



Food
Service

Health
& Nutrition

Sharing Best Practices

—

IDDSI Testing
Method





Evolution of Hydra +



2014



Hydra +
Launched 1LT

2019



Single Serve
118mL

2019



Cranberry
IDDSI 2&3

2020



Reformulation of Hydra+ IDDSI
(Xanthan gum)



IDDSI Framework Testing Methods 2.0 | 2019

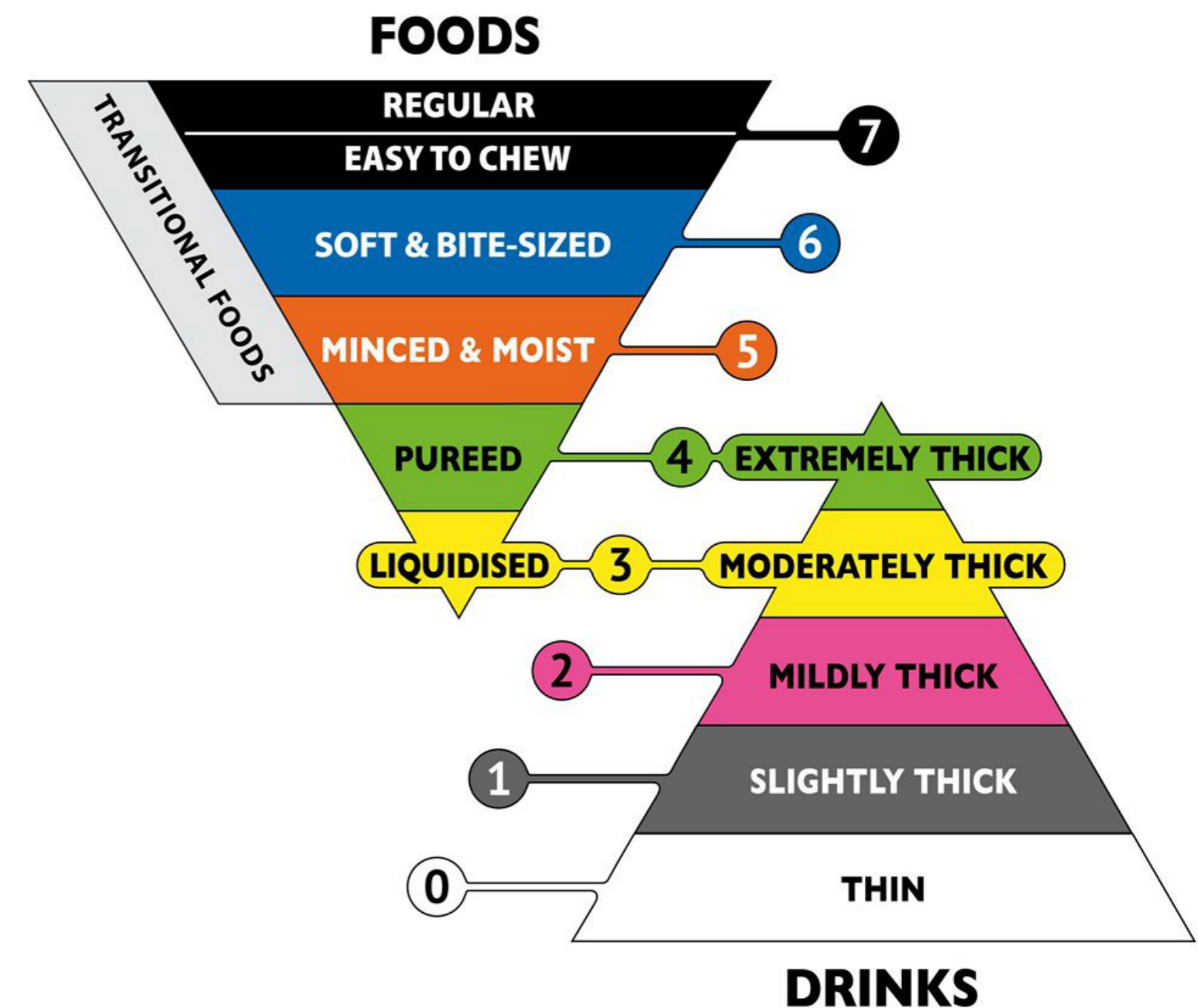
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IDDSI 2.0 | July 2019

Source: https://iddsi.org/IDDSI/media/images/Testing_Methods_IDDSI_Framework_Final_31_July2019.pdf





The IDDSI Flow Test

IDDSI
International Dysphagia Diet Standardisation Initiative
www.iddsi.org

Flow Test

IDDSI level depends on liquid remaining after 10 seconds flow.

Level 4: Test with fork or spoon

Check your syringe: 0-10 ml scale = 61.5 mm

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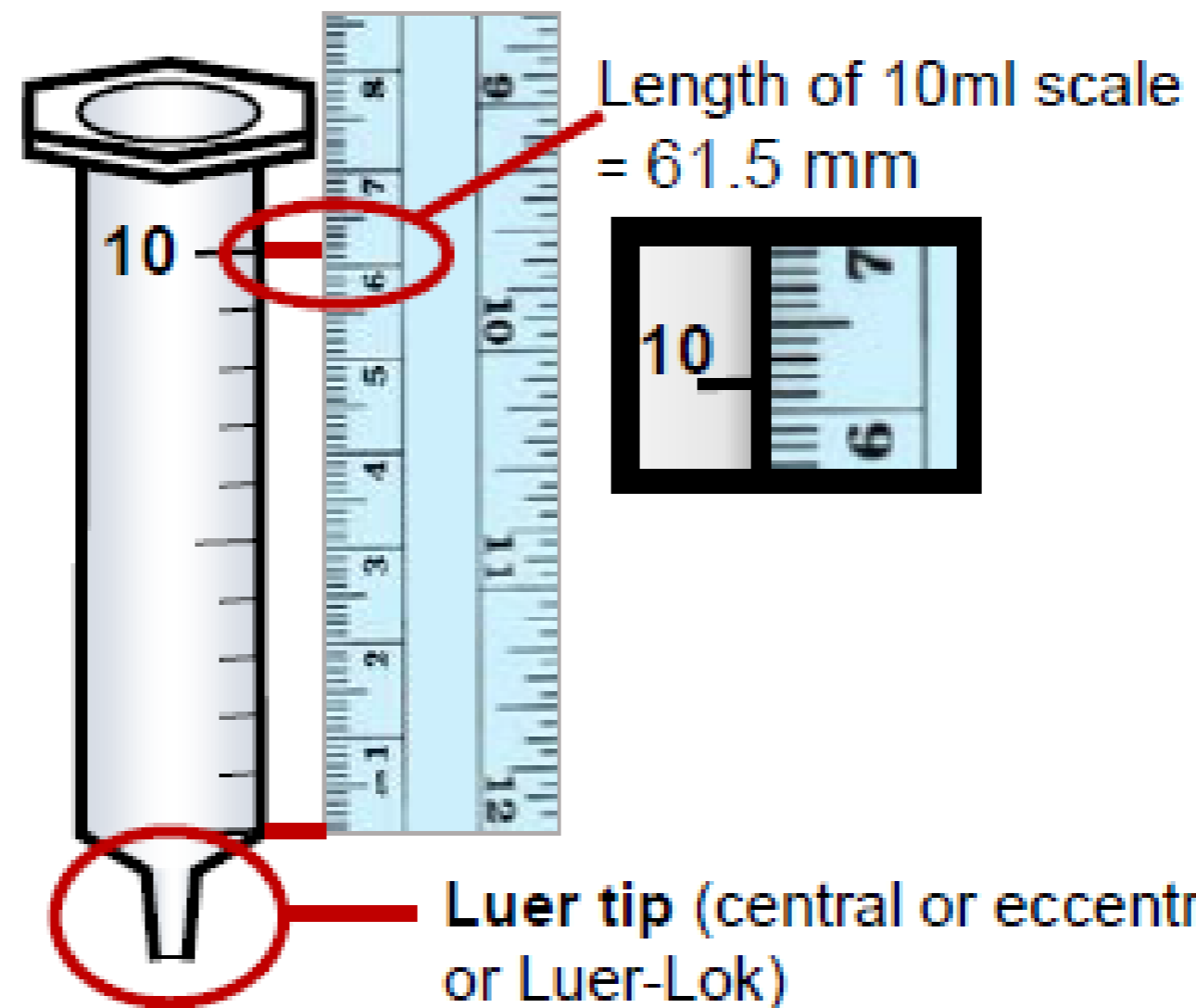
The IDDSI Flow Test

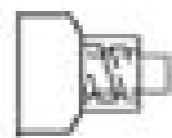
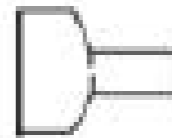


IDDSI uses an objective measurement tool for liquid thickness, 10 mL syringe.

Source: https://iddsi.org/IDDSI/media/images/Complete_IDDSI_Framework_Final_31July2019.pdf

Before you test...

You **must check** your syringe length because there are differences in syringe lengths. Your syringe should look like this:



-  BD Luer-Lok™ Tip
-  Luer Slip Tip
-  Eccentric Luer Slip Tip
-  ~~Catheter Tip~~

Q&A





Q&A

What is xanthan gum?

It is a thickener used in a variety of foods and most commonly used in salad dressings, sauces and ice cream.

Any benefits with gum-based vs starch-based formulas?

Gum-based formulas are resistant to heat and freeze-thaw process, while starch-based formulas are not.

How is gum-based different from starch-based thickened beverages for safety swallowing?

Although more research is still required, several studies have shown similar improved safety of swallow in dysphagia patients when compared gum and starch. Gum may offer a cutting-edge advantage as some studies have shown that starch-based tends to increase the risk of post-swallow residue and aspiration during the oral and pharyngeal passage. But, in general term, starch-based thickened beverages possess no harm in patients with dysphagia.

Are there any precautions on the use of thickened beverages (starch or gum-based) along with a medication?

There are no contra-indications that we know of except for: Starch-based thickened beverages should not be used to prepare or dilute medications that are polyethanol glycol or PEG-based. There is a known interaction between PEG and starch which results in thinning effect to the consistency of the beverages. PEG is commonly used as laxative and also as excipient in many other medications. Gum-based products do not have this interaction. No other known precautions related to starch nor xanthan gum has been reported.



Q&A

Is it true that saliva can influence the consistency of thickened liquids?

Yes, there is amylase enzyme in saliva which can digest starch. The consistency of thickened liquids made with starch can be affected if the liquid is in contact to saliva for too long. That is the case for all thickened liquids made with starch including all 1 L Hydra+. Arguments: (1) This problem is not an issue in institutions as it is not the first criteria of buying or not buying; (2) starch-based pre-thickened beverages have been used for many decades and have proven to help safety swallowing.

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Q&A

What analyses are done to ensure the consistency quality of the products?

Hydra+ pre-thickened beverages are manufactured and analysed to ensure the products are appropriate IDDSI 3 moderately thick and IDDSI 2 mildly thick. Our quality assurance team uses IDDSI flow test to ensure these consistencies.

Are there any tips on using IDDSI Flow test for very thick beverages?

Bubbles are the big issue when using IDDSI Flow test as they influence the reading. Make sure there are no visible bubbles (big and small) present in the syringe. Here are a few

tips: (1) Tapping the syringe a few times may help removing trapped bubbles; (2) Avoid incorporating bubbles to the syringe by introducing the thick liquid, using another syringe, on the surface of the syringe. Make sure the syringes are clean and dry before using them.

What should I do if there is no flow or only a few drops from the syringe is observed?

The IDDSI's fork drip test is recommended in this particular case to confirm the IDDSI level of a very thick liquid. Hydra+ IDDSI 3 beverages are in a high range of IDDSI 3 and the fork drip test has confirmed the suitability to IDDSI 3 level. (see next page and iddsi.org)

Can IDDSI's Flow test be used for starch-based thickened beverages?

Of course but be cautious that consistency of starch-based products varies with varying temperatures. The product is thicker when it's colder. Temperature should be noted when performing the Flow test and the best temperature for measurement is the temperature that the product is consumed. Note: Hydra+ milk beverages are starch-based. We recommend consuming and measuring Hydra+ milk at chilled (8-10 oC) temperature.