# 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 <u>www.iddsi.org</u> 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

REGULAR
EASY TO CHEW
SOFT A BITE-SIZED

PUREED

LIQUIDISED

MODERATELY THICK

LIQUIDISED

THIN

DRINKS

March 2019

Used with permission from IDDSI

IDDSI is a global standardized framework that provides terminology and definitions for texture modified foods and thick drinks

It is a continuum of 8 levels from zero to seven

The colour coding has been designed to reduce challenges for people with colour blindness

The terminology is culturally neutral

IDDSI includes descriptors, testing methods and evidence for 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

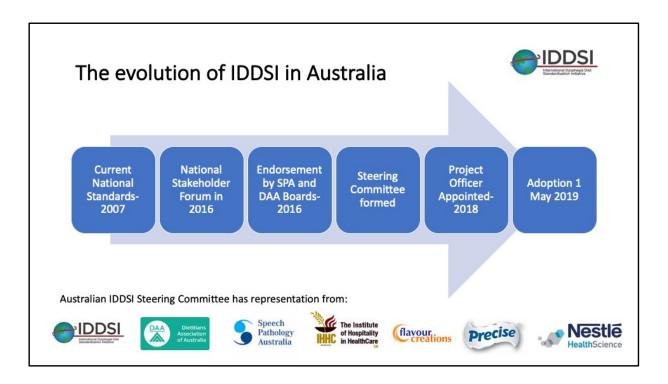






In lieu of government regulations, Professional Associations provide leadership on professional practice

The IDDSI Framework was formally adopted by the Dietitians Association of Australia, Speech Pathology Australia and the Institute of Hospitality in HealthCare in 2016 with a plan for implementation on 1 May 2019. Adoption of the IDDSI framework is voluntary, in the same way that the adoption of the Australian standardized terminology was voluntary. In lieu of government regulations, Professional Associations provide leadership on professional practice.

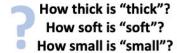


The steps for the introduction of IDDSI in Australia is shown in this slide. The members of the Australian Steering Committee are shown along the bottom of the slide



There are a couple of key reasons for changing from the Australian Standards. Whilst evidence based, these were published more than 10 years ago, and the new IDDSI Framework has conducted a series of systematic reviews and stakeholder surveys to ensure that it uses current, evidence-based best practice. The Australian standards do not have an ability to classify thick drinks that flow through an infant teat. This was identified by Australian clinicians as a thickness level that was needed when the uptake of the Australian standards were evaluated in 2012. IDDSI uses more than descriptions. It uses specific measures that aim to minimize the need for subjective judgements to increase safety.

### Objective measures



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



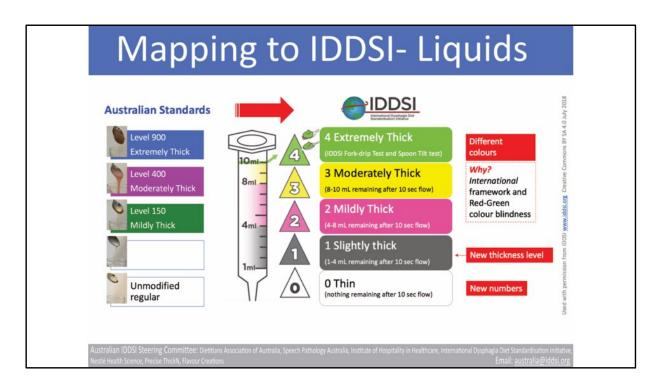
- Tests chosen to be simple, quick, portable, reliable.
- It's possible to perform these at any time...
   but testing won't be needed every time!
- Tests are most useful for:
  - · Initial staff training
  - Auditing
  - · Industry use to develop & test products
  - · Kitchen use to develop & test recipes



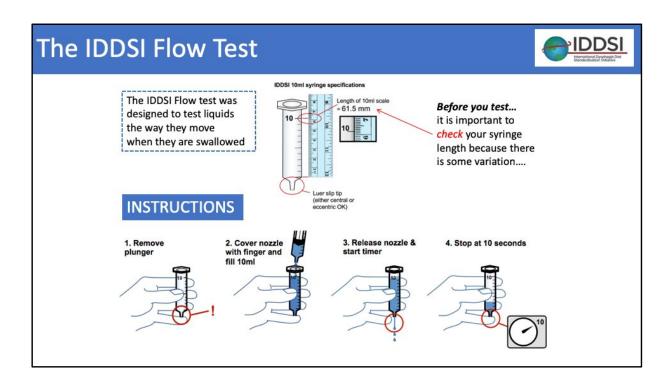
July 2018

Used with permission from IDDSI

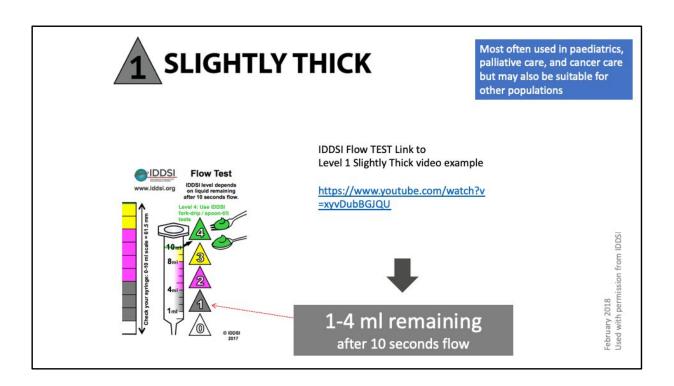
IDDSI uses specific measurements and testing methods that minimize the need for personal subjective judgement. Tests are simple, chick, portable and reliable. While it's possible to perform these tests at any time, they don't need to be used every time. Tests are most helpful for initial staff training, auditing, and when developing and testing recipes or products.



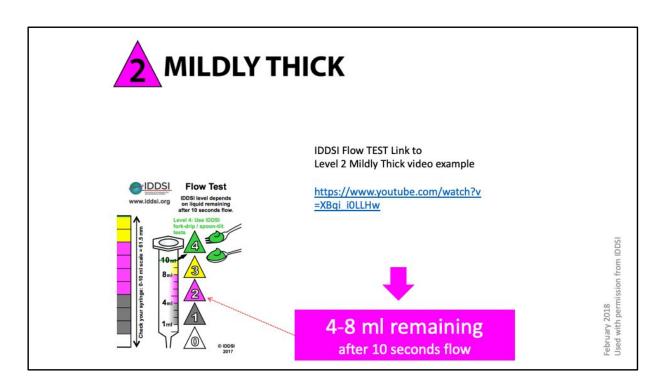
This slide shows the key changes in moving from the Australian standards to IDDSI. There are colour changes associated with thick drinks. IDDSI chose a colour system overall that reduced challenges for people with red-green colour blindness. There is a new thickness level called Level 1 Slightly Thick. The numbering system changes to become a more conventional 0,1,2,3,4 rather than 150, 400, 900



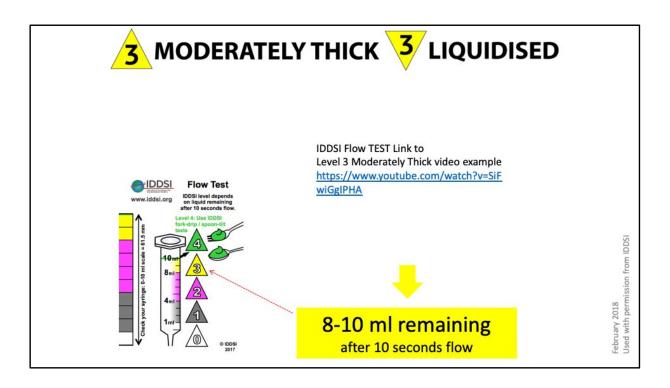
For testing of liquids and drinks IDDSI recommends using the IDDSI Flow Test. A 10 mL syringe is used to perform the IDDSI flow test, please make sure have the correct syringe by making sure that it measures 61.5mm from the zero line to the 10ml line. If it doesn't have these measures, it will not give accurate information about the IDDSI thickness level. To perform the IDDSI flow test, You'll need an empty syringe, a cup or container and a timer. Cover the opening at the top of the syringe with your finger. Fill the syringe with fluid to the 10ml mark. It is best to do this with another syringe. Release the nozzle and start the timer. Allow the liquid to flow for 10secs, then cover the nozzle and read the amount remaining in the syringe to work out the IDDSI thickness level.



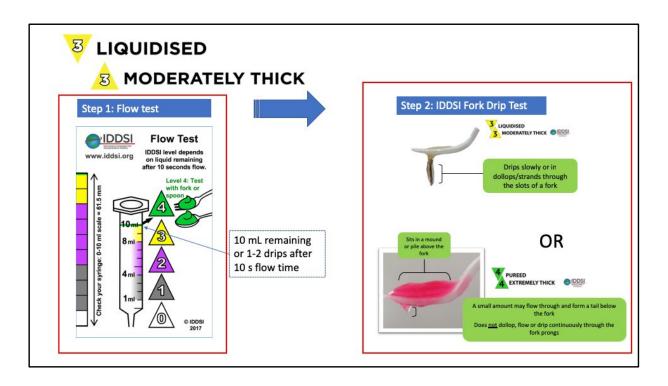
Level 1 Slightly thick is most often used in paediatrics, palliative care and cancer care but may also be suitable for use in other populations. For Level 1 Slightly Thick, there will be 1-4 ml remaining in the syringe after 10 seconds of flow.



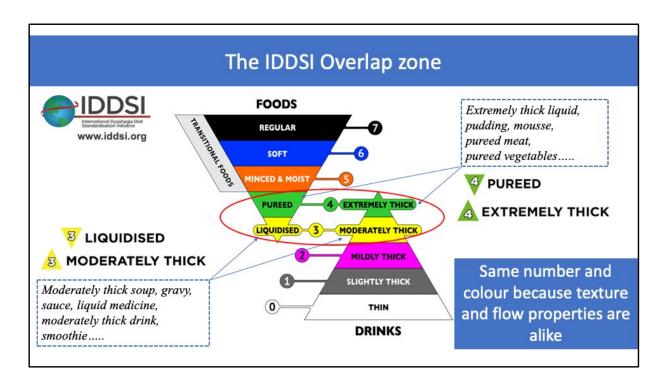
For Level 2 Mildly Thick there will be 4-8 ml remaining in the syringe after 10 seconds of flow



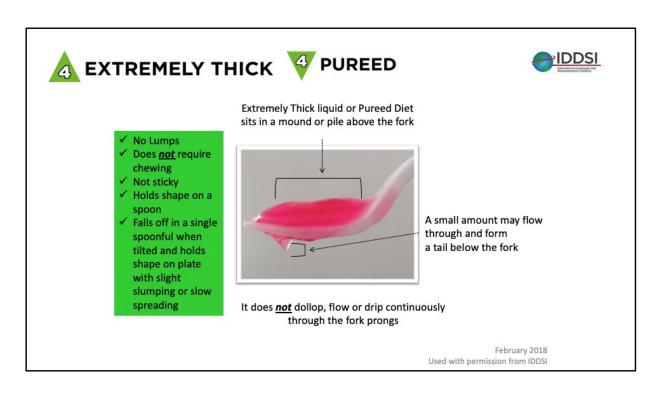
For Level 3 Moderately Thick or Liquidised thickness, there will be 8-10 ml remaining in the syringe after 10 seconds of flow

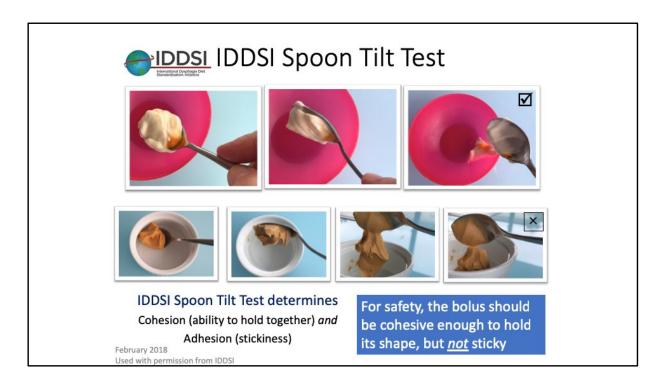


If you find you have 10 ml remaining or just one or two drips after 10 seconds of flow, move to the IDDSI Fork Drip Test. The liquid is level 3 if it drips slowly in dollops or strands through the prongs of a fork when you drag the fork up through the liquid. You cannot eat a moderately thick liquid with a fork because it drips through. If the sample holds on the fork with a mound above the fork and a small tail below the fork and does not dollop or drip continuously, then it is a level 4 Extremely Thick or puree sample. You can eat Level 4 Extremely Thick or puree with a fork.

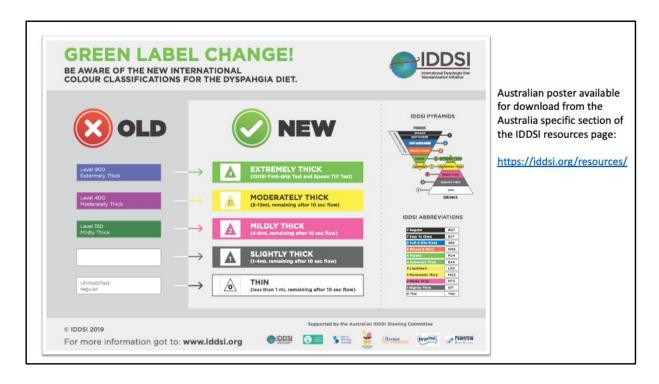


The overlap zone in the middle of the IDDSI pyramids share the same number and colour because the texture and flow properties are alike. Level 3 liquidized has similar flow properties to moderately thick drinks. Level 4 puree has similar texture and flow properties to extremely thick drinks.



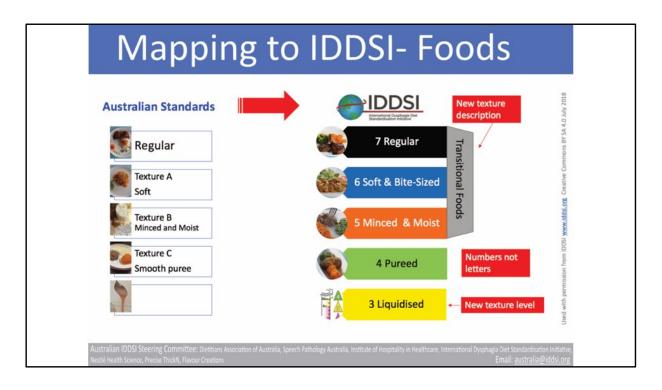


Here are two examples of the samples being tested with the Spoon Tilt Test. For safety the bolus should be cohesive enough to hold its shape, but not sticky. A sticky bolus can adhere to the roof of the mouth or teeth and cause a choking risk.



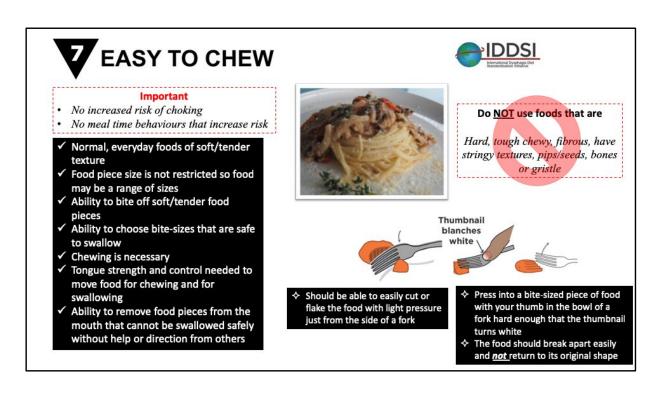
## What do we do with thick fluid recipes we currently use?

- 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



For foods the major changes from the Australian standards are that there are now numbers rather than letters. There is a new texture level – Level 3 Liquidised. There is a new texture description – transitional foods





### EASY TO CHEW



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

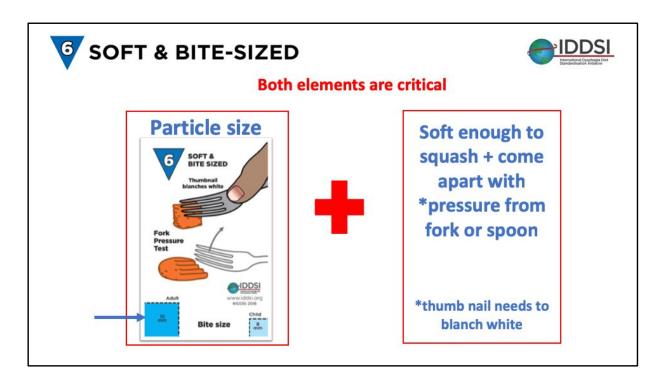
It is **NOT** appropriate if there are mealtime behaviours that make eating unsafe.

 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.

	Unmodified		Most Modified
Australian Guidelines Texture A	Unmodified - Regular Foods	Texture A – Soft Texture B – Minced and Moist	Texture C – Smooth Pureed
Soft — Atherton, 2007,	NAME	TEXTURE A – SOFT	
Nutrition & Dietetics, 64, S53-	Description	Food in this category may be naturally sof may be cooked or cut to alter its texture	t (eg ripe banana), or
S76	Characteristics	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 Special Notes (page S72)	
<ul> <li>NO CHANGE to particle size</li> <li>IDDSI Fork pressure test</li> </ul>	Testing Information	Targeted particle size for infants and child for adults and children over 5 years or equ tracheal size)      Targeted particle size for children over 5 years.	al to 0.8 cm (based on

This slide shows the Australian Texture A guidelines. There is no change to the particle size, but there is now the IDDSI Fork Pressure Test for softness







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

### 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

Deaths of people with
disability in residential care
2012-2013, NSW
Ombudsman, 2015

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)

Sticky rice cake, steamed rice, bread, meat, fish, fruit,
candy. Konjac mini-cup jelly

Sandwiches) crepes, carrot, steak, cheese, dim sims

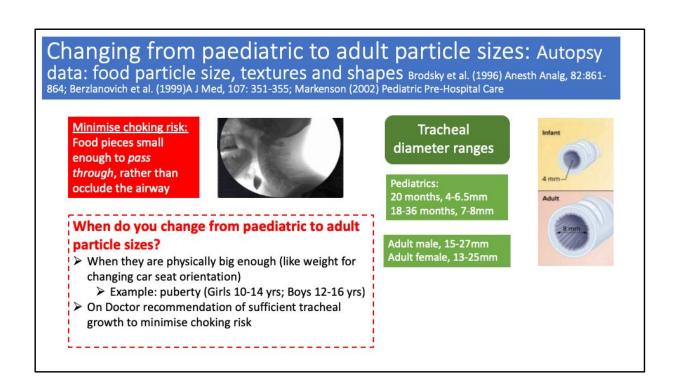


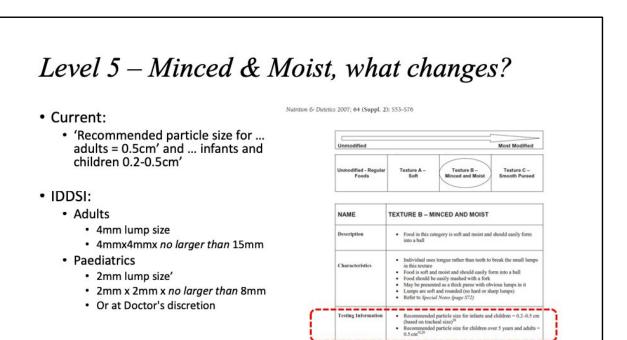
## What if our patients are already eating bread and sandwiches?

#### Answer:

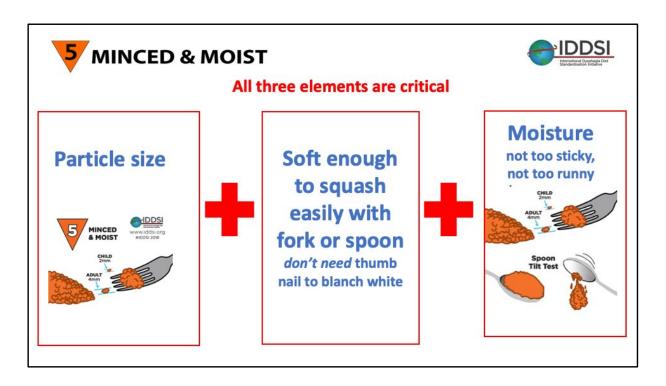
If they have been assessed as 'safe' by a speech pathologist for bread and sandwiches, then these can continue to be included.

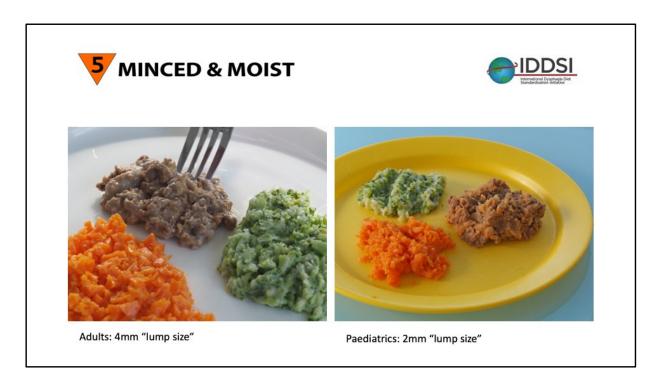
 The Australian guidelines always had them coded for inclusion only 'after clinical assessment', <u>not</u> as a <u>regular inclusion</u> for Texture A - Soft











These images show the particle sizes of different foods (carrots, broccoli and beef)

### Better images to educate about presentation



These images are designed to show that minced food can be presented in an appealing way

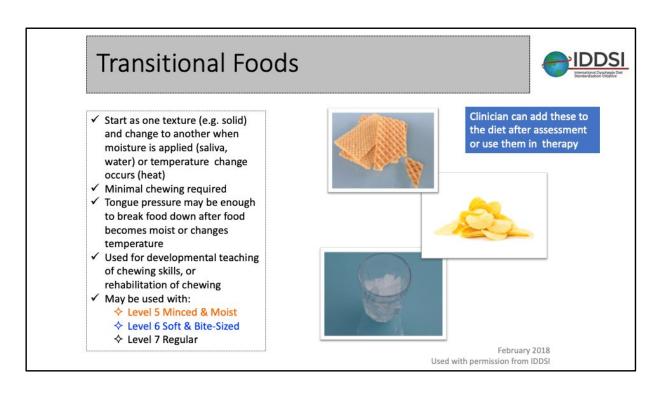
**Q:** For Level 5 Minced & Moist, why does the IDDSI Framework say '4mm lump size' and the audit sheet say 'equal to or less than 4mm and no longer than 15mm'? \*[adult particle size example]

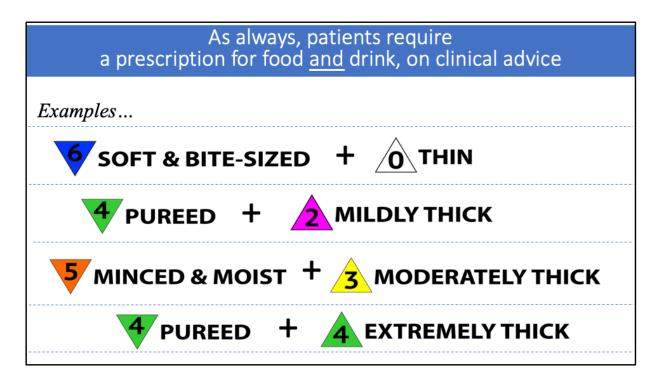
- $^{ullet}A$ : The framework document states '4mm lump size', however clarification was requested as people came to put the definitions into practice
  - Did the lumps need to be exactly 4mmx4mm?
  - If 'yes', rice (8-10mm long, but less than 4mm wide) or similar products would not be suitable without 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')



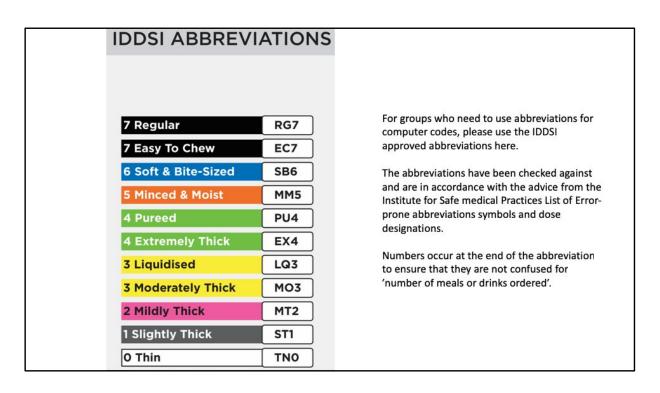


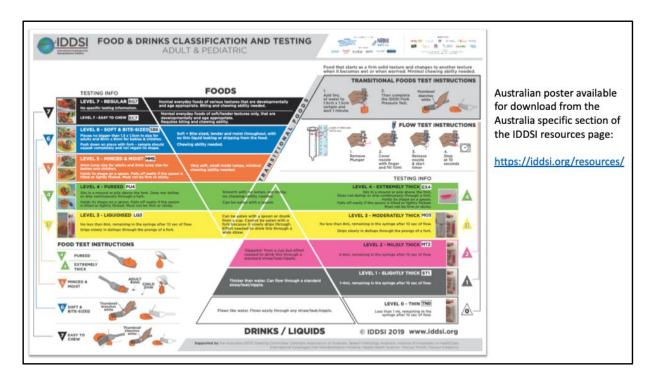
Examples of foods that would be appropriate for Level 5 Minced and Moist. Note they would need a sauce to moisten them. They are shown in this way purely to demonstrate particle size.

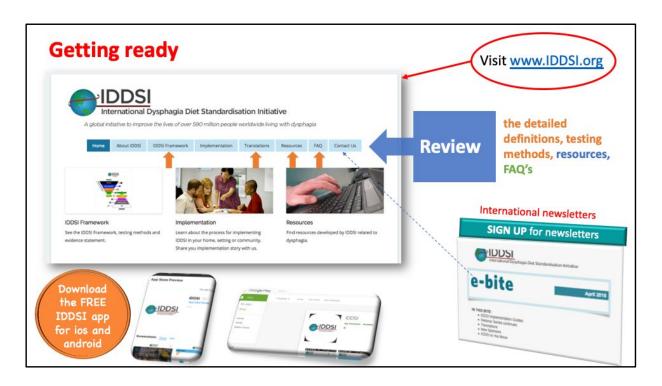




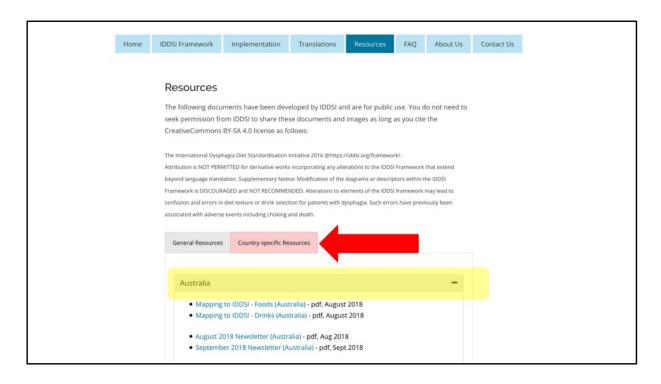
Note, patients who require Level 4 puree do NOT always require Level 4 Extremely thick drinks or vice versa. The speech pathologist will provide food texture and drink thickness recommendations. Dietitians will ensure that the food and drink meets nutrition and hydration needs.



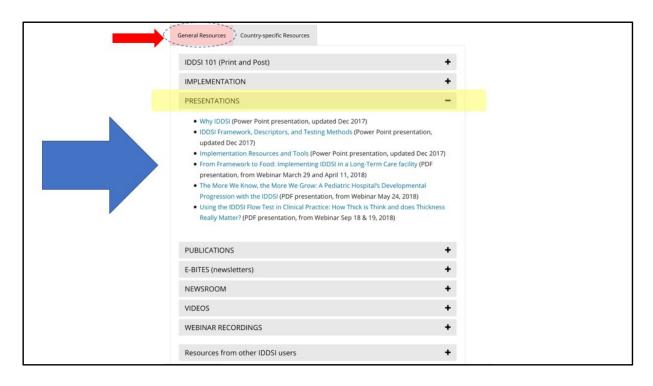




What can you do to get ready for IDDSI? Start with the website. There are many different tabs and new information or resources are regularly being added.



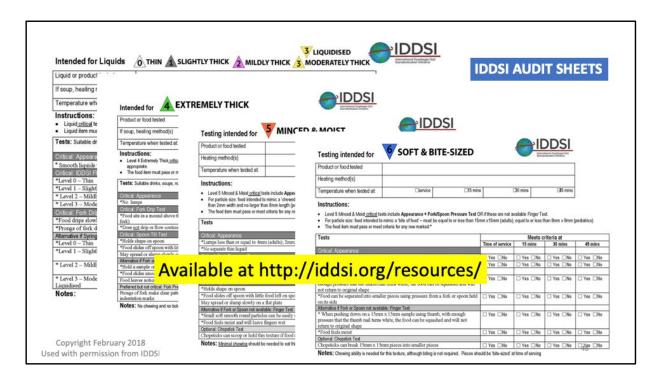
On the resources tab there is a country specific section – Australia has its own tab there. To look for Australia specific resources, look under this tab.



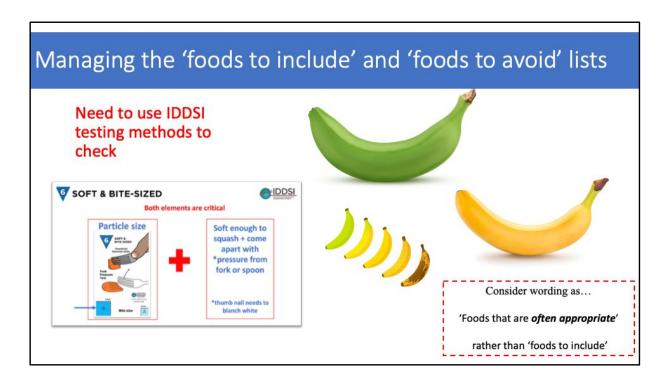
There are lots of other resources available. Please explore them



One easy way to get started is to look at your current foods and drinks, assess them using the IDDSI test methods and work out which items need modification. If a menu item 'fails' an IDDSI test, work with your chef and Dietitian to work out how to make the texture compliant.



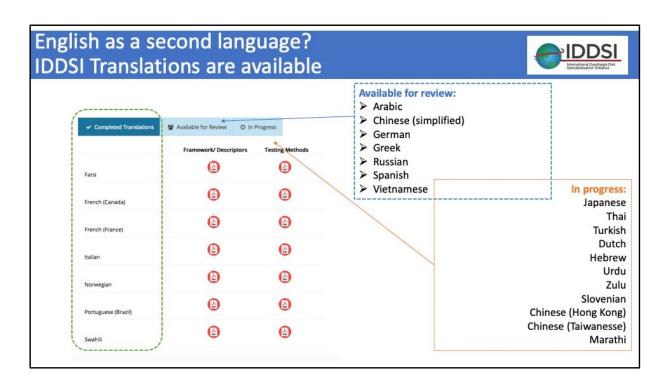
IDDSI has audit sheets available for download from the resources section of the website



IDDSI does not include lists of 'foods to include' or 'foods to avoid'. This is because a food can be compliant or non-compliant depending on how it is cooked, stored or even how ripe it is. Consider the two bananas in the picture. The green banana would be a choking risk, while the ripe banana when cut or mashed or pureed as appropriate would be safe.



IDDSI has produced consumer handouts for each IDDSI level for adult and paediatric people written in layperson friendly language. These are available from the resources section of the IDDSI website



If you have staff that speak English as a second language, please consider looking at the IDDSI translation to see if you can see the framework in their first language to help them understand the IDDSI Framework.

## 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



Labels have been developed to help with the transition process. These can be downloaded from the IDDSI website.

## **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

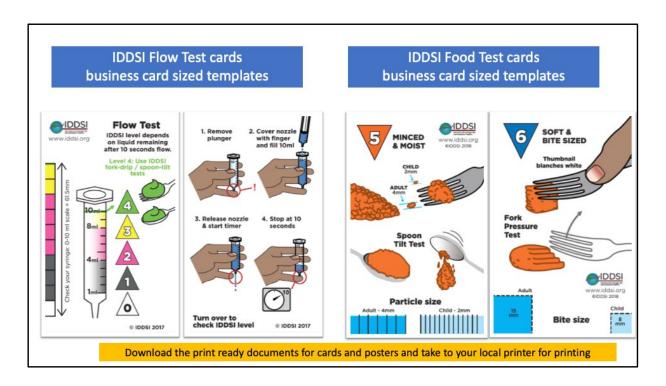
Title: Myths & Truths about Modifying Foods for IDDSI Levels

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.\*





For those who wish to have IDDSI on the go, the IDDSI App is now available for both iOS and Android devices. Visit the iOS app store or Google Play store to download the free IDDSI App. The descriptors and videos are all available within the App and the best part is that you don't even need Wifi or data to use it. This means that you can use it to talk about IDDSI wherever you are!



# Questions and Follow Up

For further information or to join the mailing list

Contact Australian IDDSI Project Officer: Dr Julie Cichero Email: <u>australia@iddsi.org</u>