | 0 ml | 0 ml | 0 ml |
| 14 Blendarized cream of mushroom soup | None | Hot | 0.4 ml | 0.4 ml | 0.6 ml | 1.6 ml | 1.6 ml | 1.4 ml |
| 15 Anderson Erickson chocolate milk 2% | None | Cold | 0.4 ml | 0.4 ml | 0.4 ml | 0 ml | 0 ml | 0 ml |
| 16 Ensure Plus strawberry (Abbott) | None | Cold | 1 ml | 1 ml | 1 ml | 0.4 ml | 0.4 ml | 0.4 ml |
| 17 1% Low Sodium Original | None | Cold | 1.4 ml | 1.4 ml | 1.4 ml | 0.8 ml | 0.8 ml | 0.8 ml |

Intended for Liquids



IDDSI AUDIT SHEETS

Liquid or product
If soup, heating method(s)
Temperature when tested at:

Instructions:

- Liquid critical tests
- Liquid item must pass or meet criteria for any row marked *

Tests: Suitable drinks, soups, and purees

Critical: Appearance

* Smooth liquids

Critical: IDDSI Flow Test

*Level 0 – Thin

*Level 1 – Slightly thick

*Level 2 – Mildly thick

*Level 3 – Moderately thick

Critical: Fork Drip Test

*Food drips slowly

*Prongs of fork do not separate

Alternative if Syringe Test

*Level 0 – Thin

*Level 1 – Slightly thick

*Level 2 – Mildly thick

*Level 3 – Moderately thick

Liquidised

Notes:

Intended for **4 EXTREMELY THICK**



Product or food tested
If soup, heating method(s)
Temperature when tested at:

Instructions:

- Level 4 Extremely Thick critical tests include **Appearance** appropriate.
- The food item must pass or meet criteria for any row marked *

Tests: Suitable drinks, soups, and purees

Critical: Appearance

*No lumps

Critical: Fork Drip Test

*Food sits in a mound above the fork

*Does not drip or flow continuously

Critical: Spoon Tilt Test

*Holds shape on spoon

*Food slides off spoon with little food left on spoon

Alternative if Fork or Spoon Test

*Hold a sample of food on a flat plate

*Food slides smoothly

*Food leaves noticeable indentation marks

Preferred but not critical: Fork Pressure Test

Prongs of fork make clear pattern of indentation marks

Notes: No chewing and no bolus formation

Testing intended for **5 MINCED & MOIST**



Product or food tested
Heating method(s)
Temperature when tested at:

Instructions:

- Level 5 Mincéd & Moist critical tests include **Appearance** appropriate.
- For particle size: food intended to mimic a 'chewed' texture with particles no larger than 2mm width and no larger than 8mm length (pediatrics).
- The food item must pass or meet criteria for any row marked *

Tests: Suitable drinks, soups, and purees

Critical: Appearance

*Lumps less than or equal to 4mm (adults), 2mm (pediatrics)

*No separate thin liquid

Alternative if Fork or Spoon Test

*Holds shape on spoon

*Food slides off spoon with little food left on spoon

May spread or slump slowly on a flat plate

Alternative if Fork or Spoon not available: Finger Test

*Small soft smooth round particles can be easily squashed

*Food feels moist and will leave fingers wet

Optional: Chopstick Test

Chopsticks can scoop or hold this texture if food is moist

Notes: Minimal chewing should be needed to eat this texture

Testing intended for **6 SOFT & BITE-SIZED**



Product or food tested
Heating method(s)
Temperature when tested at: service 15 mins 30 mins 45 mins

Instructions:

- Level 6 Soft & Bite-sized critical tests include **Appearance + Fork/Spoon Pressure Test** OR if these are not available **Finger Test**.
- For particle size: food intended to mimic a 'bite of food' – must be equal to or less than 15mm x 15mm (adults); equal to or less than 8mm x 8mm (pediatrics).
- The food item must pass or meet criteria for any row marked *

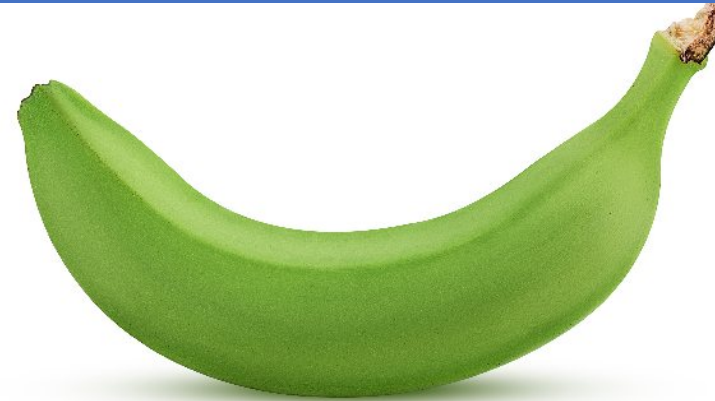
| Tests | Meets criteria at | | | |
|---|---|---|---|---|
| | Time of service | 15 mins | 30 mins | 45 mins |
| Critical: Appearance | Yes <input type="checkbox"/> No <input type="checkbox"/> | Yes <input type="checkbox"/> No <input type="checkbox"/> | Yes <input type="checkbox"/> No <input type="checkbox"/> | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| *Food can be separated into smaller pieces using pressure from a fork or spoon held on its side | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Alternative if Fork or Spoon not available: Finger Test | | | | |
| * When pushing down on a 15mm x 15mm sample using thumb, with enough pressure that the thumb nail turns white, the food can be squashed and will not return to original shape | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> |
| *Food feels moist | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Optional: Chopstick Test | | | | |
| Chopsticks can break 15mm x 15mm pieces into smaller pieces | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> |

Notes: Chewing ability is needed for this texture, although biting is not required. Pieces should be 'bite-sized' at time of serving

Available at <http://iddsi.org/resources/>

Managing the 'foods to include' and 'foods to avoid' lists

Need to use IDDSI testing methods to check



6 SOFT & BITE-SIZED

Both elements are critical

Particle size

6 SOFT & BITE SIZED

Thumb nail blanches white

Fork Pressure Test

Adult

Child

Bite size

Soft enough to squash + come apart with *pressure from fork or spoon

***thumb nail needs to blanch white**

The diagram illustrates the IDDSI Level 6 testing methods. It includes a 'Thumb nail blanches white' test where a thumb nail is pressed against a piece of food. A 'Fork Pressure Test' shows a fork being pressed against a piece of food. A 'Bite size' reference shows a square of food with a side length of 15 mm. A red plus sign is placed between the testing diagrams and the softness criteria.

Consider wording as...

'Foods that are *often appropriate*'

rather than 'foods to include'



5 MINCED & MOIST



Level 5 Minced & Moist Food for Adults

What is this food texture level?

Level 5 – Minced & Moist Foods:

- ✓ Soft and moist, but with no liquid leaking/dripping from the food
- ✓ Biting is **not** required
- ✓ Minimal chewing required
- ✓ Lumps of 4mm in size
- ✓ Lumps can be mashed with the tongue
- ✓ Food can be easily mashed with just a little pressure from a fork
- ✓ Should be able to scoop food onto a fork, with no liquid dripping and no crumbs falling off the fork



Why is this food texture level used for adults?

Level 5 – Minced & Moist food may be used if you are not able to bite off pieces of food safely but have some basic chewing ability. Some people may be able to bite off a large piece of food, but are not able to chew it down into little pieces that are safe to swallow. Minced & Moist foods only need a small amount of chewing and for the tongue to 'collect' the food into a ball and bring it to the back of the mouth for swallowing. It's important that Minced & Moist foods are not too sticky because this can cause the food to stick to the cheeks, teeth, roof of the mouth or in the throat. These foods are eaten using a spoon or fork.

How do I test my food to make sure it is Level 5 Minced & Moist?

It is safest to test Minced & Moist food using the IDDSI Fork Drip Test **and** the IDDSI Spoon Tilt Test.

See videos of the IDDSI Fork Test and IDDSI Spoon Tilt Test at www.iddsi.org/framework/food-testing-methods/

IDDSI Fork Test

For **adults** the lump size is **4mm**, which is about the gap between the prongs of a standard dinner fork



IDDSI Spoon Tilt Test

Sample holds its shape on the spoon and falls off fairly easily if the spoon is tilted or lightly flicked
Sample should **not** be firm or sticky



Consumer handouts are available...



5 MINCED & MOIST



EXAMPLES of Level 5 Minced & Moist Food for Adults

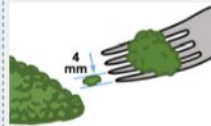
- * **Meat** served finely minced or chopped to 4mm lump size served in a thick, smooth, non-pouring sauce or gravy
- * **Fish** served finely mashed or chopped to 4mm lump size served in a thick, smooth, non-pouring sauce or gravy
- * **Fruit** served finely mashed or use a blender to finely chop it into to 4mm lump size pieces (drain any excess liquid)
- * **Vegetables** cooked, finely mashed or use a blender to finely chop it into to 4mm lump size pieces (drain any excess liquid)
- * **Cereal** served thick with small soft 4mm lumps. Any milk/fluid should not separate from the cereal. Drain any excess liquid before serving
- * **Rice** requires a sauce to moisten it and hold it together. Rice should **not** be sticky or gluey, and should **not** separate into individual grains when cooked and served. May require a thick, smooth, non-pouring sauce to moisten and hold the rice together
- * **NO REGULAR DRY BREAD due to high choking risk!**
See <https://www.youtube.com/channel/UCOISFDiwJROLSvviGvIqHA/featured?reload=0> for instructions on how to make a Level 5 Minced & Moist sandwich



See videos of the IDDSI Fork Test and IDDSI Spoon Tilt Test at www.iddsi.org/framework/food-testing-methods/

IDDSI Fork Test

For **adults** the lump size is **4mm**, which is about the gap between the prongs of a standard dinner fork



IDDSI Spoon Tilt Test

Sample holds its shape on the spoon and falls off fairly easily if the spoon is tilted or lightly flicked
Sample should **not** be firm or sticky



Minced & Moist food must pass both tests!

















5 MINCED & MOIST



For safety, please **AVOID** these food textures that pose a choking risk for adults who need Level 5 Minced & Moist Food

| Food characteristic | Example |
|--|--|
| Mixed thin + thick textures | Soup with pieces of food; cereal with milk |
| Hard or dry food | Nuts, raw vegetables (e.g. carrot, cauliflower, broccoli); dry cakes; bread; dry cereal |
| Tough or fibrous foods | Steak; pineapple |
| Chewy | Lollies/candies/sweets; cheese chunks; marshmallows; chewing gum; sticky mashed potato; dried fruits |
| Crispy | Crackling; crisp bacon; cornflakes |
| Crunchy food | Raw carrot; raw apple; popcorn |
| Sharp or spiky | Corn chips/crisps |
| Crumbly bits | Dry cake crumble; dry biscuits |
| Pips, seeds | Apple seeds; pumpkin seeds; white of orange |
| Food with skins or outer shell | Peas; grapes; chicken skin; salmon skin; sausage skin |
| Foods with husks | Corn, shredded wheat, bran |
| Bone or gristle | Chicken bones; fish bones; meat with gristle |
| Round, long shaped food | Sausage; grape |
| Sticky or gummy food | Nut butter; overcooked oatmeal/porridge; edible gelatin; konjac containing jelly; sticky rice cakes |
| Stringy food | Beans; rhubarb |
| Floppy foods | Lettuce, cucumber, uncooked baby spinach leaves |
| Crust formed during cooking or heating | Crust or skin that forms on food during cooking or after heating; for example; cheese topping; mashed potato |
| 'Floppy' food | Lettuce; cucumber; baby spinach leaves |
| 'Juicy' food | Where juice separates from the food piece in the mouth, for example watermelon |
| Large or hard lumps of food | Casserole pieces larger than 4mmx4mmx15mm; fruit pieces larger than 4mmx4mmx15mm |
| Extra Clinician notes | |

English as a second language? IDDSI Translations are available

| | Completed Translations | Available for Review | In Progress |
|---------------------|---|---|-------------|
| | Framework/ Descriptors | Testing Methods | |
| Farsi |  |  | |
| French (Canada) |  |  | |
| French (France) |  |  | |
| Italian |  |  | |
| Norwegian |  |  | |
| Portuguese (Brazil) |  |  | |
| Swahili |  |  | |

Available for review:

- Arabic
- Chinese (simplified)
- German
- Greek
- Russian
- Spanish
- Vietnamese

In progress:

- Japanese
- Thai
- Turkish
- Dutch
- Hebrew
- Urdu
- Zulu
- Slovenian
- Chinese (Hong Kong)
- Chinese (Taiwanese)
- Marathi

Risk management: Change in pre-packaged labels

- A change over time period for product labelling is to be expected
- For other legislated label change initiatives (e.g. allergens, Country of Origin), a two year time frame is most common
- Many manufacturers have indicated they are changing their labels to be ready for 1 May 2019
- Label changes are voluntary, in the same way that packaging accessibility changes to meet Arthritis Guidelines are voluntary

Manufacturers and Industry would like you to contact them directly for information on when their product labels will change



6 **SOFT & BITE-SIZED**

5 **MINCED & MOIST**

4 **PUREED**

3 **LIQUIDISED**

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

Sticker jpegs available from
www.iddsi.org

**Labels & Triangles
for download**

4 **EXTREMELY THICK**

3 **MODERATELY THICK**

2 **MILDLY THICK**

1 **SLIGHTLY THICK**

VISIT the IDDSI YouTube Channel

IDDSI webinars and recorded webinars

www.iddsi.org/resources



New IDDSI Webinar Announced

October 16 at 9am PDT & October 29 at 4pm PDT, 2018

Title: Myths & Truths about Modifying Foods for IDDSI Levels

Presenters: Preston Walker & James Ball

Preston and James have been developing ideas in healthcare catering for over 10 years. Their collaboration has led to the establishment of Oak House Kitchen, based at Preston's family residential home in Greetham, England. Oak House Kitchen aims to improve the practical application of nutrition across many different diet restrictions. For many years they have been training chefs, care workers and healthcare professionals in how best to modify

foods for dysphagia. Their current focus in this field is on the transition to the IDDSI standards and have been working on how best to achieve this.

In this cooking-based webinar, Preston and James will show you how to modify foods to the IDDSI standards. They will show you a range of practical solutions to common problems across various foods. You will see that foods modified for dysphagia can be delicious, nutritious and look great!

If you missed any of our last webinar *Using the IDDSI Flow test in clinical practice: How thick is thick and does thickness really matter?* Presented by Carly Barbon SLP or any of our previous webinars – you can watch them on our [YouTube channel](#).

Register for Oct 16, 2018

Register for Oct 29, 2018

IDDSI Flow Test cards business card sized templates

IDDSI Food Test cards business card sized templates

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

Level 4: Use IDDSI fork-drip / spoon-tilt tests

Check your syringe: 0-10 ml scale = 61.5mm

10ml
8ml
4ml
1ml

4
3
2
1
0

© IDDSI 2017

1. Remove plunger

2. Cover nozzle with finger and fill 10ml

3. Release nozzle & start timer

4. Stop at 10 seconds

Turn over to check IDDSI level

© IDDSI 2017

5 MINCED & MOIST

CHILD 2mm

ADULT 4mm

Spoon Tilt Test

Particle size

Adult - 4mm

Child - 2mm

© IDDSI 2018

6 SOFT & BITE SIZED

Thumbnail blanches white

Fork Pressure Test

Bite size

Adult 15mm

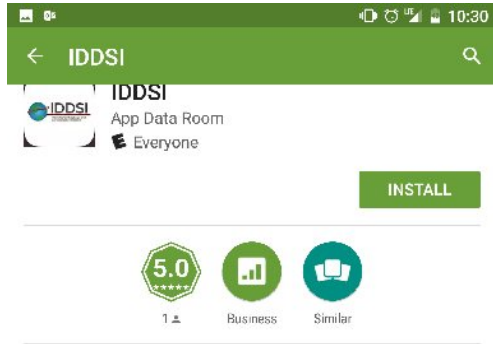
Child 8mm

© IDDSI 2018

Download the print ready documents for cards and posters and take to your local printer for printing

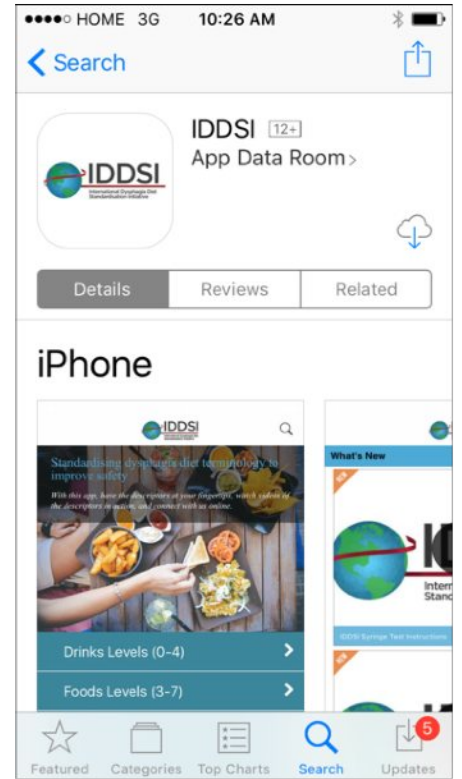
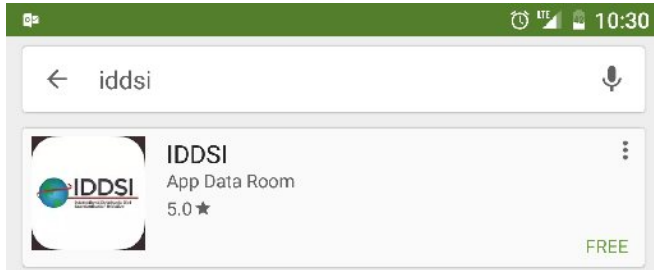
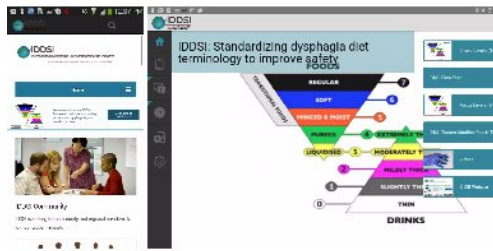
IDDSI on the Go: Free App

Android & iOS
- for Smartphones & Tablets



The IDDSI framework available for Android users.

READ MORE



Questions and Follow Up

For further information or to join the mailing list

Contact Australian IDDSI Project Officer: Dr Julie Cichero

Email: australia@iddsi.org