



Dysphagia Guidelines: What's New & Best Practices



Meet the Speaker Panel

Featured Speaker



Debra Zwiefelhofer, RDN, LD

Owner/President
Nutrition Affairs, LLC

Moderator



Melissa Holte

Associate Channel Manager
Healthcare
General Mills, Inc.

Featured Speaker



Gilles Stassart, CEC, CCA

Corporate Chef
Convenience and Foodservice
General Mills, Inc.

Overview

Part I

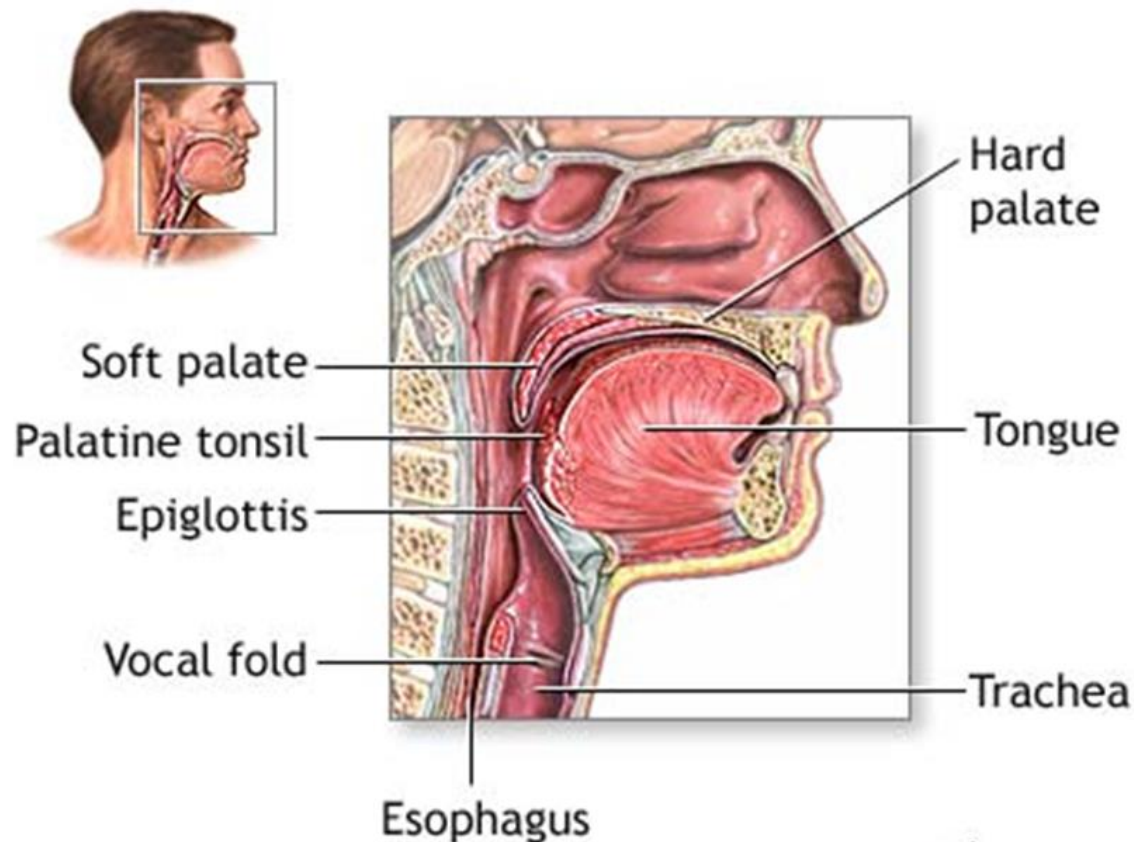
- Background of dysphagia
- The dysphagia diet evolution

Part II

- Culinary demonstrations of dysphagia recipes

Dysphagia Defined

Dysphagia is defined as difficulty moving food, liquid, saliva or medication from the mouth to the stomach.



Dysphagia Overview

- Secondary to a variety of medical conditions
- May be present in any age group
- May be acute or present slowly
- May be short-term or chronic

Estimated to impact 35% of people over 75 years

Nutrition Consequences

- **Dehydration**
 - Impacts ~30%
- **Malnutrition**
 - ~49% malnourished
- **Aspiration**
 - 25-30% “silent aspirators”
 - Pneumonia
- **Asphyxiation**

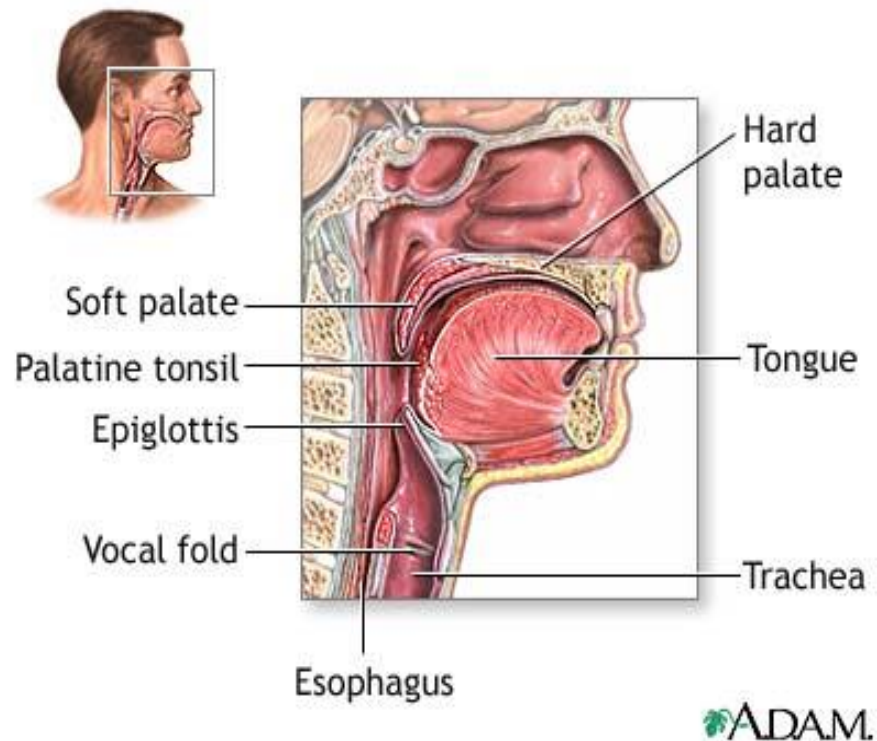
Social/Emotional Consequences

- 1999 Pan-European Survey of Elders with Dysphagia¹
 - 55% unable to eat select foods
 - 50% ate less than normal
 - 30% left meals hungry
 - 66% bothered by swallowing problems
 - 48% no longer enjoy eating

¹Ekberg, Olle. Hard facts to Swallow: a European survey assessing the impact of Dysphagia. *EGDG* 1999.

Phases of Swallowing

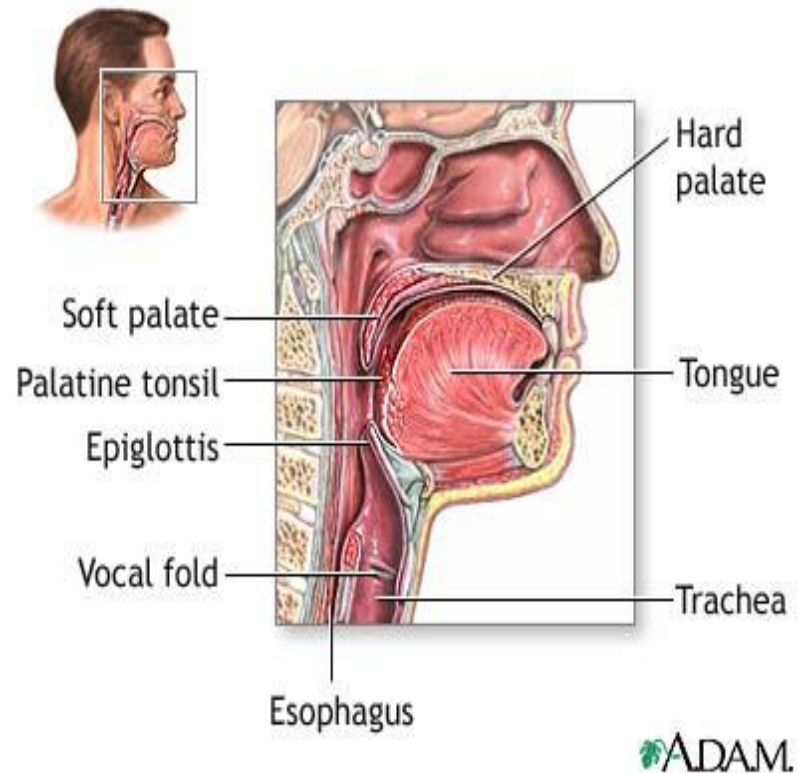
- Preparatory
- Oral
- Pharyngeal
- Esophageal



Imaged accessed online June 2010 at <http://www.healthline.com/galecontent/swallowing-disorders>

Oral Phase

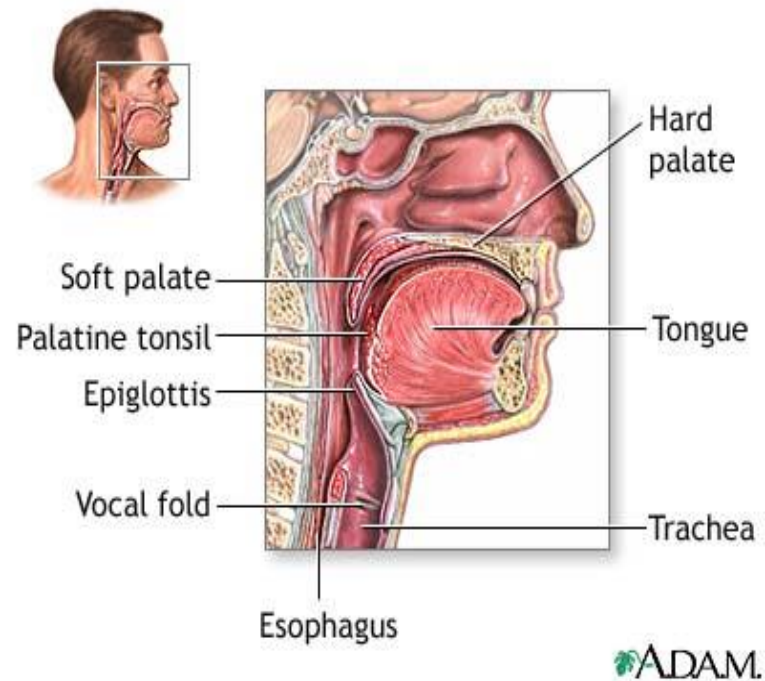
- Food in mouth is combined with saliva
- Chewing as needed
- Bolus formed
- Tongue pushes food to rear of oral cavity
- Challenges
 - Weakened muscles of lips, tongue movement
 - Poor tongue strength and motility



Imaged accessed online June 2010 at <http://www.healthline.com/galecontent/swallowing-disorders>

Pharyngeal Phase

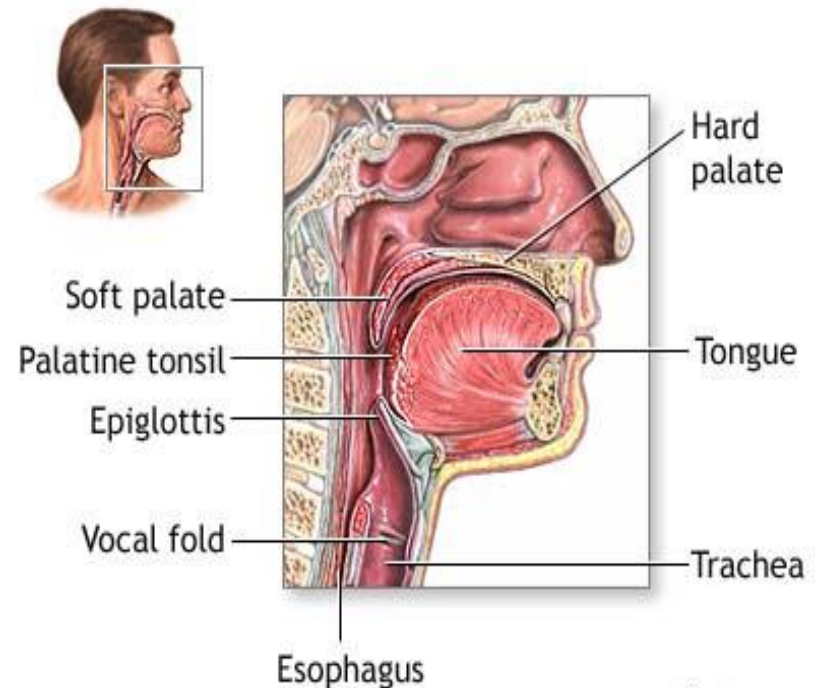
- Involuntary
- Bolus moves between tonsillar pillars
- Epiglottis and vocal folds close off airway
- Upper esophageal sphincter is opened
- Difficulties noted as:
 - Gagging, choking, nasopharyngeal regurgitation



Imaged accessed online June 2010 at <http://www.healthline.com/galecontent/swallowing-disorders>

Esophageal Phase

- Involuntary
- Upper esophageal sphincter is relaxed
- Peristaltic wave moves bolus down the esophagus to the stomach
- Difficulties:
 - Mechanical obstruction
 - Impaired peristalsis



ADAM.

Imaged accessed online June 2010 at <http://www.healthline.com/galecontent/swallowing-disorders>

The Dysphagia Diet Evolution

Food Texture & Liquid Consistency Modifications

Objective: Minimize risk for aspiration and choking

Goal: Maximize normal eating without compromising nutrition or hydration status

Pre “Dysphagia Diet”

- **Before dysphagia was a “diet”**
 - Foods were served pureed/liquidized
 - Nutrients were questionable
 - Or, baby food for all
 - Foods/liquids were thickened with other foods
 - Wonder what that tasted like?
 - Little thought was given to visual look of meals

Poll Question

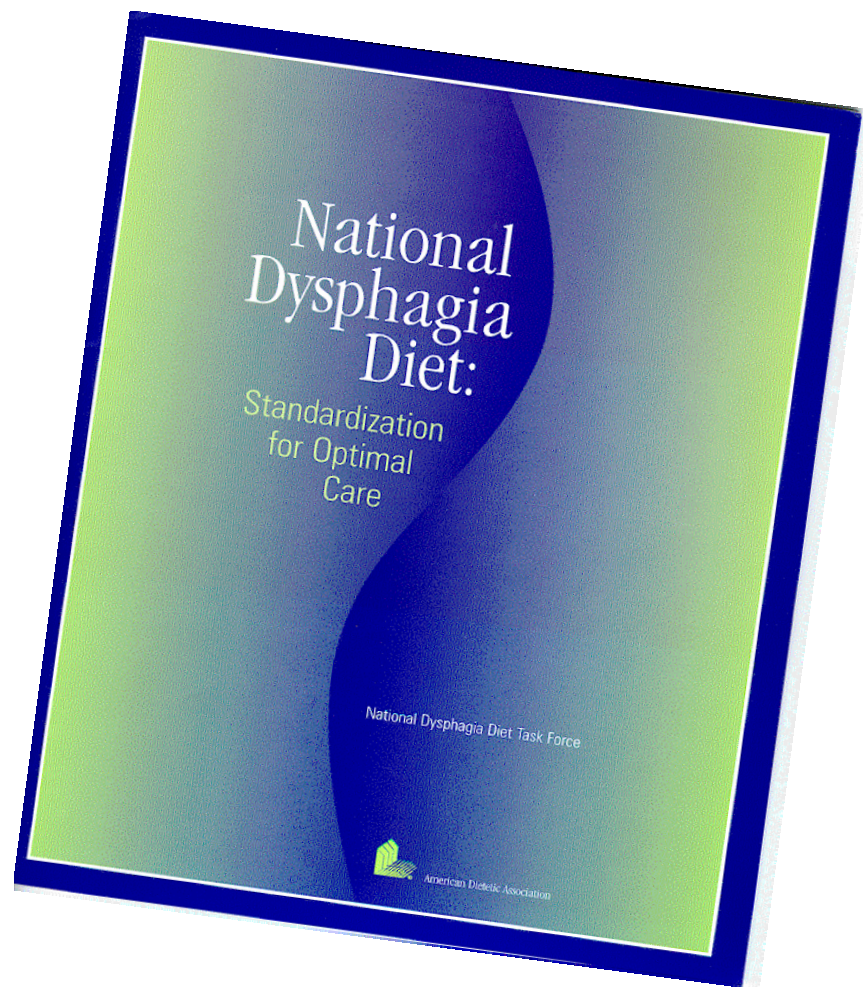
What does your facility currently use as guidance for dysphagia menus?

- a. NDD (National Dysphagia Diet)
- b. IDDSI (Int. Dysphagia Diet Stdzn Ini.)
- c. Other
- d. None

National Dysphagia Diet

Introduced in 2002

- Multi-level diet structure
- Defined food and fluid consistency standards
- Offered food preparation tips



National Dysphagia Diet

- **Terminology guidelines for solid foods:**
 - Level 1 - Dysphagia Pureed
 - Smooth, cohesive, pudding-like, no chewing required
 - Level 2 - Dysphagia Mechanically Altered
 - Moist, soft foods with some cohesion, minimal chewing required
 - Level 3 - Dysphagia Advanced
 - Soft-solid foods, nearly a regular diet, requires more chewing and manipulation
 - Level 4 - Regular Diet

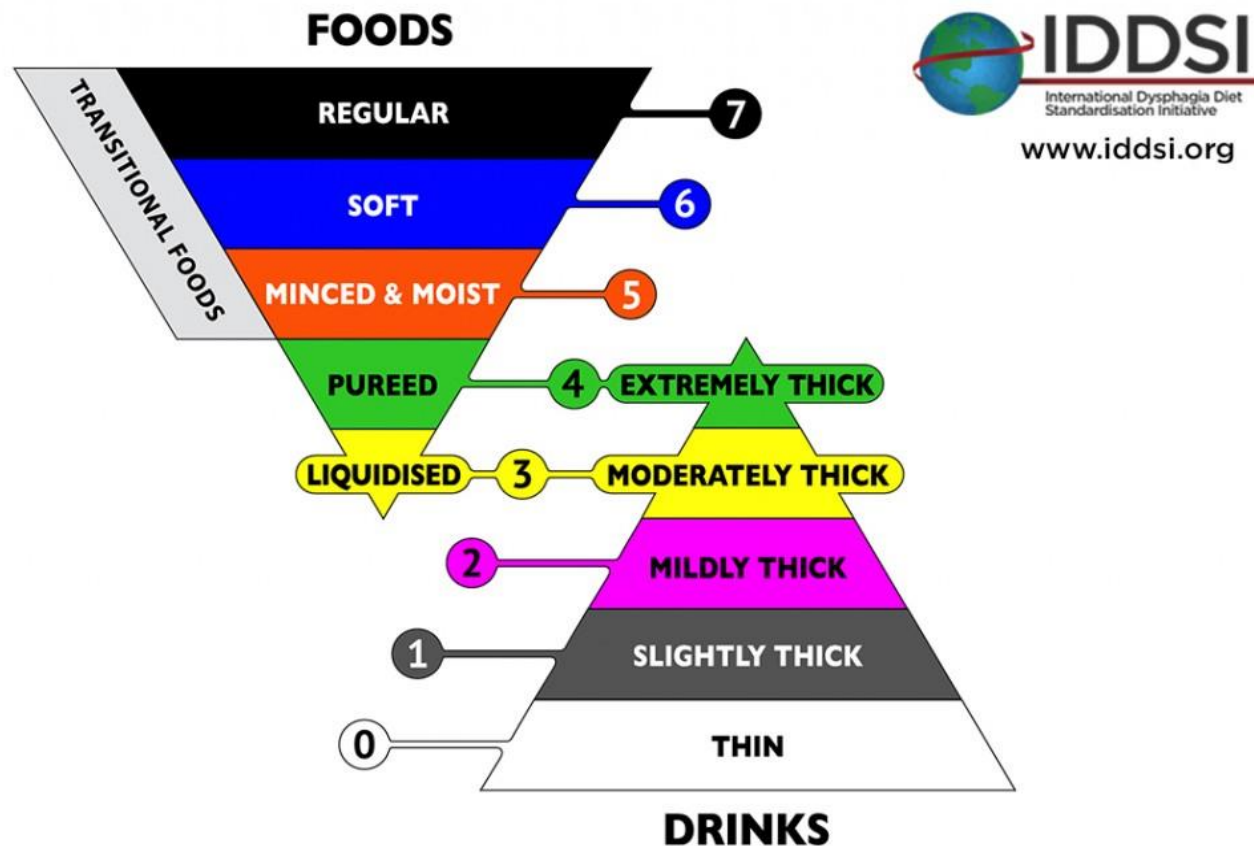
National Dysphagia Diet

Viscosity & Liquids

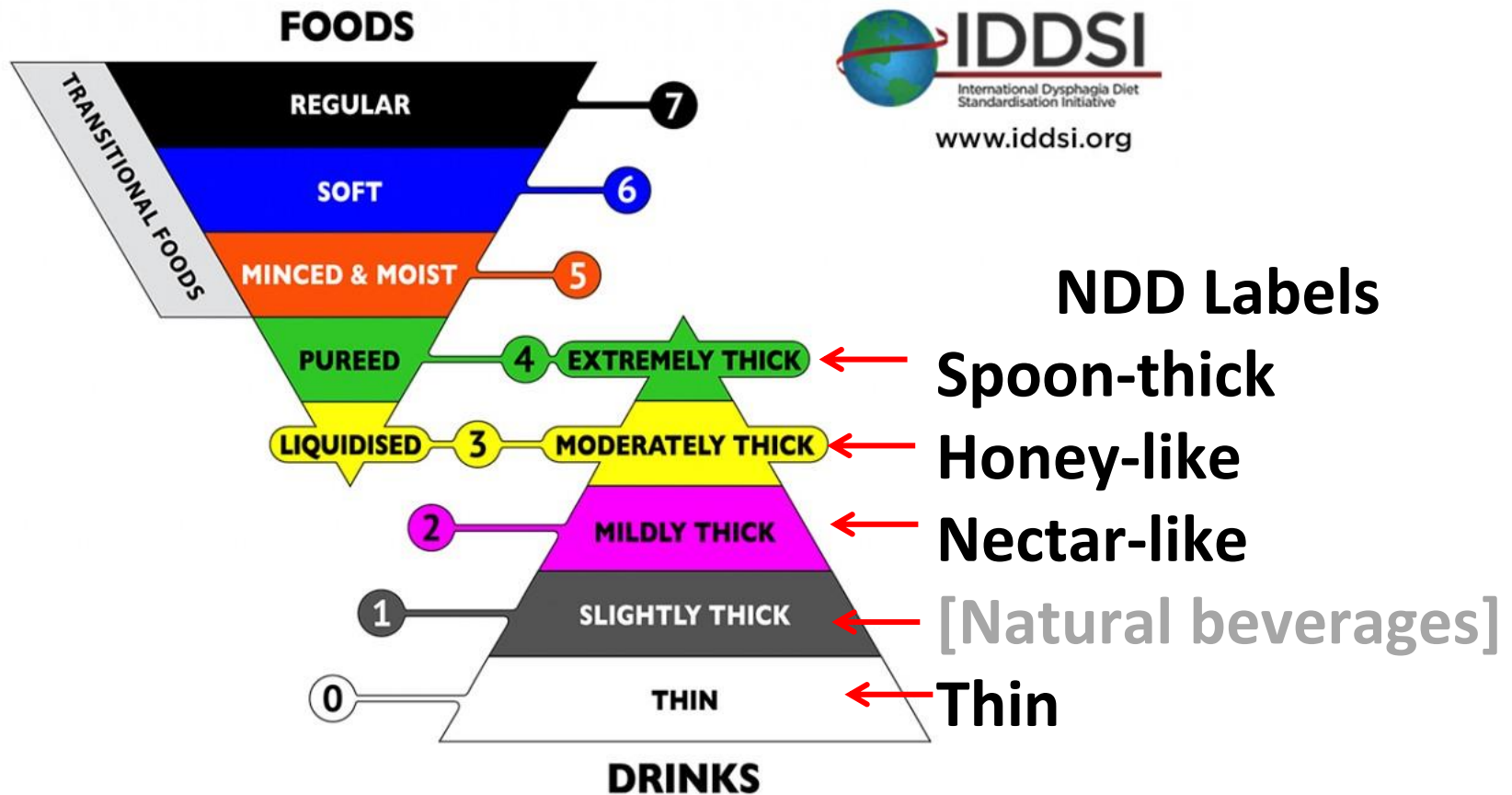
Classified Viscosity	Description	Centipoise (cP)
Thin	Think water	1-50
Nectar-like	Easily pourable and similar to a thick cream soup	51-350
Honey-like	Less pourable, drizzles from a cup	351-1750
Spoon-thick (pudding)	Holds shape, not pourable, eaten with a spoon	>1750

International Dysphagia Diet Standardization Initiative


Changing the way we look at consistencies



Liquids for Dysphagia




IDDSI Flow Test



International Dysphagia Diet Standardisation Initiative
www.iddsi.org


IDDSI Flow Test

- 1**




1. Get a stopwatch and some 10 ml slip-tip syringes. Remove the plunger from a syringe & discard.

- 2**



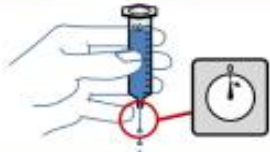
2. Cover the nozzle of the syringe with your finger, making a seal.

- 3**



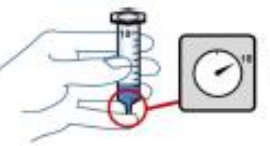
3. Fill the syringe up to the 10 ml line with fluid - it's recommended to use another syringe to do this.

- 4**



4. Remove your finger from the nozzle end at the same time as starting the stopwatch.

- 5**




5. At 10 seconds, replace your finger over the nozzle, stopping the liquid flowing.

IDDSI Level classifications based on liquid remaining after 10 seconds:

- Level 0: All liquid has flowed through syringe.
- Level 1: There is between 1 and 4 ml remaining.
- Level 2: There is between 4 and 8 ml remaining.
- Level 3: There is more than 8 ml remaining, but some liquid still flows through.
- Level 4: If no liquid flows at all, the category is Level 4 or above.

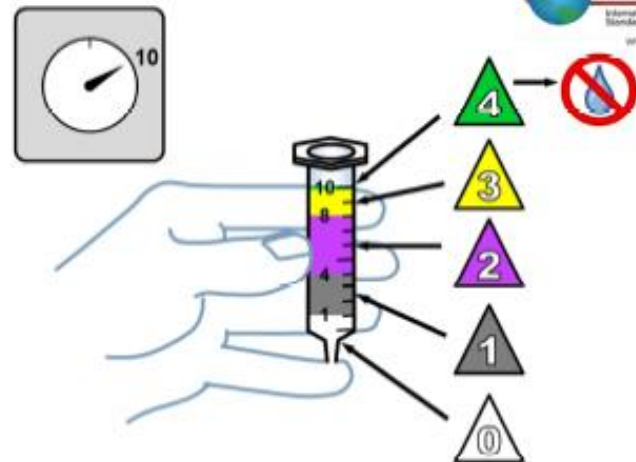
Level 4 can be easily identified without a syringe test: Material holds its own shape; small peaks remain on the surface. Too thick to be drunk from a cup or a straw, should be taken with a spoon. A full spoonful must drop off a spoon if turned sideways; a very gentle flick may be necessary but the material should not be firm, nor sticky.

© Ben Harrison 31/3/2015



International Dysphagia Diet Standardisation Initiative
www.iddsi.org

IDDSI Flow Test



IDDSI Level classifications based on liquid remaining after 10 seconds:

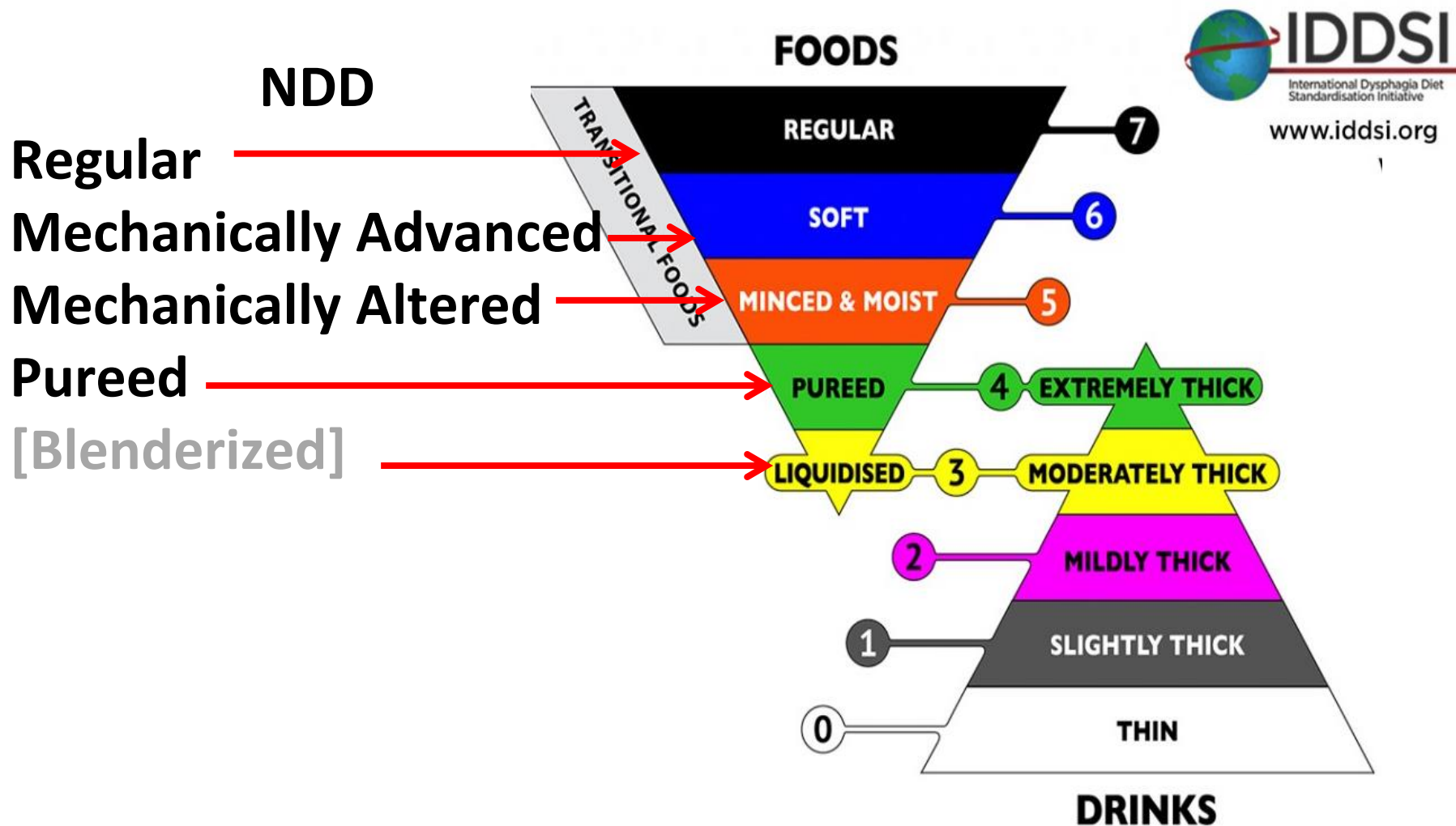
- Level 0: All liquid has flowed through syringe.
- Level 1: There is between 1 and 4 ml remaining.
- Level 2: There is between 4 and 8 ml remaining.
- Level 3: There is more than 8 ml remaining, but some liquid still flows through.
- Level 4: If no liquid flows at all, the category is Level 4 or above.

Level 4 can also be easily identified without a syringe test: Material holds its own shape; small peaks remain on the surface. Too thick to be drunk from a cup or a straw, should be taken with a spoon. A full spoonful must drop off a spoon if turned sideways; a very gentle flick may be necessary but the material should not be firm, nor sticky.

© Ben Harrison 31/3/2015

Syringe video clip

Foods



Poll Question

What is your biggest challenge when serving dysphagia patients?

- a. Lack of ready-to-eat products
- b. Lack of recipe ideas
- c. Lack of labor to prepare custom meals
- d. All of the above

Adjusting Menus the IDDSI Way

New “tools of the trade”

- Rule with millimeter increments
 - 4 mm or less for adult level 5 minced and moist
 - 15 mm or less for adult level 6 soft
- Fork with 4 mm between tines

Poll Question

Are you offering yogurt on your dysphagia menu?

- a. Yes
- b. No

Regular Diet to Dysphagia

Recipe Modifications to Consider

1. Consider recipes that can be “regular diet” *after* dysphagia modification
2. Use ground meat instead of diced, chopped, or chunked
3. Use minced veg/fruit vs. diced or chopped
4. Change the preparation method
5. Omit “the one” ingredient; replace or not
6. Add extra moisture with sauces
7. Hold the crunchy topping

Gilles recipe examples video

Tip: Omit the Crunchy Topping

Maple Cupcakes

Before



After



Mini Salted Caramel Cupcakes



Tip: Use Ground Instead of Diced or Chunked Meat



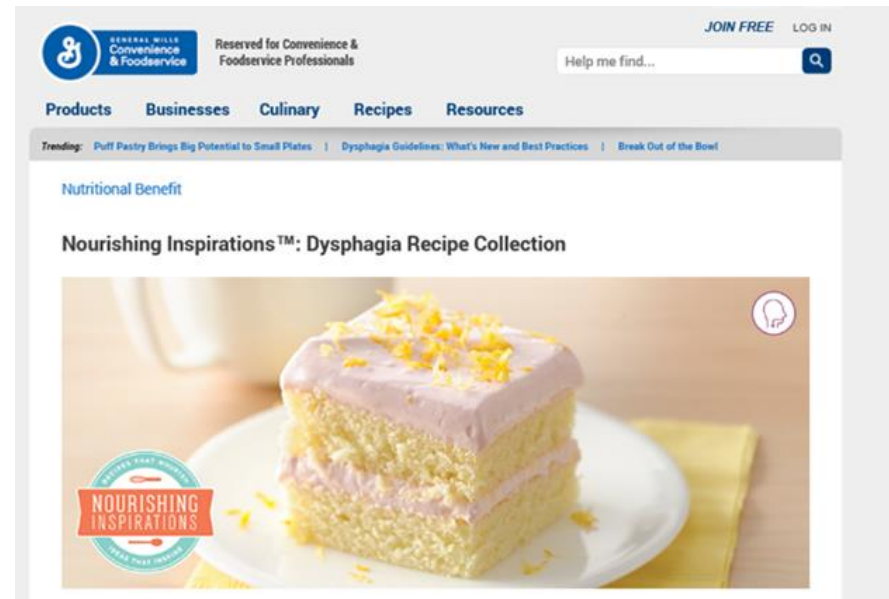
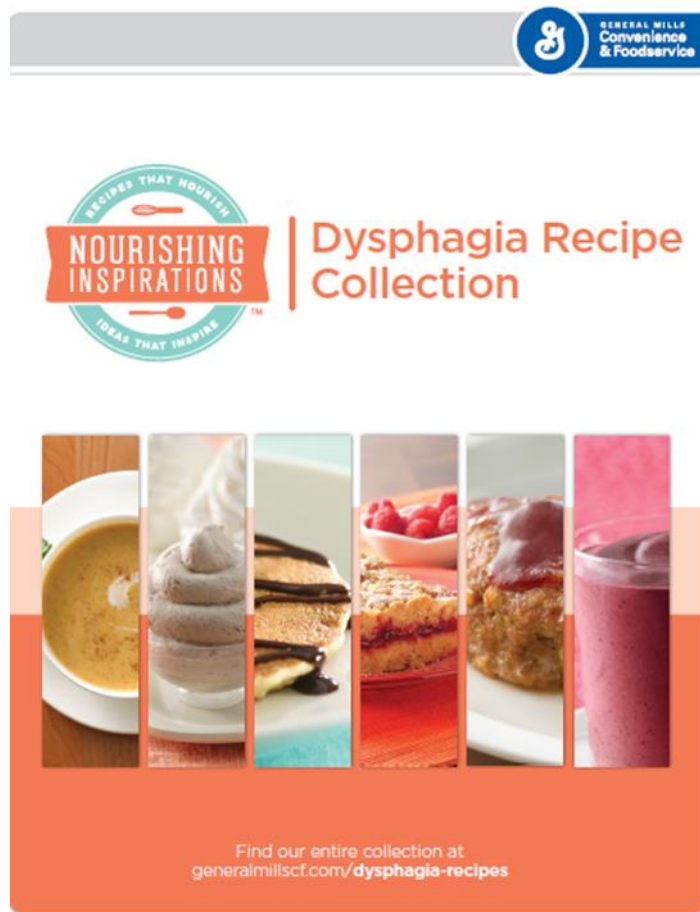
Corn Muffin Breakfast Squares

Tip: Consider Recipes that Can Be “Regular Diet”



Gluten-Free Butternut Squash Soup

Dysphagia Recipe Ideas On GeneralMillsCF.com



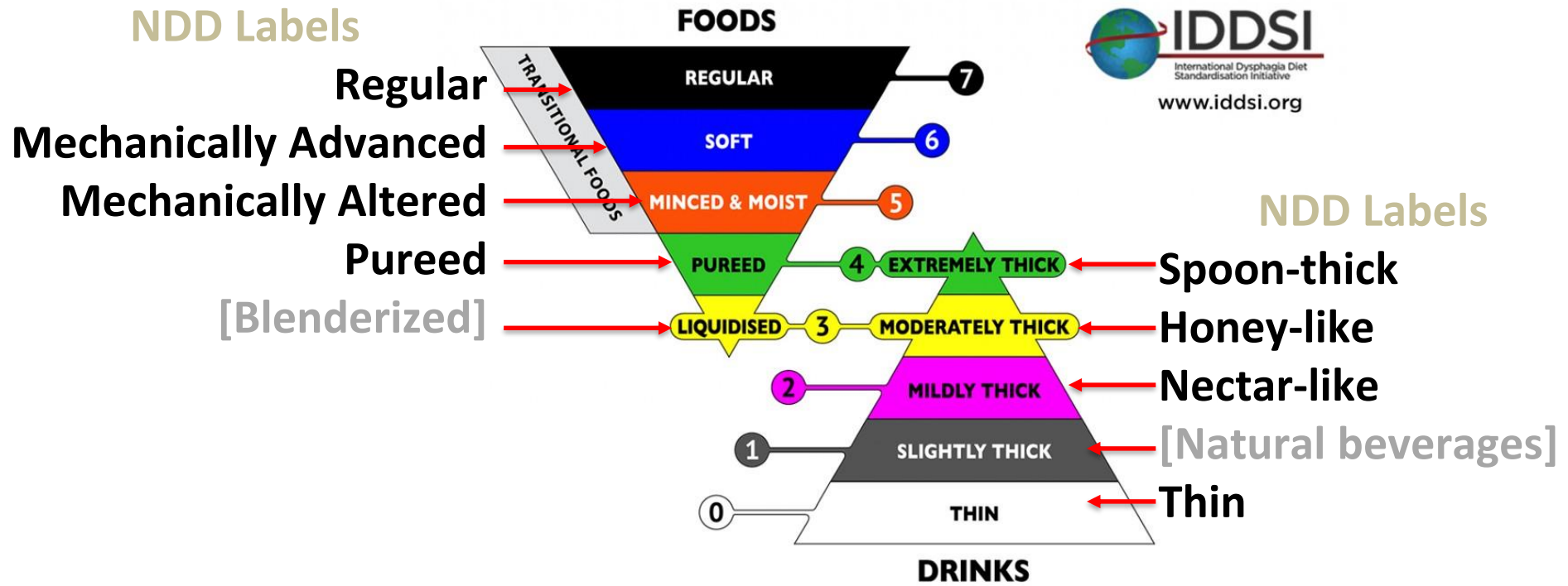
<https://www.generalmillscf.com/dysphagia-recipes>

Easy [Dysphagia] Menu Reminders

- Shop for foods/recipes that require no modification:
 - Pudding, yogurts, hot cereals, smoothies
- Consider foods recipes that can be “regular diet” *after* dysphagia modification
 - Pureed soups, pureed fruits, desserts
- Alter one or two ingredients to stretch a recipe
 - Mince or grind instead of chop, add extra sauces; remove inappropriate garnishes

Aligning NDD to IDDSI

Many same recipes; Better self-check tools; Different naming conventions = Not Difficult!



Helpful to Have

Resources

- www.IDDSI.org
- Food service distributor

Kitchen Tools

- 10 mL Syringe (see IDDSI materials for syringe specifications)
- Pre-checked Fork with 4mm spaced tines
- Plastic (washable) ruler with millimeter increments

Conclusion

- Dysphagia is a health concern – especially for elderly
 - that is not recognized as widely as it should be.
- Treatment involves food texture and liquid consistency modifications.
- For patient safety and quality of life it is well worth the effort to give more attention to Dysphagia diets.
- The IDDSI is the new best practice resource

Q&A

Questions?



bell institute
OF HEALTH AND NUTRITION
GENERAL MILLS



GENERAL MILLS
GLOBAL CULINARY GROUP
CULINARY PASSION WITH PURPOSE

Stay Connected



General Mills Bell Institute of Health and Nutrition

Website: bellinstitute.com

Email: bell.institute@genmills.com

Twitter: @BellInstitute

LinkedIn: General Mills Bell Institute of Health and Nutrition



General Mills Foodservice

Website: generalmillscf.com



General Mills Foodservice Senior Living

<https://www.generalmillscf.com/industries/healthcare/support-tool-categories/health-and-wellness-resources/senior-living>