International Dysphagia Diet Standardisation Initiative (IDDSI)
Australian Training slides
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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 (0-7). 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 both drink thickness and food texture levels.
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.
IDDSI uses specific measurements and testing methods that minimize the need for personal subjective judgement. Tests are simple, quick, 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.
Information as per slide
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.
information as per slide
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.
No particle size restrictions
Includes all textures
Chewing is necessary
Tongue strength and control needed to move food for chewing and for swallowing

Information as per the slide
Information as per the slide
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.
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.
Information as per slide
6 SOFT & BITE-SIZED

Both elements are critical

Particle size

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

*thumb nail needs to blanch white

Information as per slide
Information as per slide
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


<table>
<thead>
<tr>
<th>Source</th>
<th>Example Foods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irwin, 1977, <em>JAMA</em>, 237, 2744-2745</td>
<td>Cheese, lima beans, peas, semi-solid cereal, <strong>bread</strong>, orange</td>
</tr>
<tr>
<td>Eikberg &amp; Feinberg, 1992, <em>Dysphagia</em> 7, 205-208</td>
<td>Solis 40% (<strong>meat</strong>, poultry), complex bolus 14% (hamburger, hot dog, sandwich, meat, potato, meatball, spaghetti, chicken soup, pizza), small hard solid (peanut, popcorn, hard candy), dry (<strong>bread</strong>, toast, cracker, donut, breadstick), semi-solid (mashed banana, cooked egg, ground meat)</td>
</tr>
</tbody>
</table>

Information as per slide
## Autopsy data continued

<table>
<thead>
<tr>
<th>Reference</th>
<th>Foods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dolkas 2006, J Forensic Sci, 52, 176-179</td>
<td><strong>Meat</strong> (1.2% - esp. steak and chicken), peanut butter &amp; jelly (<strong>sandwich</strong>) (4%); All other foods (~2% - carrot, pancakes, broccoli, burrito, hot dog, meat ball, pizza, toast, hamburger, shrimp and others)</td>
</tr>
<tr>
<td>Food Safety Commission of Japan, 2010</td>
<td>Sticky rice cake, steamed rice (<strong>bread</strong>, <strong>meat</strong>, fish, fruit, candy, Konjac mini-cup jelly)</td>
</tr>
<tr>
<td>Deaths of people with disability in residential care 2012-2013, NSW Ombudsman, 2015</td>
<td><strong>Sandwiches</strong> - crepes, carrot, <strong>steak</strong>, cheese, dim sims</td>
</tr>
</tbody>
</table>

Information as per slide
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
Information as per slide
Level 5 – Minced & Moist, what changes?

• 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

Information as per slide
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

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

Small particle size
4mm for adults
2mm for children
Information as per slide
These images show the particle sizes of different foods (carrots, broccoli and beef)
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]*

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’)

Information as per slide
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.
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

Information as per slide
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.
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'.
Information as per slide
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

Information as per the slide
Labels have been developed to help with the transition process. These can be downloaded from the IDDSI website.
Information as per the slide
Information as per the slide
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: australia@iddsi.org

Information as per slide