Education

Q: How do we explain this to nursing and dietary staff? What is Extremely thick to one person, may not be Extremely thick to another? Can we have orders doing a range of say... moderately thick to extremely thick?

A: Training nursing will now be **much easier with more descriptive labels** of mildly, moderately, and extremely thick liquids. Nurses and other staff have been confused with nectar vs honey for years. You can also train with the IDDSI Flow Test with the 10 mL syringes that are very handy around our healthcare facilities. Everyone has a second hand on the clocks in facilities or stopwatches on their smart phones to mark off 10 seconds. The IDDSI Flow Test can be used to show the slightly thick, mildly thick, and moderately thick ranges. An extremely thick liquid does not flow through the syringe at all and requires the Spoon Tilt Test or the Fork Drip Test. These are distinct flow characteristics, and moderately thick is not the same as extremely thick.

Identifying these liquids off the shelf will be easier as industry will start dual labeling packages, and clinicians should continue to ask all of our industry partners about their plans for dual labeling and performing IDDSI testing. However, as before, there may still be inconsistencies across products even within one company. Now that we have the IDDSI Flow Test, we can see for ourselves if the liquid meets a consistent criterion within the range stated on the package. We can also see how the viscosity/thickness **changes over time** (especially when a powder corn-starch thickener is used) and **in response to different temperatures** (i.e., colder fluids have a thicker viscosity versus when they warm up to room temperature). Additionally, you can teach the IDDSI Flow Test to patients and families, and they can use it at home. For example, a caregiver can do a flow test on the smoothie that she makes at home to make sure it is thick enough to meet her husband's mildly thick requirements.

I would not recommend orders in a range of Moderately thick to Extremely thick. Ideally, the person has been evaluated by the speech-language pathologist (SLP) to determine the least restrictive level of liquids. Potentially, the evaluation showed that moderately thick was determined to be safe and effective to prevent aspiration while not accumulating too much residue in the pharynx. Why would you then want to give someone a "liquid" even thicker in the range of Extremely thick (such as pudding thick liquid that requires spoon feeding)? This would be not only less palatable, less drinkable, and cause increased dehydration risks, but it could also cause even more residue to remain in the pharynx after the swallow. Liquids need to be prescribed carefully like medication orders. Ideally this recommendation is based on careful instrumental evaluations (such as the videofluoroscopic swallow study/VFSS or the Fiberoptic endoscopic evaluation of swallowing/FEES) in order to rule out silent aspiration on one-hand and to make sure the recommendations are not overly restrictive and too cautious on the other hand. We want people on the least amount of thickener possible, which is why the new level of "Slightly thick" is promising. Maybe your patient does not even need a liquid as thick as mildly thick (aka, nectar thick liquid). Maybe the slightly thick viscosity is all that is needed to create a safer swallow.

Diet and Food Questions:

Q: I work in a LTC facility for adults with intellectual disabilities; 95% of our residents require texture modifications (chopped, ground, puree and strained puree) only 5% of our residents are on a regular/cut-up texture due to dysphagia and MBS/OT recommendations. Our strained puree diet is processed (1) step further than puree by putting the food through a mesh strainer. Would our strained puree diet order be classified as a "Liquidised" texture under the IDDSI? Thank you for your very interesting and helpful webinar.

A: Yes, it sounds like your "strained puree" diet is similar to what we have also called a "thinned puree" in the past. This would NOW be called a "Liquidised." This is similar to the Moderately thick liquid. Therefore, after it is strained, you could do testing on it with:

- 1. IDDSI Flow Test: there should be 8-10 mL left in the syringe.
- 2. Fork Drip Test: there should be strands or dollops through the tines of the fork.

This consistency will be for people who cannot manage a puree, Level 4, because maybe they have minimal oral manipulation of the thicker bolus. Maybe also the puree leaves too much residue in the throat. This is typical for people who have had radiation to the throat in treatment of head/neck cancer. When prescribing a Liquidised puree, the medical team needs to think about why this extreme diet restriction is needed.

Q: Does Soft and Bite size diet include or exclude bread?

A: There is no bread allowed on the Soft & Bite-Sized diet, as it does not pass the Fork Pressure Test and can be highly chokable. See also FAQ on the IDDSI website that addresses this issue and provides references regarding how bread is the most common cause of choking deaths. HOWEVER, the decision to allow bread or not on the Minced & Moist and Soft & Bite-Sized diets should be left up to further testing by qualified professionals. Potentially, if bread is tested (ideally with instrumental evaluations) special orders could be written to allow bread for an individual. Quality of life must also be taken into consideration. I would not recommend special written waiver forms for bread, but appropriate and thorough documentation by the SLP and the medical team reflecting the patient's and/or healthcare proxy's decisions will suffice.

Q: What is the best way to categorize soups? Some of our participants (elderly population) can tolerate certain soups, but are on a mechanically altered diet, thin liquid.

A: Mixed consistencies are the issue with soups. The risk is that a person could aspirate the thin liquid from the soup, while focused on chewing the solid. This skill and risk can be tested on instrumental examinations by the SLP to determine if the person can tolerate a mixed consistency. Soups can easily be blended to avoid the challenge with mixed consistencies. Then the soup can be tested with the IDDSI Flow Test, The Fork Drip Test, or even the Spoon

Tilt Test to determine if the thickness falls in the ranges of Mildly, Moderately or Extremely thick.

Q: Level 3's: What about bread? Rice? Peanut butter, Corn? Peas? Lima beans? Creamstyle corn?

A: Level 3 is Moderately thick/Liquidised; therefore, certainly no bread, rice, peanut butter, corn, etc. Even pureed bread is NOT appropriate for Liquidised. Even cream-style corn is not appropriate unless blended smoothly and Liquidised to a Moderately thick level and strained to remove corn husks.

Q: Do you ever utilize the word "slurry"?

A: That word is not in any official descriptions for the IDDSI framework.

Q: Is it possible to have food in 1 Level and fluids in another level with IDDSI or do they automatically go together?

A: The foods and liquids do NOT automatically go together. Hopefully your skilled professionals in dysphagia, primarily the SLPs, will recommend to the medical team the safest and least restrictive diet level according to the patient's goals of care and condition. The patient may need an order for a solid that is: Liquidised, Pureed, Minced & Moist, Soft & Bitesized, or maybe he can handle a regular texture. This solid will be selected based on a multitude of physiological and behavioral factors. Then a liquid will be ordered in the ranges of: Level 1 of a Thin liquid through Level 4 of Extremely thick liquid, in the thinnest liquid possible that has been determined to be safe and effective for the individual. So someone's diet may even be Regular diet with Mildly thick liquid or Puree with Thin liquid or Minced & Moist with Moderately thick liquid - any combination of a solid diet order and a liquid diet order. That is why the solids and liquids are in separate triangles. They only are connected at the Puree and Liquidised levels to show that the bolus flow characteristics are actually the same between puree and extremely thick, as well as between Liquidised and moderately thick.

Q: How does this translate to individuals who have just a chewing problem, as in poor dentition and historically received a dental soft diet? Or someone who just prefers meats to be ground and regular diet otherwise?

A: The Soft & Bite-Sized diet will be appropriate for the person with difficulty chewing due to poor dentition. However, that person should still have a swallowing evaluation to make sure that is really the only problem. Why does the person prefer the meats to be ground? It may not be just due to dentition, which is often obvious and pointed out by staff and family. Maybe it is actually due to meat getting stuck in the throat due to a weak pharyngeal swallow. We will not know this unless instrumental swallowing evaluations show us into the areas of the throat that are not visible without x-ray vision.

Q: We use mechanical soft textures for those who require energy conservation or simply chewing issues. Can this be kept separate from IDDSI diets?

A: No, the idea is to standardize diets to avoid confusion of too many diet names. The term "mechanical soft" means nothing really. There has been no standardization connected to that term. The term is older than 2002 at least, as it was not used either in the National Dysphagia Diet of 2002. Confusion of diets leads to unsafe situations and foods presented that could cause choking and death. (Also see the answer above.)

Energy conservation needs due to fatigue and weakness, as well as difficulty chewing are all reasons to provide the Soft & Bite-Sized or the Minced & Moist, depending on the person's swallowing evaluation by a dysphagia professional. We have to stop the guessing, the assuming, and the making up of diets that are not standardized. This has led to placing people either on diets that are overly restrictive or on diets that are still too risky.

Q: What do you think of wired jaw syringe puree diets?

A: Here is another example of the wide variety of diet labels out there that has led to confusion. We have to standardize the terminology. I have never heard of "wired jaw syringe puree diet." This would now likely be called a "Liquidised" diet.

Q: Are patients on extremely thick liquids more likely to become dehydrated?

A: Yes, we try to avoid placing people on Extremely thick liquid. If their swallow is that severe that the only thing that is not aspirated is a puree or Extremely thick liquid, then there needs to be goals of care discussions. Is the patient still on an appropriate curative path? If so, then supplemental nutrition will be needed via alternative means. Is the patient on more of a palliative care path? Then consider allowing a "safer" diet, accepting risks for aspiration, knowing that there will be no fully "safest" diet. Often, we cannot prevent aspiration. Even providing a moderately thick liquid can cause dehydration and increased UTI risks; therefore, other options have to be presented with a palliative care focus.

Q: When determining a safe liquid level would we use the "room temp" of the item even if it is going to be served cold (ex: milkshake)?

A: It is best to double check your liquids, especially supplements/smoothies, at both room temperature and when cold. The viscosity is dependent on temperature, meaning that cold liquids will test at higher viscosities/thicker. What if the liquid is way too thick when served cold, and your patient gets more residue built up in the throat when the liquid is at a moderately thick liquid level? (Thicker is not always better). On the other hand, you need to make sure that your supplement is STILL a Mildly thick liquid when it is room temperature, even though it tested as a Mildly thick when cold. Often as the smoothie or supplement sits on the tray, it will become thinner over time and may only be a Slightly thick liquid or a thin liquid when the patient drinks

it, causing him to aspirate. Keep in mind, aspiration can happen silently, meaning without any reaction by the patient (no coughing, throat clearing or outward signs of congestion).

Q: What would you consider tomato juice? Our Speech therapist always says it is considered it Nectar thick - to me, it just seems a little too thin to be considered Nectar.

A: This is the great thing about the IDDSI Flow Test. Now we have the ability to reliably and easily check for ourselves. Before, we were really just making an educated guess and using our clinical judgement when looking at the item. We may have been told by someone before us that it was "nectar thick," so we believed them. We never had such an easy way to check viscosity before. Now test tomato juice and all your supplements together to agree upon the classifications. I bet the tomato juice will fall under only Slightly Thick.

Q: What's the best method to thicken ice cream? Melt, thicken and refreeze? My small group homes often balk at the cost of pre-thickened, so I can't serve to everyone.

A: There is no good way to thicken ice cream in and of itself that I know of. There are ice cream products available that claim to maintain a pudding thick consistency (Extremely thick under IDDSI). You can also put ice cream in a blender, adding foods that would naturally thicken the ice cream into a smoothie (e.g., banana, yogurt). Then run your smoothie through the IDDSI Flow Test.

Liquid Questions:

Q: Please review the conversion from current to new terms for fluids... such as Extremely thick +?

A: See the slide about "Mapping to IDDSI – Drinks"

Q: Are nutritional drinks such as Ensure in the Slightly thick range?

A: When I tested different Ensure products, they were either a Tliquid or in the Slightly thick liquid ranges. For example, the original Ensure Milk Chocolate and Ensure's Glucerna tested in the Thin liquid range. Whereas, the Ensure "Enlive" product tested in the Slightly thick range. I encourage each facility to test their supplements to make sure they know what they are giving to their patients. You may even need to test often to double check that there are not significant inconsistencies in the brand.

Q: Is Slightly thick similar to a milkshake?

A: The term "milkshake" is also not a standardized level of liquid. Technically, a milkshake is just milk and ice cream, which would become a Thin liquid when it hits the warmth of the mouth. Any smoothie or supplement that is offered must be tested with the IDDSI Flow Test to take away our guess-work and inconsistencies.

Q: At some point, would pre-packaged commercial thickened liquids be labeled and identified as Mildly/Moderately thick (etc.) instead of nectar and honey thick?

A: As Karen mentioned in the webinar presentation, companies are starting to do dual-labeling. You will see both terms on the packaging. This will really help us teach the terminology change. People will see that the old term is nectar thick and the new term is Mildly thick. We can start using this dual-labeling in our reports and when speaking with staff. Start small with this dual-speak to start teaching the terminology changes.

Q: What about use of straws?

A: That is not involved with the IDDSI framework. The concept that straws can sometimes make liquids more risky for some people needs to be tested by the SLP who is performing the bedside swallowing evaluation and then the instrumental swallowing evaluation. On the instrumental evaluations, we can watch to see if taking liquid from a straw drops the liquid to the pharynx and airway too quickly before the swallow happens. Sometimes straws could increase aspiration risk before the swallow (i.e., before the airway has a chance to close).

Testing and Measuring Questions:

Q: How precise should the bite sizes be? It will be impossible to measure in a hospital food service.

A: That is why it is nice that 1.5 cm is about the size of an adult thumbnail. It makes it easy to check at the point of service. You can even put that on your swallow guide on the wall. (e.g., "Make sure food is cut up into small pieces – the size of an adult thumbnail.")

We have to at least strongly teach and recommend making bite sizes this measurement for those at high risk for choking on solids. I think this concept helps drive home the point: this is the size that can fall through an airway, rather than block an airway and cause asphyxiation.

Q: For the Minced & Moist diet is the particle size 4 mm x 4 mm (similar to Soft & Bite Size being 1.5 x 1.5 cm)?

A: Yes, that is accurate. However, IDDSI has a picture of Risotto fitting through the tines of the fork, but the other dimension is a bit longer. The key also is moist and cohesive pieces (not dry and crumbly little pieces that could roll to the airway).

However, the 1.5 cm x 1.5 cm is really important regarding the size of the airway, as I noted in the question above.

Q: Is the Fork Pressure test only for Level 6?

A: The Fork Pressure Test is really good for levels 5 (Minced & Moist) and 6 (Soft & Bitesized). If you do the fork pressure test on level 5, then you should see the particles easily

separate through the tines of the fork, while staying moist, smooth and cohesive. Again, you do not want particles in the level 5 that are hard, dry, and crumbly.

You can even try it on your Level 4 puree. Your thumbnail should NOT have to blanch white if you are pressing into a puree. It should squash easily without much pressure. I have found that as a puree sits too long on a tray and gets cold, it can be shown to be unsafe if you do the fork pressure test on it. It would not be a safe puree if the puree feels harder, spongy and sticky. The puree should just easily squash between the tines of the fork, leaving an impression and not sticking to the fork. Make sure the edges of the puree do not dry out and become resistant to this very light fork pressure.

Q: There are two tests for liquids? Is the syringe better/accurate than the spoon tilt?

A: The syringe test (IDDSI Flow Test) is accurate for Thin liquid, Slightly thick liquid, Mildly thick liquid, and Moderately thick liquid.

The IDDSI Flow Test is NOT accurate for Extremely thick liquid, as only maybe one drop will come through, if that. Therefore, you can do the Spoon Tilt Test on the extremely thick liquid. You can use this on the Moderately thick also, watching the Moderately thick run off the spoon in a stream.

The third liquid test is the Fork Drip Test. This is appropriate for Moderately thick and Extremely thick liquid. See those slides again for the pictures. The Moderately thick liquid allows strands or dollops of liquid to flow through the tines of the fork.

The Extremely thick liquid will sit in a mound on the fork and no dollops will go through the fork (maybe only a small tail under the tines of the fork).

Q: Please repeat the correct item number for a syringe.

A: Options for syringes:

BD Slip Tip: 303134BD Leuer Lock: 302995

These may not be the only syringes that are appropriate. Just make sure the syringe measures 61.5 mm from the 0 to the 10 mm lines.

Q: For commercial products, are liquid beverages tested chilled or at room temperature?

A: Industry is just starting to test products with the IDDSI standards, with the urging of IDDSI and clinicians like you. We can continue to push for more consistency across products from one company and between companies.

Q: Doesn't the consistency change if it sits on tray for 30 minutes before eating?

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A: Yes, the viscosity is not only temperature dependent, but also time dependent. Especially with corn-starch based thickened liquid powders, these products thicken over time. You may prepare it to a Mildly thick liquid, but by the time the patient drinks it, it has thickened to a Moderately thick. You can avoid thickening over time by using gum-based thickeners (e.g., xantham gum), which are more stable. Or use pre-thickened liquids, thickened with gum-based thickeners. Corn-starch based thickeners, even when in a pre-thickened liquid container, can become altered when saliva contaminates the cup. Ben Hanson, an IDDSI board member, has done excellent research on this, showing how the enzymes in the saliva bind with the corn-starch thickener, **thinning** out the thickened liquid over time.

Q: If an item is thinner warm than cold what do you consider it, the thinner or the thicker?

A: We have to consider it to be the level of the **room temperature rating**, as we know that the patient is not going to consistently get that cold beverage immediately. We know it will sit on the tray and warm up. It also warms up the minute it hits the mouth. Additionally, if the oral phase of the swallow is slow, that liquid could be held in the mouth for 10 seconds or more, warming and thinning all the while.

Q: Should liquids all be tested at room temperature since the temperature of liquids changes when in the mouth/during swallowing?

A: Yes, but it is good to check it at both temperatures, at least to reinforce the concepts.

Q: Is the expectation to check the flow of liquids each time a liquid is served to a patient or family member on a modified consistency liquid?

A: If you are using "stable" and "standard" products (e.g., supplements and pre-thickened liquids), then these don't have to be checked every time. The SLP and RDN should check all products in the building initially, though. Additionally, once you have appropriate "recipes" for how to make your thickened liquid, then you don't have to check it every time. However, you have to make sure you are doing it the **same** way every time (For example, always using exactly 4 ounces of liquid for that packet of mildly thick/nectar thick powder that is premeasured to be used with only 4 ounces). Sometimes at home it is hard to keep to a standard system. Your caregiver may want to make up a big pitcher of mildly thick juice. He could then test the consistency of the pitcher one time, and not every time a cup is given to a patient.

Q: What about shaking the supplement? It adds in air but does it change the viscosity?

A: Good question. It does add air, but does NOT change the thickness/viscosity. However, it does make the Flow Test more difficult. Those bubbles at the line where you are measuring get in the way! You may need to let the liquid settle down before doing the flow test.

Q: Do you have the RDNs do the testing or will it best for the SLPs to do it?

A: Both should get comfortable with this testing. It is nice how easy and reliable the IDDSI Flow Test is.

Product Questions:

Q: Do you know if Hormel has table available communicating the thickness of their products comparing to the flow test numbers?

A: We are not sure if companies in the future will be publishing their charts on each product according to IDDSI testing. That would be a good idea so that clinicians are confident in each company.

Karen has been working on doing Flow Tests on as many products as possible. We encourage you to do your own flow tests on the products in your building.

We can all urge all companies to make sure their products are falling in line with the IDDSI Framework, Descriptors and Testing Methods.

IDDSI has urged this testing among many companies. Companies that support IDDSI are starting this dual-labeling, and a lot of testing goes into the liquid product to make sure they can call it Mildly thick/nectar thick, for example.

Q: Do you have a list of these products and medications with their consistencies that you can send?

A: Karen will eventually have this chart on her website - please stay tuned. Keep doing your own flow tests, and please send any data you may have to shefflerkaren@gmail.com.

Q: Are thickening companies going to revise recipes for new liquid consistencies?

A: Yes, and we need to continue to urge the companies to do so. For example, if one company has a prethickened liquid in a "nectar thick" consistency that is testing thicker when in cranberry juice versus when in apple juice, that is not okay, and needs to be altered. Do Flow Testing and see the inconsistencies in products for yourself. Then call the company and discuss the plans they may have to remedy the inconsistencies. Clinicians can help industry move forward for the safety and comfort of our patients.

Q: Do you have information on the new Barium testing consistencies?

A; Here is the IDDSI Mapping to Varibar barium products: http://iddsi.org/wp-content/uploads/2017/07/Mapping-Varibar Short-version-1.pdf

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Q: Does IDDIS have a list of products/meds and their consistencies?

A: Not yet

Regulatory questions:

Q: Do we know when CMS will be educated and looking for this during survey or how will this be regulated or required in long term care?

A: We do not have any information on this at this time. CMS will likely balance resident's rights and the Pioneer Network New Dining Practice Standards with this new information.

Implementation Questions

Q: When the Academy says the "roll out will be in January 2019" how do we do that if we don't have all the information from IDDSI on implementation yet? Is the January 2019 date more the date to start working on implementation?

A: IDDSI expects the roll-out to be slow, requiring 1-2 years if not more for full adoption of IDDSI. It is good to have a "roll-out" date to shoot for so that people get started now. Starting is what you are already doing by taking courses like this one and raising awareness among your staff.

Go to IDDSI.org under Resources. See the IDDSI 101 tab, the IDDSI Implementation tab, and the IDDSI presentations tab. You can use those presentations to help raise awareness and educate staff in your facility about IDDSI. Make sure you sign up for news under the "Contact Us" tab. The IDDSI website has so much information to help guide your process.

Q: Do you know of any updated diet manuals (for long term care) that include this new language?

A: Our understanding is that the Academy of Nutrition and Dietetics has preliminary information on the IDDSI diets in their Nutrition Care Manual. Becky Dorner & Associates' 2016 Diet and Nutrition Care Manual also includes introductory information, and the 2019 revision will include much more detail. Of course, we can only release what is currently available through IDDSI and we will be watching for more information on the implementation plans for the U.S.

Q: So color printed tray cards would be necessary or at least optimal?

A: Yes, and Karen provided examples of those during the webinar.

Q: How will hospitals be able to accommodate such a variety of different levels and provide safety for the patient as well as being cost effective?

A: IDDSI is actually an attempt to trim down the number of levels and standardize the levels. Before, we had so many terms that were not agreed upon. The doctor may have thought that a "soft" diet meant that the patient was getting a Puree texture, when the patient was really getting foods that were similar to a regular diet. Additionally, some facilities may decide to not provide the slightly thick liquid level. Others may eliminate the Minced & Moist. Of course, that is not recommended, but the diets and descriptors cannot be altered and radically tweaked to meet needs. That would defeat the purpose of the standardization across facilities. What happened before was when a patient went from the hospital to the rehab and then to the skilled nursing facility, no one was speaking the same language with diets/liquids. Now we can talk one language that does NOT include such a wide variety as we had before.

Costs should not change much. This will require time from the Food and Nutrition Services Manager, kitchen staff, RDN, SLP and other staff to review the diets that you have now and map them over to IDDSI. This will cause you to eliminate some items and add others. You will have to teach the cooks to prepare foods according to IDDSI standards, but I don't think it should require having to increase food costs.

Q: Has anyone starting working w/ Point Click Care to get ready for these diet orders?

A: We are not aware of any work being done by Point Click Care – you may want to check with your provider.

Miscellaneous:

Q: Are there any recommendations regarding how often to repeat instrumental swallow studies in long term care?

A: This should be a decision by the SLP, patient and medical team. Sometimes we need to repeat them as often as after 2 weeks in acute care. Other times when a patient has had an instrumental swallow study in acute care, the SLP will recommend a repeat study to be done in 3-6 weeks, per the treating clinician. This is also per the prognosis and likelihood for improvement after rehabilitation and overall increasing stability of the patient. Keep in mind issues like frailty and disuse atrophy, and how a patient who is not eating will not be benefiting from the neuroplasticity principle of "use it or lose it." Sometimes though, no one consistency can be deemed "safe," and potentially the patient has to accept ongoing aspiration risk in a palliative care treatment path.

Q: Is there any clear liquid thickener?

A: Just look for gum-based thickeners. Some companies use the term "Clear," as the liquid is clear and not cloudy like the corn-starch based thickeners.