

EATSAFE SG HANDBOOK (Ver 2.0)

Nov 2023

Contents

Intent of Document	3
Executive Summary	4
Need for Review: Dysphagia Diet Landscape in Singapore	5
International Dysphagia Diet Standardisation Initiative (IDDSI) Framework	6
Singapore Dysphagia Diet Standardisation Committee	7
EatSafe SG Implementation Framework	8
Current State Mapping	8
Recommendation from the Committee	8
1. EatSafe SG Handbook and “Go-Live” Date	9
Objective	9
Aligning National “Go-Live” Date	9
Implementation Guide	9
2. EatSafe SG Resource List for Food Preparation	10
Objectives	10
3. EatSafe SG Training Framework	11
Objective	11
Target Training Group	11
Training Approach	11
EatSafe SG Master Trainer	12
EatSafe SG Trainers	12
Institutional Champions	13
EatSafe SG Training Framework	13
Training modality 1: Visual Collaterals	15
Training modality 2: Theory via E-learning	15
Training modality 3: Hands-on training	15
<i>EatSafe SG Trainers Alignment Workshop</i>	16
<i>Basic and Advanced Hands-on Workshops</i>	16
<i>Food Preparation Skills Class</i>	17
Adherence to Standardised Hands-On Training Syllabus	18
Long Term Plan for Training Framework	18
4. Minimum Diet Levels Provided and Conversion Table	19

Objective	19
Minimum Diet Levels Provided	19
Conversion Table for Safe Care Transition	19
Dysphagia Diet Orders	19
Enablers Toward National Implementation of EatSafe SG	21
EatSafe SG Communications and Outreach Strategy	21
Standardised E-Learning Development	21
Change Management	21
Changes to Clinical Documentation and Meal Ordering Systems	22
Useful Resources	22
Acknowledgements	23
References	26

Intent of Document

This document is intended as a guide and resource for organisations tasked to implement the International Dysphagia Standardisation Initiative (IDDSI) Framework in their organisations. It is relevant for management, administrators, and staff in all care settings.

This document will be updated regularly. Please check the <https://www.moh.gov.sg/hpp/allied-health-professionals/eatsafe-sg> for the latest version.

Executive Summary

Dysphagia (swallowing difficulties) can occur due to medical conditions like, stroke, degenerative diseases and, head and neck cancer. It is often associated with malnutrition, dehydration, chest infection and in some cases, even death. Speech Therapists are healthcare professionals trained to assess and provide necessary rehabilitation and/or strategies to help patients manage this impairment. Modification of food texture (e.g., pureed diet) and fluid thickness is commonly recommended.

Currently, different healthcare institutions in Singapore use different terminologies to refer to texture-modified diets and fluids. Varied terminologies for diets and fluids impose great safety concern especially in the long-term care settings where residents are referred from different healthcare institutions. With the lack of a standardised diet and fluid terminology framework, recommended dysphagia diets are mapped to actual diets based on the discretion of admissions staff. This might inadvertently result in wrong diets being served and put the patient at risk of choking.

In view of this safety risk to patients, a standardised diet and fluid terminology framework is needed. The MOH Allied Health Panel for Speech Therapy (ST) comprising Heads of ST departments in the Public Healthcare Institutions (PHIs) recommended adopting the [International Dysphagia Diet Standardisation Initiative \(IDDSI\) Framework](#), which is a standardised framework of diet and fluid terminologies and descriptors to describe texture modified foods and thickened fluids. A [Singapore Dysphagia Diet Standardisation Committee](#) was formed to recommend plans to implement this standardised framework to improve patient safety by reducing ambiguity when communicating diet or fluid related information across the care continuum.

The Committee has recommended a four-pronged approach: [EatSafe SG Implementation Framework](#) in implementing the IDDSI framework in Singapore.

Need for Review: Dysphagia Diet Landscape in Singapore

Dysphagia is a medical term that refers to swallowing difficulties. It can occur due to medical conditions (e.g., stroke, Parkinson’s Disease and head and neck cancers). Conservative estimates suggest that dysphagia affects approximately 8% of the world’s population (Reference 2). The prevalence of dysphagia increases with advancing age.

In Singapore, it is estimated that there are between 58,000 to 174,000 individuals older than 65 years living with dysphagia in the community (Reference 1). Treatment for dysphagia usually involves rehabilitating the swallowing function and using compensatory methods (e.g., diet modification, safe swallowing strategies) to reduce the risk of choking, or aspirating food or fluid. Hence, provision of texture-modified foods (e.g., pureed diets) and thickened fluids have become routine in dysphagia management. These compensatory strategies help to ensure that people with dysphagia can manage diet and fluids safely and are able to receive adequate nutrition.

In 2018, the MOH Nursing Home Dietitian and Speech Therapy Workgroup was set up to review and develop a model of care for Dietitian and Speech Therapy services in Nursing Homes (NHs). NH staff focus group discussions and feedback from workgroup members highlighted that there are inconsistent terminologies used for dysphagia diets across acute hospitals, community hospitals and Intermediate Long-term Care facilities (Table 1) causing confusion amongst the NH staff. Confusion may result in wrong diets served which may in turn compromise the safety of residents/patients who have dysphagia and are restricted to a specific dysphagia diet and fluid consistency.

For example, a Speech Therapist from an acute hospital recommends a patient to be on finely minced diet, which actually refers to a diet that is smooth in consistency and is lumps free. This same patient then transfers to a nursing home where the same diet label is used to refer to a diet which has food with small lumps and requires some chewing.

Variation in the dysphagia diet terms has given rise to confusion and errors in provision of diet textures when patients transfer across settings and institutions. This confusion **puts patients at risk of choking or aspirating** from food or fluids (Reference 2).

Table 1: Variation of Dysphagia Diet Terminologies in Singapore Across Healthcare Institutions

Healthcare Institutions - acute hospitals, community hospitals and Intermediate Long-term Care facilities (ILTCs)											
Diet Types	A	B	C	D	E	F	G	H	I	J	
Dysphagia Diet Terminologies	Diet Type 1	Blended (Pureed)	Blended diet	Pureed diet	Puree diet	Finely minced diet	Pureed diet	Pureed diet	Blended texture	Blended diet	Pureed diet
	Diet Type 2	Finely minced (Soft and moist)	Minced diet	Minced diet	-	Chopped diet	Porridge and chopped Sides	Minced diet	Soft moist texture	Finely minced (fish, egg, tofu)	Minced diet
	Diet Type 3	Chopped (Easy to chew)	Chopped diet	Soft diet	Easy chew	-	-	Soft and chopped diet	Easy chew texture	Finely minced (meat), coarsely minced	Soft diet
	Diet Type 4	-	Soft diet	-	-	Soft diet	Soft diet	Regular soft diet	-	Soft DOC	-
	Diet Type 5	Regular	DOC	Regular diet	-	DOC	DOC/Full diet	Regular diet	Regular texture	DOC	Regular diet

International Dysphagia Diet Standardisation Initiative (IDDSI) Framework

The IDDSI Framework is a globally standardised framework of diet and fluid terminologies and descriptors to describe texture modified foods and thickened fluids used for individuals with dysphagia (Reference 4)

It was published in 2015 and was **developed by a multi-professional panel made up of members from 10 different countries and all experts in their field** (i.e., nutrition and dietetics, food service, speech therapy, occupational therapy, physiotherapy, food science, mechanical engineering and research). This panel conducted an international survey in 2013 which revealed that 54 different names were used to describe texture-modified diets across 33 countries (Reference 3).

The IDDSI framework was developed using a process that follows key elements of evidence-based guideline development including those recommended by internationally recognised organisations like the World Health Organisation (WHO) and National Health and Medical Research Council of Australia (NHMRC). This framework (Diagram 1) consists of a continuum of 8 levels (0-7) to describe food textures and drink thickness.

The IDDSI framework was launched in 2015 and to date, **51 countries have endorsed and adopted or are in the process of adopting the framework.**

Diagram 1: International Dysphagia Diet Standardisation Initiative (IDDSI) Framework



In 2019, The MOH Allied Health Panel for Speech Therapy (ST) recommended the implementation of IDDSI in Singapore, with the aim to:

- improve patient safety;**
- improve communication** within and between healthcare professionals, healthcare providers and patients by reducing misunderstandings and ambiguity when communicating diet or fluid related information; and
- adopt standardised diet and fluid labels and descriptors when conducting and publishing research that is aligned to an international framework.

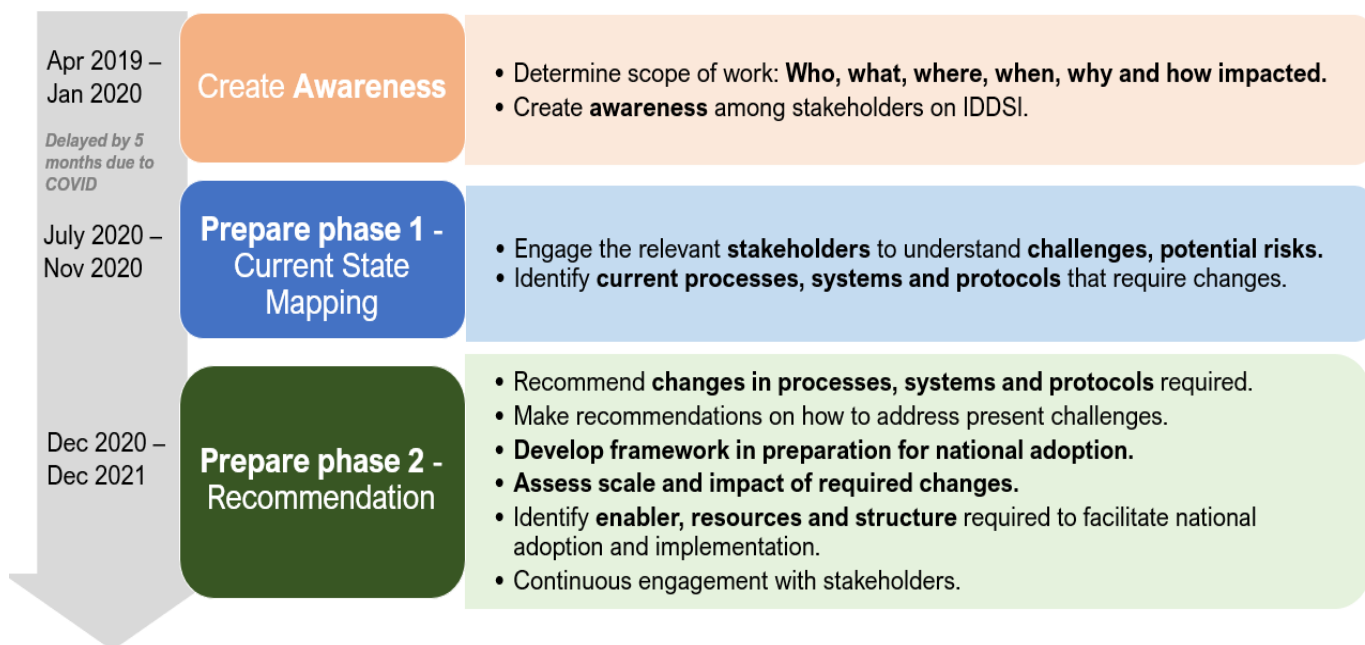
Singapore Dysphagia Diet Standardisation Committee

In 2020, the Singapore Dysphagia Diet Standardisation Committee was appointed by Director of Medical Services, Ministry of Health. It comprised **Speech Therapists, Dietitians, Nurses, Agency for Integrated Care (AIC) representatives and key stakeholders who are involved in the recommendation and preparation of diets in healthcare institutions** (refer to [Acknowledgements](#) for the composition of the Workgroup). The committee provided the platform for identifying the current state, evaluating existing diet terms and descriptors, recommending the national standard and proposing recommendations for implementing the standardised terms and descriptors nationally ([Diagram 2](#)).

Over a period of 2 years, the committee had:

- Identified and analysed processes, gaps, potential risks in the entire continuum of care from acute hospitals to the community and nursing homes and made recommendations on how to address them.
- Engaged the relevant stakeholders to understand challenges in implementing a standardised dysphagia diet framework.
- Proposed recommendations for implementing this framework.
- Identified enablers, resources and structures needed to help with the implementation of such a framework.

Diagram 2: EatSafe SG Roadmap



EatSafe SG Implementation Framework

Current State Mapping

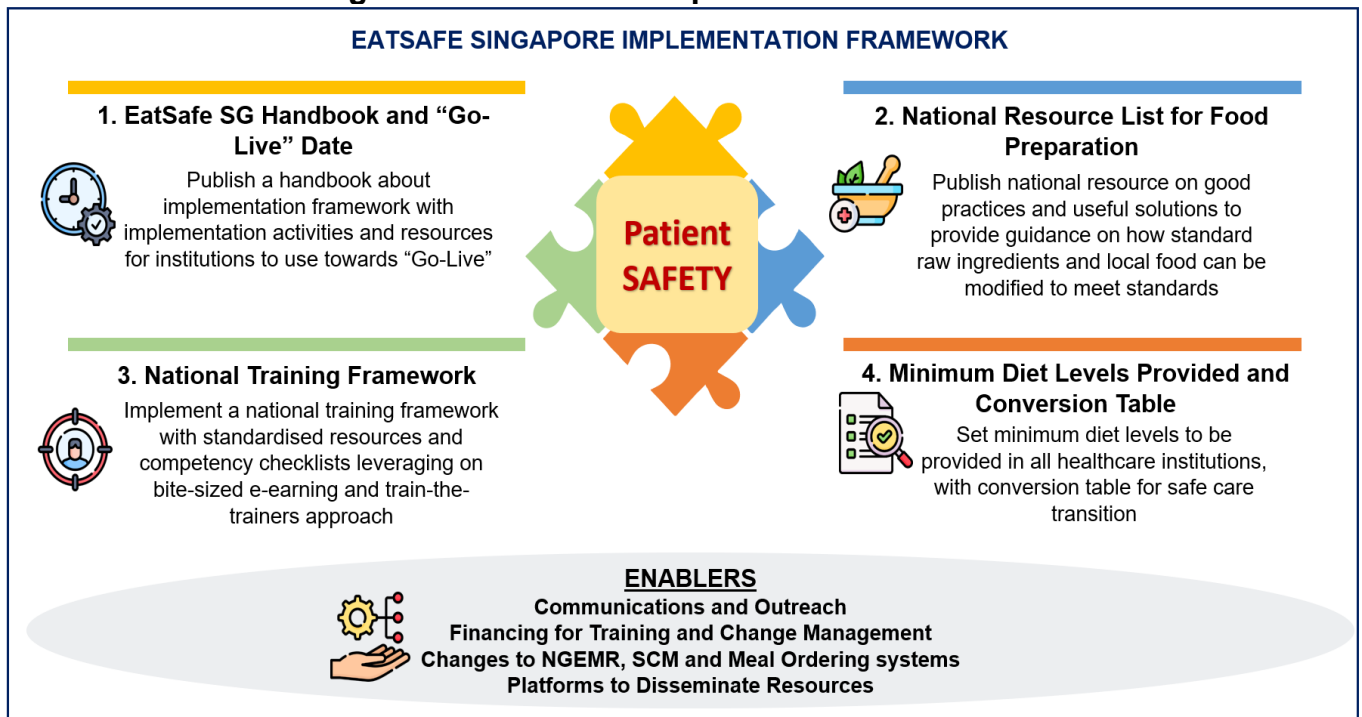
Through current state mapping by committee members, **widespread variations** were noted amongst institutions on the care continuum. Public healthcare institutions were at varying stages of readiness in implementing the IDDSI framework with varying support from their stakeholders. Institutions also reported varying difficulties in achieving the desired diet textures to meet the specifications for certain foods at the various IDDSI diet levels. Training approaches to support IDDSI implementation were also varied.

MOH conducted a survey with NHs to gather more accurate information about kitchen operations and diets served in the long-term care sector. The survey results showed **huge variations in the kitchen operations**, from small in-house kitchens to outsourcing of meals to vendors. Diets were also being modified in varied ways which included ward-based diet modification, bedside diet modification and modification carried out in the on-site kitchen. The number of dysphagia diet levels provided also varied but **most nursing homes were able to minimally provide 3 diet levels**.

Recommendation from the Committee

With the findings from current state mapping, the Committee recommended a **four-pronged approach** ([Diagram 3](#)) in implementing the IDDSI framework in Singapore (see below sections).

Diagram 3: EatSafe SG Implementation Framework



1. EatSafe SG Handbook and “Go-Live” Date

Objective

This EatSafe SG Handbook provides a **guide and resource for institutions implementing the IDDSI Framework**. It contains the following information.

- Implementation Guide and Timeline
- Food Preparation Resource List
- National Training Framework
- Information about Enablers

Aligning National “Go-Live” Date

To ensure all institutions in Singapore transit to the IDDSI framework in a coordinated manner, a national ‘Go-live’ plan with recommended activities spanning across 18 months has been set. This is to ensure that **by the end of 18 months, all institutions will be using the IDDSI framework** and, dysphagia diets of the same term will have the same characteristics.

Implementation Guide

To facilitate and guide institutions in the implementation process, an implementation guide and timeline has been developed. Institutional Champions are encouraged to use the guide to **plan change activities throughout the 18-months implementation phase within their own institutions based on the implementation guide**. The activities can be adapted to each institution’s needs.

The key tasks recommended during 18 months include:

1. Form EatSafe SG teams
2. Become familiar with IDDSI
3. Landscape scan and planning
4. IDDSI education and training
5. Diet and fluid preparation
6. System / process changes

Please visit MOH EatSafe SG website (<https://www.moh.gov.sg/hpp/allied-health-professionals/eatsafe-sg>) **to download the implementation guide.**

2. EatSafe SG Resource List for Food Preparation

Objectives

This EatSafe SG Resource List was developed by a sub-team of Chefs, Dietitians, Nurses, Speech Therapists and Food Operations staff from various care settings. It is a collation of useful resources to prepare dysphagia diet. It includes tips on how to prepare from raw ingredients, tools and techniques, etc.

Apart from providing a list of what raw ingredients are suitable for modification to the various IDDSI levels, the resource list maps common local food to IDDSI levels. Modification tips together with useful social media links have also been included. There is also a compilation of Frequently Asked Questions about the IDDSI levels and food preparation collated from meetings with Mr Peter Lam (Board Co-Chair of IDDSI, Registered Dietitian and Credentialed Food Service Executive in Vancouver, BC, Canada).

Please visit MOH EatSafe SG website (<https://www.moh.gov.sg/hpp/allied-health-professionals/eatsafe-sg>) to download the Food Preparation Resource List.

3. EatSafe SG Training Framework

Objective

Implementation of a national standardised diet and fluid terminology framework involves multiple stakeholders from numerous settings and institutions. To ensure standardised knowledge about the IDDSI framework, a national training framework has been established.

Target Training Group

The stakeholders include professionals who are involved in the care of patients with dysphagia, ranging from clinical staff to food preparation personnel. Stakeholders involved across public and private sectors include:

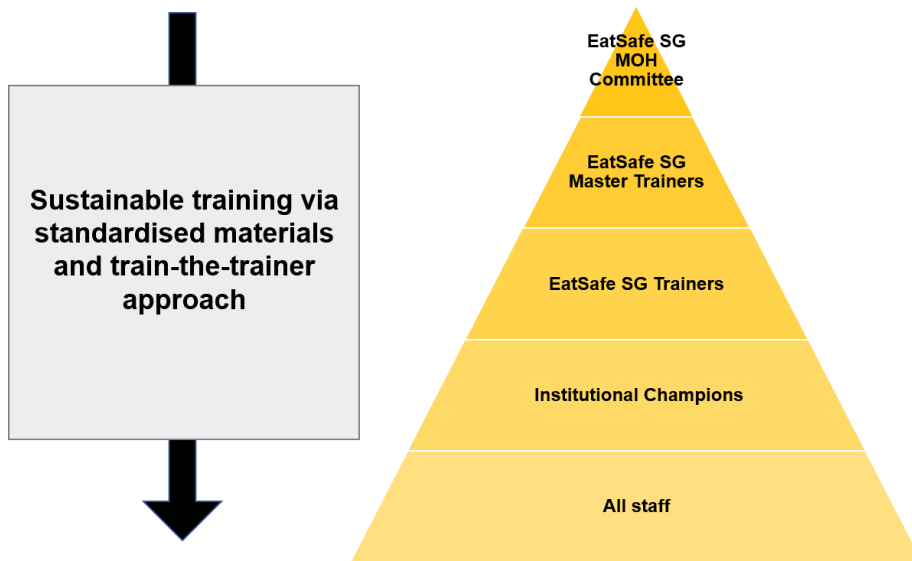
- Speech Therapists*
- Dietitians*
- Nurses and care assistants*
- Food service and kitchen staff (including chefs and food preparation personnel)*
- Vendors (including suppliers of raw ingredients, food products, and thickener powder)
- Doctors (especially those directly involved in the care of individuals at risk of developing dysphagia, e.g. neurologists, geriatricians and general medicine)
- Other medical and healthcare professionals who should be made aware of the change (e.g., doctors, physiotherapists, occupational therapists)
- Students (Speech Therapy, Nursing, Dietetics)

**Mandatory training for staff who are highly involved in dysphagia management.*

Training Approach

This **EatSafe SG Training Framework is supported by professional groups and is advocated at the national and organisational levels. It should continue to be supported at the individual department or ward level during the implementation phase.** A consistent standard of training needs to be maintained and be sustainable in the long run via train-the-trainer approach outlined in Diagram 4.

Diagram 4: EatSafe SG Training Approach



See [Table 2](#) for the Roles and responsibilities of various groups of staff involved to ensure successful implementation of a sustainable nation-wide training. Training will be aligned through standardised hands-on training materials collaboratively developed by the Singapore Dysphagia Diet Standardisation Committee and [EatSafe SG Master Trainers](#). Following which, EatSafe SG Master Trainers will update and align [EatSafe SG Trainers](#) of the training standards required. EatSafe SG Trainers will then train the [Institutional Champions](#), who will in turn be responsible for training staff within their institutions.

Table 2: Roles and responsibilities for sustainable nation-wide training

Description	EatSafe SG Master Trainers	EatSafe SG Trainers	Institutional Champions
Appointed by	<ul style="list-style-type: none"> MOH 	<ul style="list-style-type: none"> PHIs' and AIC Learning Institutes' Speech Therapist and Dietitian Heads 	<ul style="list-style-type: none"> PHIs, CHs and Community Organizations
Compulsory training		<ul style="list-style-type: none"> EatSafe SG Trainers Alignment Workshop 	<ul style="list-style-type: none"> Basic <u>and</u> advanced hands-on workshops
Collaborators	<ul style="list-style-type: none"> Ministries, Agencies, Associations, Chefs, Dietitians, EatSafe SG Trainers and institutional Champions 	<ul style="list-style-type: none"> EatSafe SG Master Trainers, institutional champions 	<ul style="list-style-type: none"> EatSafe SG Trainers, Stakeholders within own institution
Role	<ul style="list-style-type: none"> Develop standardized training materials for national implementation Trainer for EatSafe SG Trainers 	<ul style="list-style-type: none"> Trainer for Institutional Champions Can also take on role of Institutional Champion 	<ul style="list-style-type: none"> Trainer for staff who require Basic Hands-on training within own institution Ensure sustainability of training Lead implementation within institution

EatSafe SG Master Trainer

MOH has appointed a core team of EatSafe SG Master Trainers to ensure consistent EatSafe SG training standards across the nation. The role of EatSafe SG Master Trainer is to ensure a set of common standards are set across the nation for all hands-on workshops carried out by EatSafe SG Trainers and Institutional Champions. They are also the core group that develop standardised curriculum and training materials for all training modalities.

EatSafe SG Trainers

The role of EatSafe SG trainers include:

- Run both the Basic and Advanced Hands-on workshops
- Work with Institutional Champions to facilitate IDDSI implementation
- May represent their institutions as the identified Institutional Champion

To ensure that staff competencies meet the required standards, **MOH will work with Speech Therapists and Dietitians in various institutions/sectors to identify EatSafe SG Trainers** based on the criteria outlined below:

- AHPC registered Speech Therapist and Dietitians from Acute Hospitals, Community Hospitals and appointed representatives from AIC Learning Institutes.
- Have been practising in dysphagia management for 3 or more years.
- Have experiences in auditing diet/fluid textures, from institutions who have implemented, or are currently in the implementation journey.
- Experience in training other healthcare professionals in dysphagia management.
- Pass the theory knowledge quiz via ELMS (100%)
- Ability to perform syringe test (using the syringe test competency checklist used in Basic Hands-on workshop)
- Attended the EatSafe SG Trainers' Alignment workshop

Institutional Champions

Institutional Champions should be identified by the various institutions to ensure sustainability of training and be empowered to lead implementation within the institution.

Upon being trained and assessed to be competent, Institutional Champions will subsequently perform these duties at their place of employment.

Roles of Institutional Champions:

- Maintain accuracy of diet and fluid preparation by carrying out regular audits within the specified scope. Audit frequency is to be determined within the institution.
- Continue on-the-ground reminders and education for relevant staff.
- Liaise with in-house or locum Speech Therapists and Dietitians for any challenges faced.
- Conduct basic hands-on training for staff who require Level 2 training needs.

When identifying Institutional Champions, institutions should consider:

- Staff's current role and scope of influence to facilitate change within a designated scope (e.g., within the ward, department, or institution).

- Institutions are encouraged to nominate minimally 3 Institutional Champions to ensure sustainability (e.g. consider handover rate, shifts).

EatSafe SG Training Framework

To ensure stakeholders are equipped with skills and knowledge aligned with IDDSI standards, the National Training Framework outlines the depth of training required which is aligned to the amount of knowledge required by various stakeholders in their roles pertaining to dysphagia management. [See Table 3 for the EatSafe SG Training Framework.](#)

Institutions and individual stakeholders must ensure that all records of the competency assessments for relevant staff are retained in staff training records upon completion of training.

To ensure sustainability and consistency of training across multiple stakeholders, standardised e-learning materials and visual collaterals (e.g., posters and handouts) will be made available via the institution's existing education platforms.

Table 3: National Training Framework for IDDSI Implementation

Levels of training		Target population	Training modality			
			0. Visual Collaterals	1. Theory (E-learning)	2. Hands-on	
					Basic	Champions
CG*	<ul style="list-style-type: none"> Details customized for family / patient education by trained staff 	<ul style="list-style-type: none"> Patients and caregivers 	Y			
0	<ul style="list-style-type: none"> Know of new diet and fluid labels 	<ul style="list-style-type: none"> All other healthcare worker Provider of raw food materials End-product providers e.g., thickener vendors 	Y			
1	<ul style="list-style-type: none"> Know the new diet and fluid labels Understand what the descriptors are for each level Able to order an appropriate diet and fluid consistency using a protocolised flow chart 	<ul style="list-style-type: none"> Doctors 	Y	Doctors version (introduced Sept 2023) is mandatory for HOs/MOs and highly recommended for Doctors who are involved in the care of persons with Dysphagia (e.g., Geriatrician, General Physician)		
2	<ul style="list-style-type: none"> Know the new diet and fluid labels Understand what the descriptors are for each level Test diet and fluids to assess which IDDSI levels they fit into Know which types of food go into which diet levels Able to order an appropriate diet and fluid consistency using a protocolised flow chart (Nurses only) 	<ul style="list-style-type: none"> Nurses and care assistants Kitchen staff and chef Dietitians Speech Therapists 	Y	<p>Y</p> <p>Abridged version for kitchen staff and chef.</p> <p>Full version for nurses and care assistants, dietitians, and speech therapists</p>	Optional but recommended.	<i>*Kitchen staff and chef may sign up for "Food Prep Skills Class"</i>
3	<ul style="list-style-type: none"> Know the new diet and fluid labels Understand what the descriptors are for each level 	<ul style="list-style-type: none"> Champions from all institutions 	Y	Y	Y	Y

	<ul style="list-style-type: none">• Know how to conduct audits and training for basic hands-on skills for thickening, syringe tests and diet texture mapping• Able to order an appropriate diet and fluid consistency using a protocolised flow chart (Nurses only)					
--	--	--	--	--	--	--

*CG refers to caregivers

Training modality 0: Visual Collaterals

Training materials include posters, screensavers, handouts, and information memos. The materials **focus on the importance of IDDSI implementation**. Posters and handouts related to procedural steps and reminders on audit and preparation methods for diet and fluids are also available. Institutions can identify pertinent materials for use and dissemination at various timepoints, according to their implementation progress.

Training modality 1: Theory via E-learning

To promote optimal learning and retention of knowledge, the E-learning module is interactive and comprises of bite-sized information and a post-knowledge quiz. Videos are included to provide a ‘hands-on’ perspective. These training materials are standardised and have been developed by a team of Dietitians, Nurses, Healthcare Administrators and Speech Therapists. Please see [Table 4](#) for the details.

Table 4: Theory via E-learning

Target group	<ul style="list-style-type: none">●● Full version<ul style="list-style-type: none">○ Compulsory for Nurses and Care Assistants, Dietitians, and Speech Therapists● Abridged version comprises of a mandatory module on rationale and importance of IDDSI. All other modules within the e-learning course are optional.<ul style="list-style-type: none">○ Compulsory for Kitchen Staff (Including Chefs)● Doctors version is a condensed e-learning programme for doctors<ul style="list-style-type: none">○ Compulsory for House Officers (HOs) and Medical Officers (MOs). Optional but highly recommended for Doctors who are involved in the care of persons with Dysphagia (e.g., Geriatrician, General Practitioner)
Pre-requisite	Nil
Objectives	<ul style="list-style-type: none">● Understand rationale and importance of IDDSI● Understand dysphagia signs and management strategies● Decide what to do if patients are suspected to have dysphagia● Order an appropriate diet and fluid consistency using a protocolised flow chart (For doctors and nurses only)● Adopt IDDSI fluid terminologies, preparation and audit methods
Competency test	<ul style="list-style-type: none">● Post-knowledge quiz incorporated within ELMS● Unlimited attempts allowed with passing criteria of 100%

Estimated training time	Full Version: 2 hours Abridged version: 1 hour 15 mins Doctors version: 30 mins
Training platform	<ul style="list-style-type: none"> • Various organisations' E-Learning Management Systems (ELMS) • Internal training by Institutional Champions for those who are unable to access ELMS
Certification	National Standard Certificate

Training modality 2: Hands-on training

Hands-on training will adopt the following teaching strategies:

- classroom teaching
- skill demonstration
- simulated skill practice
- supervised skill practice
- case-based discussions

EatSafe SG Trainers Alignment Workshop

The EatSafe SG Master Trainers will facilitate the EatSafe SG Trainers' Alignment Workshops. As this is a new framework introduced, there is a need **to align standards and competencies for EatSafe SG Trainers** who will be conducting the Basic and Advanced Hands-on Workshop for Institutional Champions. Please see Table 5 for the details.

Table 5: EatSafe SG Trainers Alignment Workshop

Objectives	<ul style="list-style-type: none"> • Align EatSafe SG Trainers' roles, and aims and requirements of training • Align knowledge on training materials available and how they can be used during training • Align interpretation of diet texture audit results
Estimated workshop time	3 hours
Facilitators	EatSafe SG Master Trainers
Training platform	Virtual workshop (Zoom)
Certification	National Standard Certificate

Basic and Advanced Hands-on Workshops

There are 2 levels of hands-on training workshops for staff involved in Dysphagia Care and Institutional Champions: **Basic and Advanced Hands-on Workshops**.

Institutional Champions must attend both the Basic and Advanced Hands-on workshops on 2 separate half day sessions. After the completion of both workshops, Institutional Champions can conduct the Basic Hands-on workshops in their own institutions. Standardised training scaffold and competency checklists for both workshops will be disseminated and introduced during the Advanced Hands-on workshops to ensure training standards are maintained.

- Institutions that do not have in-house EatSafe SG trainers must send their Institutional Champions to attend the Basic and Advanced Hands-on Workshop run by approved training providers.
- For institutions with in-house EatSafe SG trainers, the projected training hours may be adjusted for in-house training, depending on the individual’s learning pace and trainer-to-learner ratio.

It is optional but **highly recommended for stakeholders who require Level 2 Training to attend the Basic Hands-on workshop conducted by Institutional Champions**, which allows for some direct teaching on thickening process and audit methods.

Please see [Table 6](#) for the details.

Table 6: Basic and Advanced Hands-on Workshop

	Basic Hands-on Workshop	Advanced Hands-on Workshop
Target group	<ul style="list-style-type: none"> • Compulsory for Institutional Champions • Optional but highly recommended for Nurses and Care Assistants, Kitchen Staff (Including Chefs), Dietitians, Speech Therapists 	<ul style="list-style-type: none"> • Compulsory for Institutional Champions
Pre-requisite	<ul style="list-style-type: none"> • Completed e-learning theory component 	<ul style="list-style-type: none"> • Basic Hands-on
Objectives	<ul style="list-style-type: none"> • Revision of theory components, i.e. understanding of new diet texture and fluid labels and descriptors • Demonstrate accurate preparation of fluid textures • Perform diet texture and fluid tests to assess which IDDSI levels they fit into • Understand basic strategies to adapt food to meet various IDDSI levels • Allow opportunity for discussion and clarification • Flexibility for trainer to add other components that are not IDDSI-focused, e.g., oral hygiene, safe feeding techniques 	<ul style="list-style-type: none"> • Reinforce safety implications and impetus for adhering to IDDSI standards in institutions • Know how to conduct audits and training for other staff, for skills such as thickening, syringe tests and diet texture mapping • Go through various challenges and potential scenarios during training and audit
Competency test	<ul style="list-style-type: none"> • Passing criteria of 100% on the workshop’s competency checklist 	<ul style="list-style-type: none"> • Passing criteria of 100% on the workshop’s competency checklist

Estimated training time	• 3 hours	• 3.5 hours
Trainers	• Institutional Champions and EatSafe SG Trainers	• EatSafe SG Trainers only
Training platform	• In-house training • AIC Learning Institutes, Acute Hospitals and Community Hospitals • Allied Health Training Platforms	• In-house training • AIC Learning Institutes, Acute Hospitals and Community Hospitals • Allied Health Training Platforms
Certification	• In-house certification or certification from learning institutes	• National Standard Certificate

Food Preparation Skills Class

Food services staff and chefs may require additional knowledge on food preparation methods to adhere to IDDSI diet texture requirements while ensuring optimal nutrition. An optional half-day workshop will provide a hands-on opportunity to discuss various diet preparation methods, and modification using a range of kitchen equipment. Please see Table 7 for the details.

Table 7: Food Preparation Skills Class

Target group	Food Services Staff and Chefs (Optional but highly recommended)
Pre-requisite	Completed e-learning theory component
Objectives	<ul style="list-style-type: none"> • To be able to prepare diets that meet IDDSI Framework standards • To be able to modify diets with a range of kitchen equipment • To demonstrate ability to prepare dishes that meet the 3 minimum diet levels for institutions.
Competency test	Passing criteria of 100% on the workshop's competency checklist
Estimated training time	4 hours
Trainers	EatSafe SG Trainer chef and EatSafe SG Trainers
Training platform	<ul style="list-style-type: none"> • AIC Learning Institutes
Certification	National Standard Certificate

Adherence to Standardised Hands-On Training Syllabus

EatSafe SG Trainers and Institutional Champions will be given access to all standard training materials, including the training curriculum, training scaffold, and competency checklists. In taking up this role, EatSafe SG trainers must agree to follow the set syllabus and competency checklists designed for IDDSI training.

EatSafe SG Trainers and Institutional Champions must ensure that the records of their competency assessments are maintained. Institutions are expected to keep an updated list of their EatSafe SG Trainers and Institutional Champions. Regular discussion sessions will be organised for EatSafe SG Trainers and Institutional Champions to discuss current issues related to training and implementation.

Long Term Plan for Training Framework

In the long term, institutions should incorporate IDDSI knowledge and skills as part of mandatory training for all clinical staff (akin to infection control/cybersecurity training). The knowledge about the IDDSI Framework will also be incorporated as part of curriculum in Medical, Nursing, Speech Therapy and Dietetics schools.

4. Minimum Diet Levels Provided and Conversion Table

Objective

To ensure all institutions are able to adequately cater suitable diets for patients who have dysphagia, minimum diet levels to be provided is recommended.

Minimum Diet Levels Provided

All **institutions are to provide minimally 3 Diet Levels** from the IDDSI framework as follows:

- i. Regular Diet (Level 7) or Easy to Chew (Level 7)
- ii. Soft & Bite-sized (Level 6) or Minced & Moist (Level 5)
- iii. Pureed Diet (Level 4) or Liquidised Diet (Level 3)

Conversion Table for Safe Care Transition

To ensure patients are served a safe diet texture when they transit across settings, a conversion table ([Table 8](#)) has been developed to **recommend a safe diet level if the recommended diet level is unavailable in the next care setting**.

Table 8: Conversion Table

Recommended Diet Level by ST	Suggested Diet for Safe Conversion
Level 7: Regular	Level 7: Regular OR Level 7: Easy to Chew
Level 7: Easy to Chew	Level 7: Easy to Chew OR Level 6: Soft & Bite sized OR Level 5: Minced & Moist
Level 6: Soft & Bite sized	Level 6: Soft & Bite sized OR Level 5: Minced & moist
Level 5: Minced & moist	Level 5: Minced & moist OR Level 4: Pureed* Level 3: Liquidised*
Level 4: Pureed	Level 4: Pureed OR Level 3: Liquidised*
Level 3: Liquidised	Level 3: Liquidised* OR Level 4: Pureed*

** Most patients/residents are safe on both Pureed and Liquidised diet, unless stipulated by Speech Therapist. If patients/residents are only safe on either Pureed or Liquidised diet, this should be clearly documented in any communication e.g., handover memo to Nursing Home.*

Dysphagia Diet Orders

Dysphagia diets should only be ordered or changed by STs after assessment and take precedence over other orders.

Table 9 provides details on the healthcare professionals who are empowered to make diet orders for various dysphagia risk groups when STs are not immediately available for consult, and the corresponding set of competencies required.

Table 9: Dysphagia Diet and Fluid Ordering Framework

Type	Description	Competencies needed	Healthcare professionals empowered to make diet orders whilst waiting for ST assessment	Action required
i	General Population – No risk factors or reports of dysphagia symptoms, not seen by STs	<ol style="list-style-type: none"> 1. Knowledge about medical diagnoses and conditions that are commonly associated with Dysphagia 2. Able to identify signs and symptoms of dysphagia 3. Knowledge of IDDSI fluid and diet labels 4. Aware of general characteristics and physiological rationale for each IDDSI Level 5. Able to order an appropriate diet and fluid consistency using a protocolised flow chart 	Drs / SNs	-
ii	Individuals at risk of Dysphagia, not seen by STs <ul style="list-style-type: none"> • Medical Diagnoses or acute conditions* associated with dysphagia; and/or • reported or observed dysphagic symptoms <i>*acute conditions – reduced alertness, need for oxygen support, delirium</i>			Refer to STs
iii	Individuals diagnosed with Dysphagia by an ST, diet/fluid recommendations given but has a sudden change in medical status/presents with dysphagic symptoms			
iv	Individuals diagnosed with Dysphagia by an ST, diet/fluid recommendations given within the last 2 weeks, transiting from acute to community setting	<ol style="list-style-type: none"> 1. Knowledge of IDDSI fluid and diet labels 2. Able to map the ST recommended diet to diets provided in the institution using the Conversion Table. 	Any healthcare professional to follow ST's recommendations or use Conversion Table to order diet	Continue ST follow up

Enablers Toward National Implementation of EatSafe SG

EatSafe SG Communications and Outreach Strategy

EatSafe SG **impacts close to 55,000 healthcare workers, kitchen staff/food providers and vendors, across public and private sectors.** There is a need to orchestrate a coordinated implementation approach, timeline and buy-in from various stakeholders.

A series of **ongoing engagement including regular webinars and meeting were setup to update all stakeholders** including Chairmen of Medical Boards, Nursing Leaders, Allied Health Directors, MOH Panel for Speech Therapist, MOH Panel for Dietitian, Institutes of Higher Learning for healthcare students, EatSafe SG Institutional Champions, Professional Associations, policy makers/ AIC, operations/kitchen staff/vendors, IDDSI Board, Ministry of Social and Family Development (MSF) and SG Enable (SGE) on the EatSafe SG and planning in the lead up to the Go-Live date.

Please visit <https://www.moh.gov.sg/hpp/allied-health-professionals/eatsafe-sg> for more updates on upcoming webinars and engagement events.

Standardised E-Learning Development

The Committee has also developed the **Interactive e-learning (SCORM) files for standardised e-learning modules.** The SCORM file to be uploaded into institutions ELMS in relevant care settings was disseminated to the EatSafe SG Institutional Champions via email. **EatSafe SG Institutional Champions should upload and work with their respective e-Learning Management System team to kick-start the online learning in respective institutions.**

Please visit <https://www.moh.gov.sg/hpp/allied-health-professionals/eatsafe-sg> for more updates.

Change Management

MOH has appointed a core team of EatSafe SG Master Trainers to manage change and ensure successful implementation of EatSafe SG standards in all healthcare settings.

As the scope of change required in long-term care settings to move to EatSafe SG Standards is greater and more varied as compared to Acute/Community Hospitals, **EatSafe SG Master Trainers will provide consultation services to settings that require support to manage the change in their institutions i.e., review menu to ensure texture modified diets provided meet EatSafe SG standards.**

The consultancy role of EatSafe SG Master Trainer include:

1. Assess current practices in the NH in relation to food preparation processes of recommended dysphagia diet/modified fluid.
2. Guide the food preparation teams to identify gaps towards implementation of fluid and diet types according to the EatSafe SG standards.
3. Work with food preparation teams to plan and recommend changes.
4. Provide guidance on training (not covered by national training curriculum e.g., ad-hoc diet modification for various diet levels) to ensure successful implementation of IDDSI framework.

There will be a **regular platform for EatSafe SG Master Trainers to engage in discussions for better alignment across the long-term care settings** and for common issues encountered to be addressed.

All EatSafe SG Institutional Champions who have completed the EatSafe SG Advanced Hands-on Workshop would receive relevant application form and be guided on the application process for EatSafe SG Consultations.

Changes to Clinical Documentation and Meal Ordering Systems

Clinical Documentation Systems

In Acute and Community Hospitals, Speech Therapists will document recommended Diet Levels in the clinical documentation systems. The change of Diet Level terminologies into IDDSI Framework has been incorporated into electronic medical record systems i.e., NGEMR and SCM.

For long-term care settings e.g., Nursing Homes, the clinical documentation system e.g., NHelp requires free text input should there be textured-modified diets prescribed for the clients/residents. Therefore, there is no enhancement required for these systems.

Meal Ordering Systems/Processes

The changes to meal ordering system/processes has been incorporated as a core activity under Implementation Guide within 18 months' implementation phase.

Useful Resources

There is a library of resources developed. Examples of these resources include:

- Implementation Guide
- Visual Collaterals
- Food preparation resource
- Fluid modification resource
- Caregiver training materials

These resources can be found on MOH EatSafe SG website (<https://www.moh.gov.sg/hpp/allied-health-professionals/eatsafe-sg>). To ensure outreach, the same set of information and updates will also be disseminated via AIC, Professional Association's webpages and International IDDSI website's Singapore page <https://iddsi.org/singapore>. However, users should visit the MOH EatSafe SG website (<https://www.moh.gov.sg/hpp/allied-health-professionals/eatsafe-sg>) for the latest updates to IDDSI related information in Singapore.

Restricted circulation materials (e.g., Training scaffold, Competency audit form for training, SCORM files) will be disseminated via MOH, AIC, Professional Associations' points-of-contact and EatSafe SG institutional champions.

Acknowledgements

The following individuals are acknowledged for the development of this document.

Lee Liang Tee	Clinical Director, Tan Tock Seng Hospital (then-Clinical Director, Renci Hospital)
Susan Niam	Chief Allied Health Officer, MOH
Melissa Chua	Deputy Chief Allied Health Officer, MOH and Head, Speech Therapy, Sengkang General Hospital
Suzanne Goh	Senior Manager, MOH
Anuja Varaprasad	Senior Project Administrator, MOH and Senior Speech Therapist, Woodlands Healthcare Campus
Alina Binte Ismail	Senior Nurse Manager, Institute of Mental Health
Angie Ng Kwee Siew	Director, Nursing & Operations, ECON Nursing Home
Chong Boon Keng	Senior Speech Therapist, Khoo Teck Puat Hospital
Chow Pek Yee	Head, Nutrition and Dietetics, Khoo Teck Puat Hospital
Cheryl Lee Huilin	Senior Speech Therapist, Alexandra Hospital
Chriselle Koh Wyn Jia	Senior Project Administrator, MOH and Speech Therapist, Sengkang General Hospital
Deirdre Tay	Head, Speech Therapy, Singapore General Hospital
Elaine Chong Yi Hui	Senior Speech Therapist, Khoo Teck Puat Hospital
Fung Xinhui	Senior Speech Therapist; Section Lead, Alexandra Hospital
Geraldine Wee Yen-Na	Senior Project Administrator, MOH and Senior Speech Therapist, Changi General Hospital
Goh Yiting	Senior Project Administrator, MOH and Senior Dietitian, Tan Tock Seng Hospital
Grace Lai	Senior Dietitian, Ng Teng Fong General Hospital
Janet Chong Ngian Choo	Nurse Clinician, Singapore General Hospital
Jason Lim Ghim Leong	Senior Speech Therapist, Ang Mo Kio Community Hospital
Joycelyn Er Pei Ling	Principal Dietitian, Singapore General Hospital
Josefina Peralta Khai	Assistant Nurse Manager, The Salvation Army Peacehaven Nursing Home
Karryn Kam Wanlin	Speech Therapist, St Luke's Hospital
Lee Yan Shan	Principal Project Administrator, MOH and Principal Speech Therapist, Singapore General Hospital
Leong Chin Jong	Assistant Director (Clinical), Quality & Productivity Division (QPD), AIC
Ling Ping Sing	Senior Principal Project Administrator, MOH and Senior Principal Dietitian, Changi General Hospital
Loh Yet Hua	Head, Dietetics, Singapore General Hospital
Lucinda Tay Lay Eng	Nurse Clinician, National University Hospital

Mindy Chiang	Head, Rehabilitative Services, Changi General Hospital
Ng Wan Tian	Senior Speech Therapist, Institute of Mental Health
Phua Quan Quan	Senior Speech Therapist, National University Hospital
Ruth Yeoh Yue En	Speech Therapist, Ng Teng Fong General Hospital
Serene Yap	Assistant Director, Nursing & Operations, ECON Nursing Home
Sheena Koh Su Hui	Senior Project Administrator, MOH and Senior Speech Therapist, Tan Tock Seng Hospital
Swee Bee Hong	Senior Assistant Director (Clinical), Quality & Productivity Division (QPD), AIC
Teo Wei Shan	Senior Speech Therapist, Tan Tock Seng Hospital
Voon Siew Wei	Senior Speech Therapist, St Luke's Hospital
Yulanda Heng	Senior Project Administrator, MOH and Senior Dietitian, KK Women's and Children's Hospital
Zuraidah Bte Sulaiman	Advanced Practice Nurse, Ren Ci Hospital

For their valuable contributions towards the development of national training and food preparation resources:

Alison Kwok Zhi Yi	Speech Therapist, Ng Teng Fong General Hospital
Angena Teo Wei Sze	Senior Dietitian, Sengkang Community Hospital
Chai Min Xia Jaymie	Senior Speech Therapist, Singapore General Hospital
Chang Huey Fang	Speech Therapist, Ng Teng Fong General Hospital
Chew Jing Si	Adv Practice Nurse / Asst. Nurse Clinician, Singapore General Hospital
Chia An An	Senior Speech Therapist, Sengkang General Hospital
Chia Pei Ling	Asst. Manager, Food Services, Sengkang General Hospital
Chloe Ang Hui Min	Senior Speech Therapist, Khoo Teck Puat Hospital
Chong Hui Hsien	Principal Dietitian, Changi General Hospital
Choo Wan Ling	Senior Speech Therapist, Khoo Teck Puat Hospital
Jayanthi	Dietitian, Orange Valley Nursing Home
Jeffrey Lomboy Ordonez	Asst. Nurse Manager, ECON Nursing Home
Jessica Tan Siew Hoon	Assistant Manager, Food Services, Changi General Hospital
Lau Su Re	Senior Speech Therapist, St Andrew's Community Hospital
Leo Wei Zhi	Senior Speech Therapist, KK Women's and Children's Hospital
Leo Yui Thim	Senior Production Chef, Tan Tock Seng Hospital
Lim Li Mei	Senior Speech Therapist, Tan Tock Seng Hospital
Lim Tin Tin	Nurse Clinician, National University Hospital
Liu Jian Ping	Assistant Director, Nursing Home Services, ECON Nursing Home

Liu Si Jiang	Manager, AIC
Marsha Tan	Dietitian, The Salvation Army Peacehaven Nursing Home
Norman Leow Kim Soon	Executive Chef, Alexandra Hospital
Sarah Ng	Asst. Manager, AIC
Tan Li-Wun Kathleen	Speech Therapist, Ng Teng Fong General Hospital
Tan Loon Liang	Senior Executive Chef, Singapore General Hospital

With special thanks to:

- Ms Pauline Koh, Chief Nursing Officer, MOH
- MOH Panel for Speech Therapy
- MOH Panel for Dietitian
- AIC
- Mr Peter Lam, Board Co-Chair of IDDSI
- Speech and Language Therapy Singapore (SALTS)
- Singapore Nutrition and Dietetics Association (SNDA)

References

1. Cichero, J.A.Y. & Altman, K.A. (2012). Definition, prevalence and burden of oropharyngeal dysphagia: a serious problem among older adults worldwide and the impact on prognosis and hospital resources. *Stepping Stones to Living Well with Dysphagia*. Nestle Nutr Inst Workshop Ser, 72, 1-11.
2. Cichero, J.A.Y., Steele, C., Duivesteyn, J., Clave, P., Chen, J., Kayashita, J., Dantas, R., Lecko, C., Speyer, R., Lam, P. & Murray, J. (2013). The need for international terminology and definitions for texture-modified foods and thickened liquids used in dysphagia management: foundations of a global initiative. *Curr Phys Med Rehabil Rep*, 1: 280-291
3. Cichero, J.A.Y., Lam, P., Steele, C.M., Hanson, B., Chen, J., Dantas, R.O., Duivesteyn, J., Kayashita, J., Lecko, C., Murray, J., Pillay, M., Riquelme, L. & Stanschus, S. (2017). Development of international terminology and definitions for texture-modified foods and thickened fluids used in dysphagia management: The IDDSI framework. *Dysphagia*, 32:293-314.
4. IDDSI – International Dysphagia Diet Standardisation Initiative (2021). The IDDSI Framework. IDDSI. <http://iddsi.org/Framework>
5. IDDSI – International Dysphagia Diet Standardisation Initiative (2021). Framework Documents. IDDSI. <http://iddsi.org/Resources/Framework-Documents>
6. IDDSI – International Dysphagia Diet Standardisation Initiative (2021). Implementation. IDDSI. <http://iddsi.org/Implementation>
7. IDDSI – International Dysphagia Diet Standardisation Initiative (2021). Implementation Guides. IDDSI. <http://iddsi.org/Resources/Implementation-Guides>