IDDSI and Texture Modified Foods 2025

Ready.

Set.

Shift.

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Sources

- To ensure that this presentation is up-to-date, information was collected from the sources cited – the IDDSI Website and YouTube Channels – last updated April 2023
- Therapy ideas and treatment suggestions were created the IDDSI board and community using the evidence presented here along with their clinical experience and expertise.

AND and ASHA Endorsement

IDDSI is considered best practice

"The Academy of Nutrition and Dietetics (AND) and the American Speech-Language-Hearing Association (ASHA) together announce their support of a new global initiative (IDDSI) to standardize diets for the treatment of people who suffer from swallowing disorders."

- Joint Press Release January 31, 2017

IDDSI is good thing

- IDDSI has BIG Goals: All patients, All Settings.
- IDDSI uses simple, effective, always on "hand" tools
- IDDSI solves long time problems
- IDDSI is adaptable to patient needs
- IDDSI isn't perfect, but much better than the NOT Near Enough we have had.
- "When was the last time you had the viscometer in the kitchen calibrated?" Said no one ever!

- Therapy ideas and treatment suggestions were created the IDDSI board and community using the evidence presented here along with their clinical experience and expertise.

IDDSI Framework - 2019

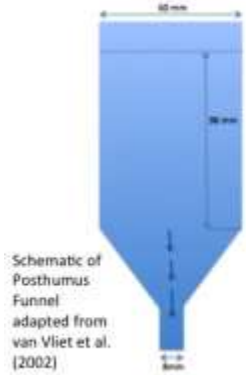


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IDDSI Flow test

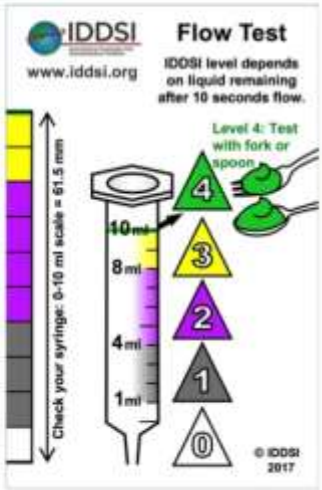
van Vliet et al. (2002), Food Quality and Preference, 13, 227-236; Kutter et al. (2011), 42: 217-227

Similar to Posthumus Funnel used in dairy industry to measure liquid thickness

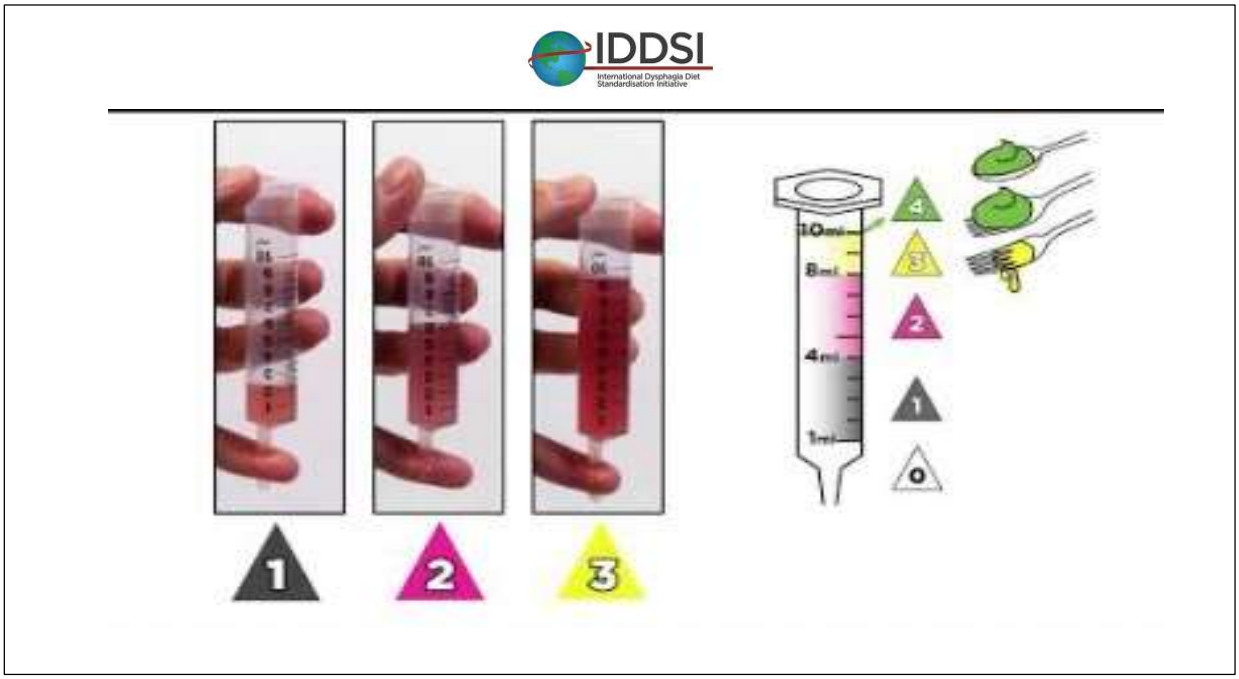


Schematic of Posthumus Funnel adapted from van Vliet et al. (2002)

"Geometry allows for both shear and elongation that more closely matches flow conditions within the oral cavity"



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Texture Modified Foods

Consider these aspects of the food

- Size of food?
- Moisture Level of food
- Stickiness of food
- Softness of food

Apple Sauce WEEPS

What other foods generate a thin liquid?

Why is weeping bad?





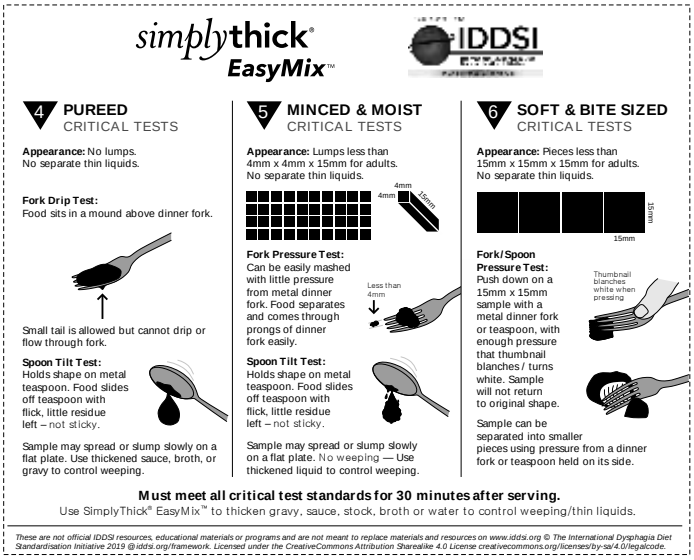
Left =thickened

Right = dangerous

How many patients eat their meal within 30 minutes?

ly

How to address texture, particle size and moisture in a simple graphic?



simplythick® EasyMix™

IDDSI

4 PUREED CRITICAL TESTS

Appearance: No lumps. No separate thin liquids.

Fork Drip Test: Food sits in a mound above dinner fork.

Small tail is allowed but cannot drip or flow through fork.

Spoon Tilt Test: Holds shape on metal teaspoon. Food slides off teaspoon with flick, little residue left – not sticky.

Sample may spread or slump slowly on a flat plate. Use thickened sauce, broth, or gravy to control weeping.

5 MINCED & MOIST CRITICAL TESTS

Appearance: Lumps less than 4mm x 4mm x 15mm for adults. No separate thin liquids.

4mm 4mm 15mm

Fork Pressure Test: Can be easily mashed with little pressure from metal dinner fork. Food separates and comes through prongs of dinner fork easily.

Less than 4mm

Spoon Tilt Test: Holds shape on metal teaspoon. Food slides off teaspoon with flick, little residue left – not sticky.

Sample may spread or slump slowly on a flat plate. No weeping — Use thickened liquid to control weeping.

6 SOFT & BITE SIZED CRITICAL TESTS

Appearance: Pieces less than 15mm x 15mm x 15mm for adults. No separate thin liquids.

15mm 15mm

Fork/Spoon Pressure Test: Push down on a 15mm x 15mm sample with a metal dinner fork or teaspoon, with enough pressure that thumbnail blanches / turns white. Sample will not return to original shape.

Thumbnail blanches white when pressing

Sample can be separated into smaller pieces using pressure from a dinner fork or teaspoon held on its side.

Must meet all critical test standards for 30 minutes after serving.

Use SimplyThick® EasyMix™ to thicken gravy, sauce, stock, broth or water to control weeping/thin liquids.

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PU 4 Level 4 Puree

Level 4 - Extremely Thick drinks may be used if your tongue control is not good enough to manage Moderately Thick, Mildly Thick, Slightly Thick or Thin drinks. Extremely Thick drinks allows more time for the tongue to "hold and move" the liquid. It's important that Extremely Thick drinks are not too sticky because this can cause the food to stick to the cheeks, teeth, roof of the mouth or in the throat. Extremely Thick drinks are best taken using a spoon.

How do I measure my liquid or drink to make sure it is Level 4 Extremely thick?
It is safest to measure Extremely Thick drinks using the IDDSI Fork Drip Test *and* the IDDSI Spoon Tilt Test.

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

Extremely thick liquids sit in a mound or pile above the fork



A small amount may flow



IDDSI Spoon Tilt Test

Sample holds its shape on the spoon and falls off fairly easily if the spoon is tilted or lightly flicked

Sample should ***not*** be firm or sticky

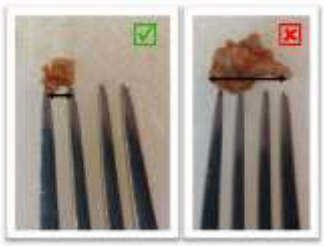


Measurement for Foods

IDDSI Fork Test:

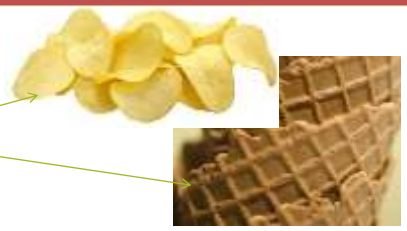
- The slots/gaps between the tines/prongs of a standard metal fork typically measure 4 mm.
- This provides a useful compliance measure for particle size of foods at Level 5 - Minced & Moist.





What are Transitional Foods?

- Foods that start as one texture and change into another with moisture or temperature
- Minimal chewing required
- Tongue pressure may be sufficient to break food down after alteration in moisture or temperature





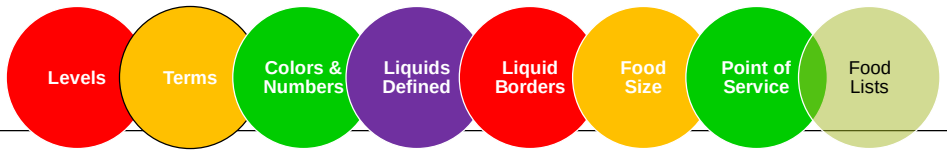
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Prepare

IDDSI Framework & NDD: Differences

Point of Service is the Point

- IDDSI is very focused on the food and drinks as ***served***
- Test Methods were developed to make that easy
- Will require a difference in thought and (?) more testing
  - Cold
  - Hot
  - After holding for awhile



TOOLS TO HELP YOU

Simple and wonderful tools that will help you sleep at night

Adopt

More Tools

- Multi-lingual
- Audit Sheets
- Stickers

7 Regular	RG7
6 Soft & Bite-Sized	SB6
5 Minced & Moist	MMS
4 Pureed	PU4
4 Extremely Thick	EX4
3 Liquidised	LQ3
3 Moderately Thick	MO3
2 Mildly Thick	MT2
1 Slightly Thick	ST1
0 Thin	TN0


Intended for 4 EXTREMELY THICK

IDDSI

Product or food tested

If soup, heating method(s)

Temperature when tested at: ☐ optimal serving temperature ☐ 10 mins after serving ☐ 30 mins after serving

Instructions:

- Level 4 Extremely Thick must include Appearance + Fork Drip Test + Spoon Tilt Test (If these are not available Finger Test. Chopstick test not appropriate.
- The food item must pass or meet criteria for any one method.

Tests: (Isolation drinker, tongue, nutritional supplements, gravies, sauces, liquid medications)

Meets criteria at: Time of service | 10 mins after serving | 30 mins after serving

Critical: Appearance

- No lumps ☐ Yes ☐ No | ☐ Yes ☐ No | ☐ Yes ☐ No

Critical: Fork Drip Test (neutral dinner fork needed)

- Food sits in a mound above the dinner fork (a small amount may form a tail below the dinner fork) ☐ Yes ☐ No | ☐ Yes ☐ No | ☐ Yes ☐ No
- Does not drip or flow continuously through the dinner fork ☐ Yes ☐ No | ☐ Yes ☐ No | ☐ Yes ☐ No

Critical: Spoon Tilt Test (Pressure method)

- Holds shape on teaspoon ☐ Yes ☐ No | ☐ Yes ☐ No | ☐ Yes ☐ No
- Food slides off spoon with little food left on teaspoon (i.e. not sticky) ☐ Yes ☐ No | ☐ Yes ☐ No | ☐ Yes ☐ No
- May spread or slump slowly on a flat plate ☐ Yes ☐ No | ☐ Yes ☐ No | ☐ Yes ☐ No

Alternative (Fork or Spoon not available): Finger Test

- Hold a sample on fingers without it dripping through continuously ☐ Yes ☐ No | ☐ Yes ☐ No | ☐ Yes ☐ No
- Food slides smoothly and easily between fingers ☐ Yes ☐ No | ☐ Yes ☐ No | ☐ Yes ☐ No
- Food leaves noticeable residue on fingers ☐ Yes ☐ No | ☐ Yes ☐ No | ☐ Yes ☐ No

Preferred but not critical: Fork Pressure Test

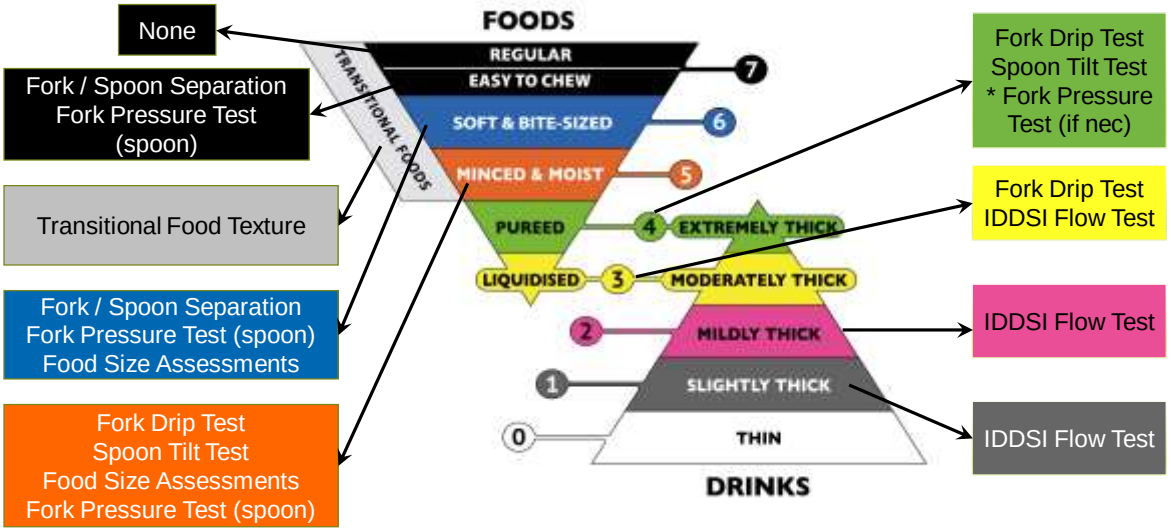
- Prongs of fork make clear pattern on surface OR food freely returns dinner fork indentation marks ☐ Yes ☐ No | ☐ Yes ☐ No | ☐ Yes ☐ No

OVERALL CONCLUSION: Does the sample meet the criteria for Level 4 Extremely Thick? ☐ Yes ☐ No | ☐ Yes ☐ No | ☐ Yes ☐ No

Notes: • Extremely Thick liquids need to be able to be put in the mouth and swallowed whole. No chewing and no lateral tongue movements should be needed to eat this consistency.

Simple Testing Reference Guide

IDDSI International Dysphagia Diet Standardisation Initiative



Improved Calorie and Protein Intake Following Implementation of Formed Pureed Food

Melanie Betz, Anne Coltman, Sarah Peterson, Diane Sowa
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Introduction

Acceptability and intake of texture modified diets is generally poor[1-3]. One possible reason for poor acceptability is unappetizing appearance of pureed foods. As a result, patients often require supplemental enteral nutrition to meet calorie and protein needs. Increased acceptability and caloric intake from pureed diets may help hasten the transition from enteral nutrition to oral diet.

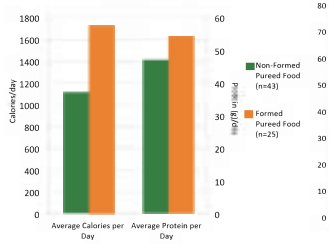
Objective

The purpose of this quality improvement project was to determine if the use of formed pureed foods to improve appearance of meal trays would result in increased calorie and protein intakes when compared to non-formed pureed foods.

Methods

- This QI project utilized a convenience sample of patients admitted to general medical/surgical and rehabilitation floors.
- Before implementation of formed pureed foods, patients received pureed meals in small bowls or divided plates. After implementation, patients received pureed foods that have been formed to be more appetizing.
- Calorie counts were completed for all patients receiving pureed diets before (Aug 2013 – Jan 2014) and after (March 2014 – July 2014) implementation of formed foods.
  - Nursing staff completed calorie counts by estimating percentages of each food item eaten.
  - Food items from home and snacks were not included.
- Total calories and protein consumed at breakfast, lunch, and dinner was summed to determine total calories per day.
  - If meals were missing, average calories and protein per day were imputed from available data.
- Average daily calories and protein were determined by summing all available days and dividing by number of days.
- Daily calorie requirements were estimated at 25-30 kcal/kg dosing weight; protein requirements were estimated at 1-1.2 g/kg dosing weight.
- Due to non-normal distributions, nonparametric statistics (medians (25, 75 percentiles), Mann Whitney U, and chi-square) were used.

Figure 1. Calories and Protein Consumed Pre and Post Formed Pureed Food Implementation



Results

- A total of 68 patients were included; 43 in the pre and 25 in the post formed pureed food group.
- The median age of the sample was 68.5 years and the median BMI was 25.4 kg/m^2; there were no differences in demographic variables between groups.
- Significantly more patients met at least 75% of calorie needs after implementation of formed foods (42% versus 72%, p=0.016, Figure 2). A non-significant increase in patients who met at least 75% of protein was also found (30% versus 44%, p=0.252).

Conclusion

- Patients who received formed pureed foods consumed an average of 500 calories more per day than those not receiving formed foods.
- Significantly more patients met at least 75% of estimated calorie needs after formed foods were implemented.
- Further research is needed to determine the effects of formed foods on duration of supplemental enteral nutrition.
- The use of formed pureed foods may be beneficial in improving intakes of patients on pureed diets and help accelerate transition from enteral nutrition to oral diet.

1.Comparison of energy and protein intakes of older people consuming a texture modified diet with a normal hospital diet. *Hum Nutr Dietet* 2005, 18, pp. 213–219.
2.Energy, protein, calcium, vitamin D and fibre intakes from meals in residential care establishments in Australia. *Asia Pacift J Clin Nutr* 2003, 12 (2): 172–177.
3.Issues Associated with the Use of Modified Texture Foods. *Jour Nutr, Health & Aging* 2012, 16 (3): 195-200.

Figure 2. Percent of Patients Meeting Nutrition Needs Pre and Post Formed Pureed Food Implementation

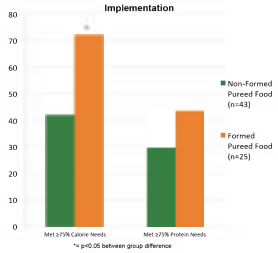
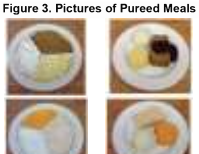


Figure 3. Pictures of Pureed Meals



Pre-Formed Food | Post-Formed Food
Top: Barbeque pork, corn, mashed potatoes
Bottom: Salmon, carrots, mashed potatoes

RUSH UNIVERSITY MEDICAL CENTER

References:

- www.iddsi.org
- Cichero, J.A.Y., Steele, C., Duivestein, J. et al. Curr Phys Med Rehabil Rep (2013) 1: 280. https://doi.org/10.1007/s40141-013-0024-z
- Steele, C.M., Alsanei, W.A., Ayanikalath, S. et al. Dysphagia (2015) 30: 2. https://doi.org/10.1007/s00455-014-9578-x
- Cichero, J.A.Y., Lam, P., Steele, C.M. et al. Dysphagia (2017) 32: 293. https://doi.org/10.1007/s00455-016-9758-y