Developing a common language for dysphagia diets: an international inter-professional initiative.

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Introduction
It is estimated that about 8% of the general population worldwide experience difficulty swallowing (dysphagia). Children and adults with cerebral palsy and other developmental disabilities represent a sub-population that has a high incidence of eating, drinking and swallowing difficulties. Modification of food textures and liquid consistency is one of the key strategies for managing dysphagia. Descriptions and definitions of the specific food or liquid modification can vary between facilities, regions and countries. This presents a potential source of miscommunication between care professionals and result in significant safety issues.

Although a number of regions and countries have developed standardised definitions and descriptions of modified food textures and liquid consistencies, there is no internationally recognized “language” for modified dysphagia diets. (1)

An agreed upon common language would enhance communication amongst people with dysphagia, clinicians, researchers and manufacturers to improve quality and safety and may set the stage for productive clinical and research partnerships across sectors.

IDDSI Initiative
In 2012, the International Dysphagia Diet Standardisation Initiative (IDDSI) was launched with the goal of developing a common language for dysphagia diets (1). IDDSI was developed to achieve the iniative’s goal of developing a common language for dysphagia diets.

Systematic Review

Goal: To identify quality evidence regarding differences in swallowing with textured modified foods and liquid consistencies across all ages and populations and to highlight any specific gaps in the research.

Search strategy: Literature searched from 1985 to January 2013. Seven search engines using search terms related to food oral processing and dysphagia. “Eating and feeding disorders of childhood” included to target pediatric populations. Ten international reviewers.

Findings:
Thickened liquids do reduce aspiration risk in adult and pediatric populations however thicker liquids also increase the risk of “post-swallow” residue.

There was insufficient evidence to specify rheological boundaries or guide practice in respect to food texture modification.

Major gaps exist in the research regarding the impact of liquid consistency and food texture on swallowing physiology in healthy and those with disability.

Pediatric Findings:
Only three studies were found (which met quality criteria) describing swallowing or oral processing in children. Identified studies looked at swallowing in premature infants [2], a second [3] explored differences in chewing behaviors in infants aged 6 months to 2 years of age. The third study explored oral processing behaviors in two groups of typically developing girls aged 5 and 8 years old, as well as a control group of healthy adult women (4).

There is a serious lack of carefully designed studies exploring the impact of bolus consistency on swallowing and oral processing in children who are healthy or who have a disability

International Stakeholder Survey

Goal: To determine current use of standardised terminology, the number, type and schemes of terms used for modified food and liquids and the frequency and methods used for testing textures and consistencies.

Method:
Four stakeholder surveys developed using SurveyMonkey™ and disseminated to the international community through the internet. Responses from 33 countries. Most responses from North America and the UK. Least responses from Africa, South America, the Middle East and Asia.

Stakeholder Groups:
- Patients, carers and organizations supporting individuals with dysphagia
- Health Professionals (HP)/food services
- Researchers
- Industry

Summary of results:

<table>
<thead>
<tr>
<th>Use of modified terminology:</th>
<th>Use of modified terminology:</th>
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<tbody>
<tr>
<td>Pediatric (n=1900)</td>
<td>Pediatric (n=153)</td>
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<tr>
<td>&gt;70%</td>
<td>&gt;80%</td>
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<tr>
<td>57% (liquids)</td>
<td>&gt;80%</td>
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Number of Levels used by HP and food services for TM foods and Thickened Liquids
- TM Foods: > 90% used 3 or more levels of TM foods
- Thickened Liquids: >80% used 2-4 levels of thickened liquids

Trend for HP working in pediatrics to use more levels for both TM foods and thickened liquids.

Most common terms used by HP and food services to describe TM foods and Thickened Liquids
- Foods: regular, chopped/diced, minced, soft, pure.
- Pediatric specific terms also included lumpy puree, easy to chew and bite and dissolve/meltable.
- Liquids: thin/normal, nectar, honey and pudding.

Next Steps
- Integrate systematic review data with survey results to inform and develop a draft first set of international standardised terminology.
- Consultation and feedback on the draft terminology will be sought from stakeholders with ongoing review and refinement.
- Recruitment of local and regional participants to communicate updates and facilitate consultation and feedback.
- Final proposed international standards submitted for publication.

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IDDSI, Laminating projects, P.O. Box 62000, Suite 200, Victoria, BC, V8S 9Z8

Registered Charity # 852157689

Eating and feeding disorders of childhood

Food textures and liquid consistencies

HP/food services

Use of modified terminology:

Liquids:

Thin/normal, nectar, honey and pudding

IDDSI Initiative website www.iddsi.org was established to provide updated information and to offer opportunities for participation in the initiative.