IDDSI

International Dysphagia Diet Standardization Initiative

The transition from National Dysphagia Diet (NDD)

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Why Change ?

A 9 year retrospective review of death certificates (2,424,379) with stroke mentioned were identified:

- 5.1 % of the deaths were reported as aspiration pneumonia = ~12,000 annually
- 1.3 % of the deaths were reported as choking = ~3,700 annually
  - These are 2 **preventable** complications in this population and preventable for other disease states as well

In 2019, 5200 choking deaths were reported in the US (National Safety Council, 2021)

A recent sentinel event within UMMS:

- Patient on a Mechanical Soft/Chopped/NDD3 diet, received a brownie on her food tray.
- While eating it, the patient began coughing and choking
- Resulting in a transfer to a higher level of care
- After developing an aspiration pneumonia, the patient expired

Brownies are not allowed on the new IDDSI diet that corresponds with NDD3.

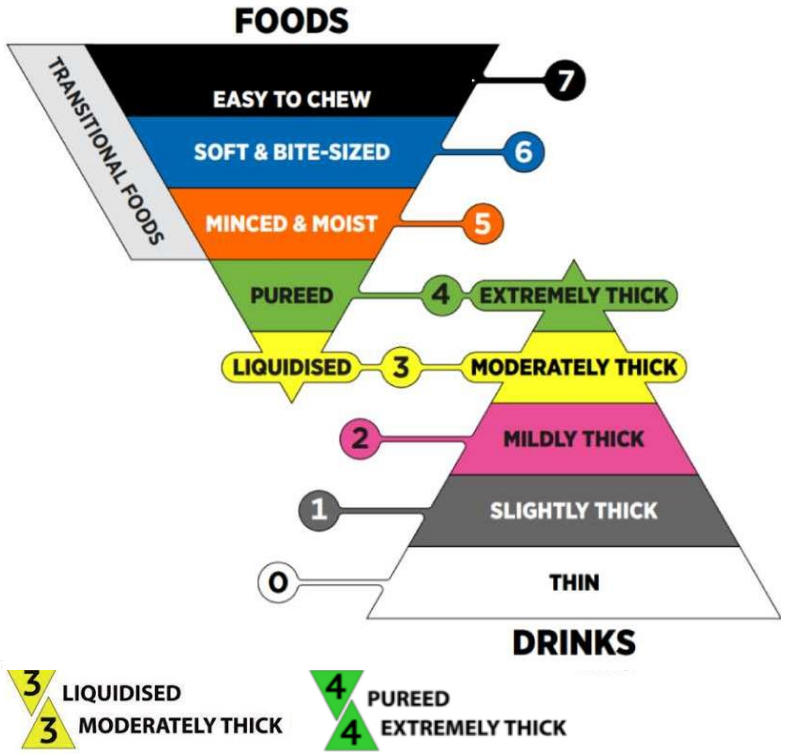
Changing to the IDDSI will PREVENT this from happening.

What is IDDSI?

A new framework to think about foods and liquids with standardized terms and leveling. Created to provide clarity and continuity for people with dysphagia on an international scale.

- Created in 2013
- Published in 2015
- Clinical application began in 2018
- Global movement to standardize diets/provide continuity of care
- Defined food textures and liquids
- Defined testing for food and liquid consistencies
- Addresses gaps in the NDD diets

This switch will go live at all UMMS facilities on 5/12/22.



Dysphagia Diet Crosswalk

Leveling from 0-7 references a continuum of thickness/viscosity so a range of foods/liquids can be referenced for safety:

Current	Future (IDDSI)
FOODS	
Dental soft (not a diet at UCH)	**Easy to Chew (Level 7)**
Chopped (NDD3)	**Soft and Bite-sized (Level 6)**
Ground (NDD2)	**Minced and Moist (Level 5)**
Pureed (NDD1)	**Pureed (Level 4)**
-	**Liquidized (Level 3)** *Will not be used within UMMS
DRINKS	
No Liquids	**Extremely Thick (Level 4)** *Enter in EPIC as "no liquids"
Honey Thick	**Moderately Thick (Level 3)**
Nectar Thick	**Mildly Thick (Level 2)**
-	**Slightly Thick (Level 1)** *Will not be used within UMMS
Thin Liquid	**Thin Liquid (Level 0)**

*UMMS will not be doing Slightly Thick Level 1 – level similar to infant formula viscosity.

*UMMS will not be doing Liquidised Level 3 Foods – only Level 3 Moderately Thick Liquids.

*UMMS will not have a separate diet order for Extremely Thick Level 4 Liquids = This will be ordered as "No Liquids" in EPIC.

Level 7: Easy to Chew

Normal everyday foods of a soft/tender texture. Foods on this diet must break apart easily with fork pressure or able to “bite off” pieces. Food piece size is not restricted on this level.

Similar to a dental soft diet.

Safe for people without altered levels of alertness.

For people who need softer food options to chew/swallow.

7 REGULAR
EASY TO CHEW

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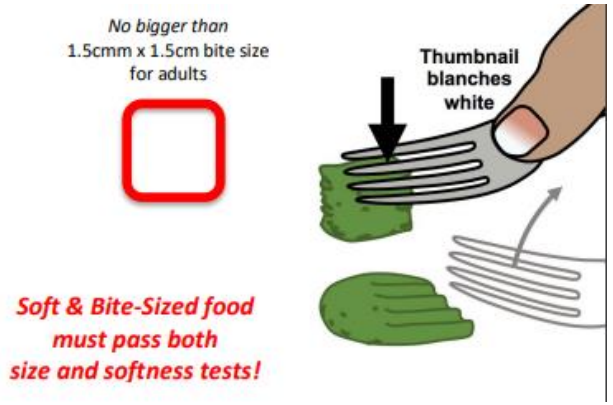
Avoid these food textures for adults who choose Level 7 Regular *Easy to Chew*

Food characteristic to AVOID	Examples of foods to AVOID
Hard or dry food	Nuts, raw vegetables (e.g. carrot, cauliflower, broccoli), dry cakes, bread, dry cereal
Tough or fibrous foods	Steak, pineapple
Chewy	Lollies/candies/sweets, cheese chunks, marshmallows, chewing gum, sticky mashed potato, dried fruits, sticky foods
Crispy	Crackling, crisp bacon, cornflakes
Crunchy food	Raw carrot, raw apple, popcorn
Sharp or spiky	Corn chips/crisps
Pips, seeds	Apple seeds, pumpkin seeds, white of orange
Bone or gristle	Chicken bones, fish bones, other bones, meat with gristle
Sticky or gummy food	Edible gelatin, konjac containing jelly, sticky rice cakes
Stringy food	Beans, rhubarb
Extra Clinician notes	

Level 6: Soft and Bite-sized

"Bite-sized" foods defined as 1.5cm x 1.5cm. Soft foods are tender and moist, but with no thin liquids leaking from the food. Foods can be mashed/broken down with pressure from a fork.

Similar to a chopped diet.
For people who are not able to bite off pieces of food safely but are able to chew bite-sized pieces down into little pieces that are safe to swallow.



6 SOFT & BITE-SIZED

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For safety, AVOID these food textures that pose a choking risk for adults who need Level 6 Soft & Bite-Sized Food

Food characteristic to AVOID	Examples of foods to AVOID
Mixed thin + thick textures	Soup with pieces of food, cereal with milk
Hard or dry food	Nuts, raw vegetables (e.g. carrot, cauliflower, broccoli); dry cakes, bread, dry cereal
Tough or fibrous foods	Steak; pineapple
Chewy	Lollies/candies/sweets, cheese chunks, marshmallows, chewing gum, sticky mashed potato, dried fruits, sticky foods
Crispy	Crackling, crisp bacon, cornflakes
Crunchy food	Raw carrot, raw apple, popcorn
Sharp or spiky	Corn chips and crisps
Crumbly bits	Dry cake crumble, dry biscuits (add sauce to make these suitable)
Pips, seeds	Apple seeds, pumpkin seeds, white of orange
Food with skins or outer shell	Peas, grapes, chicken skin, salmon skin, sausage skin
Foods with husks	Corn, shredded wheat, bran
Bone or gristle	Chicken bones, fish bones, other bones, meat with gristle
Round, long shaped food	Sausage, grape
Sticky or gummy food	Nut butter, overcooked oatmeal/porridge, edible gelatin, konjac containing jelly, sticky rice cakes
Stringy food	Beans, rhubarb
Floppy foods	Lettuce, cucumber, uncooked baby spinach leaves
Crust formed during cooking or heating	Crust or skin that forms on food during cooking or after heating, for example, cheese topping; mashed potato
'Floppy' food	Lettuce, cucumber, baby spinach leaves
'Juicy' food	Where juice separates from the food piece in the mouth, for example watermelon
Large or hard lumps of food	Casserole pieces larger than 1.5cmx1.5cm, fruit, vegetable, meat, pasta or other food pieces larger than 1.5cmx1.5cm
Extra Clinician notes	

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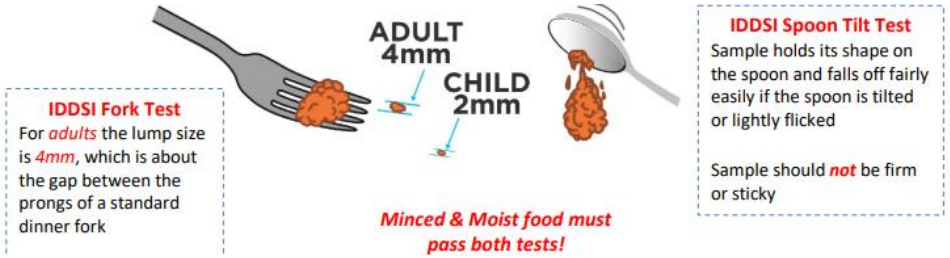
Level 5: Minced and Moist

"Minced" foods defined as lumps 4mm in size. Lumps can be mashed with the tongue or with just a little fork pressure. Foods must be moist, but with no thin liquids leaking from the food.

Similar to a ground diet.

For people who are not able to bite off pieces of food safely but have some basic chewing ability.

Requiring a small amount of chewing. Biting not required.



5 MINCED & MOIST

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For safety, AVOID these food textures that pose a choking risk for adults who need Level 5 Minced & Moist Food

Food characteristic to AVOID	Examples of foods to AVOID
Mixed thin + thick textures	Soup with pieces of food, cereal with milk
Hard or dry food	Nuts, raw vegetables (e.g. carrot, cauliflower, broccoli), dry cakes, bread, dry cereal
Tough or fibrous foods	Steak, pineapple
Chewy	Lollies/candies/sweets, cheese chunks, marshmallows, chewing gum, sticky mashed potato, dried fruits, sticky foods
Crispy	Crackling; crisp bacon, cornflakes
Crunchy food	Raw carrot, raw apple, popcorn
Sharp or spiky	Corn chips and crisps
Crumbly bits	Dry cake crumble, dry biscuits
Pips, seeds	Apple seeds, pumpkin seeds, white of orange
Food with skins or outer shell	Peas, grapes, chicken skin, salmon skin, sausage skin
Foods with husks	Corn, shredded wheat, bran
Bone or gristle	Chicken bones, fish bones, other bones, meat with gristle
Round, long shaped food	Sausage, grape
Sticky or gummy food	Nut butter, overcooked oatmeal/porridge, edible gelatin, konjac containing jelly, sticky rice cakes
Stringy food	Beans, rhubarb
Floppy foods	Lettuce, cucumber, uncooked baby spinach leaves
Crust formed during cooking or heating	Crust or skin that forms on food during cooking or after heating, for example cheese topping, mashed potato
'Floppy' food	Lettuce, cucumber, baby spinach leaves
'Juicy' food	Where juice separates from the food piece in the mouth, for example watermelon
Large or hard lumps of food	Casserole pieces larger than 4mmx4mmx15mm; fruit, vegetable, meat or other food pieces larger than 4mmx4mmx15mm
Extra Clinician notes	

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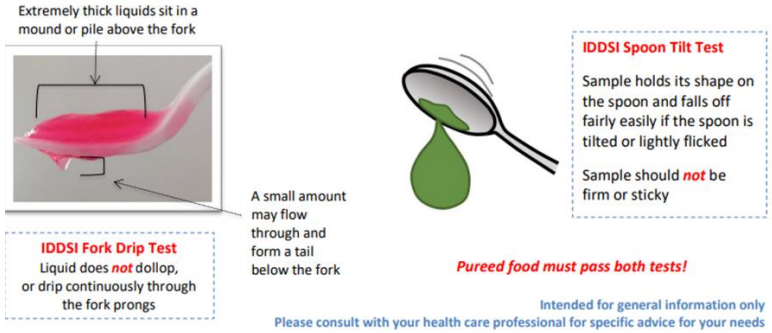
Level 4: Pureed

Pureed foods have a smooth texture with no lumps, hold their shape on the spoon and can fall off the spoon when tilted. Foods cannot be too sticky or they may stick to the cheeks, teeth, roof of the mouth or throat.

For people who are not able to bite or chew foods safely, or if tongue control is reduced.

Best eaten with a spoon. Does not require chewing.



4 PUREED

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For safety, AVOID these food textures that pose a choking risk for adults who need Level 4 Pureed food

Food characteristic to AVOID	Examples of foods to AVOID
Mixed thin + thick textures	Soup with pieces of food, cereal with milk
Hard or dry food	Nuts, raw vegetables (e.g. carrot, cauliflower, broccoli), dry cakes, bread, dry cereal
Tough or fibrous foods	Steak, pineapple
Chewy	Lollies/candies/sweets, cheese chunks, marshmallows, chewing gum, sticky mashed potato, dried fruits, sticky foods
Crispy	Crackling, crisp bacon, cornflakes
Crunchy food	Raw carrot, raw apple, popcorn
Sharp or spiky	Corn chips and crisps
Crumbly bits	Dry cake crumble, dry biscuits
Pips, seeds	Apple seeds, pumpkin seeds, white of an orange
Food with skins or outer shell	Peas, grapes, chicken skin, salmon skin, sausage skin
Foods with husks	Corn, shredded wheat, bran
Bone or gristle	Chicken bones, fish bones, other bones, meat with gristle
Round, long shaped food	Sausage, grape
Sticky or gummy food	Nut butter; overcooked oatmeal/porridge, edible gelatin, konjac containing jelly, sticky rice cakes
Stringy food	Beans, rhubarb
Floppy foods	Lettuce, cucumber, uncooked baby spinach leaves
Crust formed during cooking or heating	Crust or skin that forms on food during cooking or after heating, for example, cheese topping, mashed potato
'Floppy' food	Lettuce, cucumber, baby spinach leaves
'Juicy' food	Where juice separates from the food piece in the mouth, for example watermelon
Visible lumps	Lumps in pureed food or yoghurt
Extra Clinician notes	

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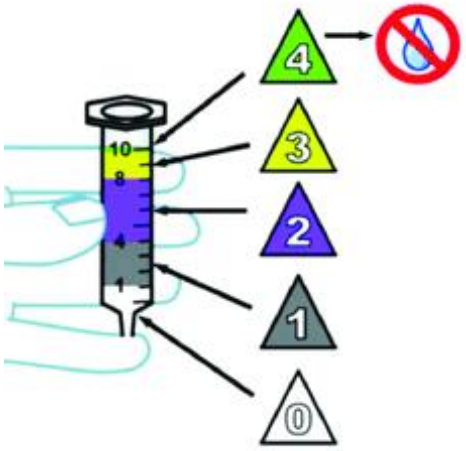
Level 3: Moderately Thick

3



- Never add ice or other liquids to these products
- Commercially thickened products use color-coded labels with number level to match IDDSI pyramid
- Liquids are tested via the Syringe Flow test

Level 3: Mildly Thick

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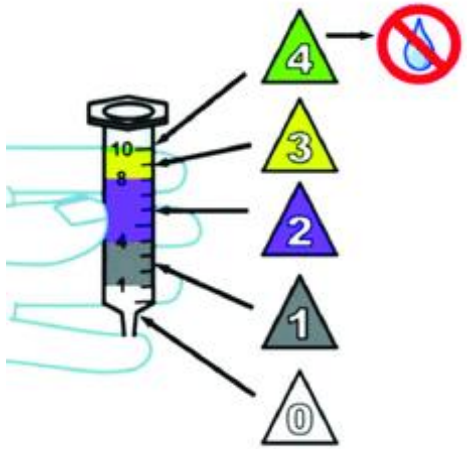


- Never add ice or other liquids to these products
- Commercially thickened products use color-coded labels with number level to match IDDSI pyramid
- Liquids are tested via the Syringe Flow test

IDDSI Safety Changes

Dry Breads are not allowed (i.e Bagels, English muffins, toast) or cake products like brownies

Soft bread products may be allowed for Easy to Chew (L7) ONLY (i.e Dinner rolls, Pancakes, Sliced Bread)

Transitional Foods and liquids are those that melt/breakdown in your mouth and change texture:

- Ice cream
- Jell-o
- Popsicles
- Cheetos/Veggie stix
- Rice puffs
- ICE CHIPS will be at the discretion of clinician.
- **These items are allowed ONLY if passed for Thin (L0) liquids**

IDDSI Safety Changes

Dual Textures/Mixed Consistencies are foods with more than 1 textured item

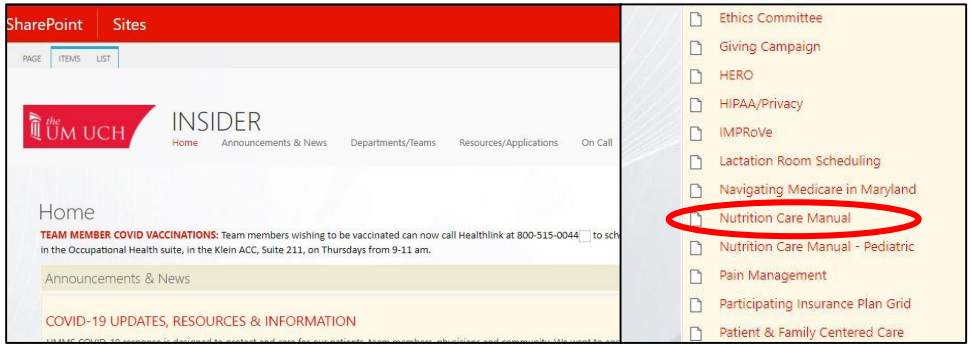
- Cereal with milk
- Soup with pieces of food (i.e chicken noodle)
  - Only allowed on Easy to Chew (L7) and Soft and Bite Sized (L6) as long as allowed for Thin (L0) liquids

Fruit selection is limited on dysphagia diets - all fruits need to be drained

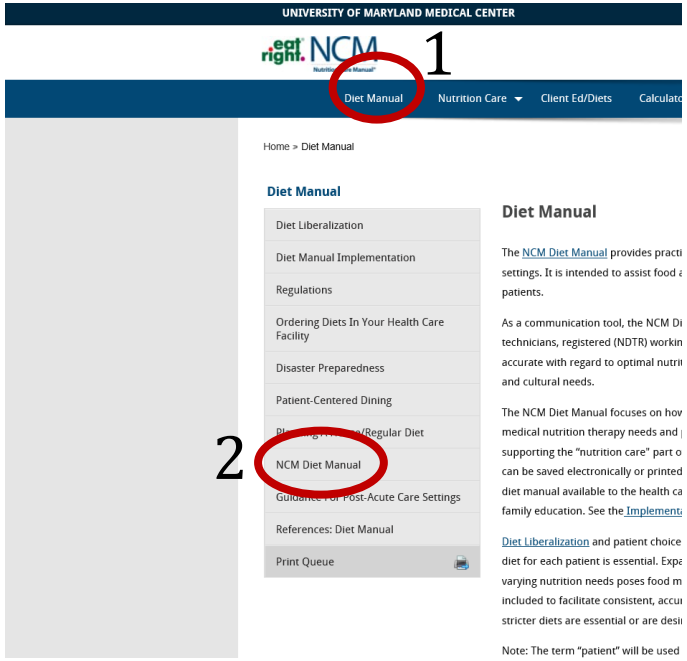
- Applesauce
- Canned peaches
- Canned pears
- Pureed Fruit Molds (Mixed berried, pears, peaches)
- Mandarin oranges and Bananas for Easy to Chew (L7) only

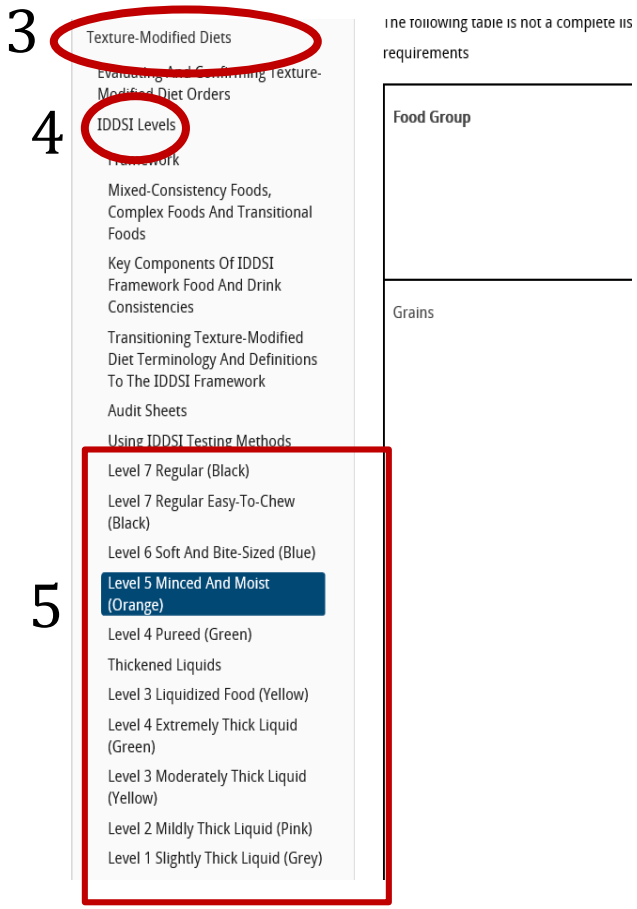
No peanut butter allowed on IDDSI diets = too sticky, does not pass the spoon tilt test

IDDSI information available on the Nutrition Care Manual via the hospital Intranet > Resources/Applications



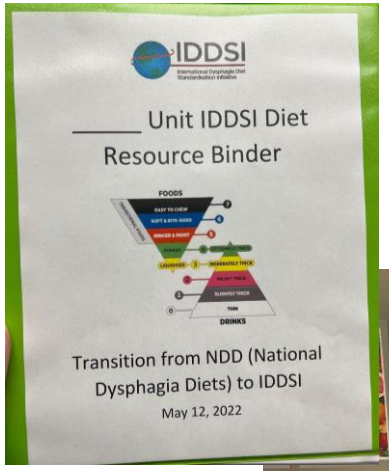
1. Click on the Diet Manual tab
2. NCM Diet Manual
3. Texture Modified Diets
4. IDDSI Levels
5. Select the diet you wish to learn more

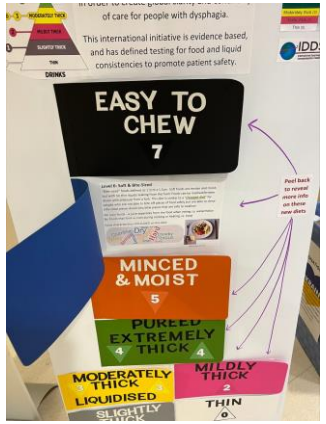




Education

- UMMS U sent to PCTs, RNs, LPNS, RDs, SLPs, unit secretaries
- Educated Hospitalist staff at their last monthly meeting
- Unit binders to be provided to all inpatient units and EDs
- Morrison Culinary team to educated the food service staff
- Plan to present at the Daily Patient Safety Brief closer to Go-Live
- Interactive posters outside cafeterias
  - Plan to take the posters “on the road” to the inpatient units
- IDDSI Badge Buddies created?
  - If anyone wants - $96 for 12 pcs





IDDSI Menu Inserts

PUREE (L4)

Breakfast

Hot Cereal
Oatmeal | Cream of Wheat
Apple Cinnamon Cream of Wheat
Grits

Cold Cereal
Puree Raisin Bran®
Puree Cornflakes®

Breakfast Entrées
Puree Scrambled Eggs
Puree Pancakes
Puree Waffle
Puree French Toast

Breakfast Sides
Puree Sausage Links

Yogurt: Strawberry
Raspberry | Peach
French Vanilla

Fruit
Applesauce
Puree Fruit:
Peaches | Pears | Mixed
Berries

Lunch & Dinner

Soups
Puree Chicken Noodle

Chef's Featured Entrées
Puree Chicken
Puree Roasted Turkey
Puree Pork
Puree Roast Beef
Puree Fish
Puree Bow Tie Pasta with Marinara

Sides
Puree Macaroni & Cheese | Puree Bread
Mashed Potatoes | Puree White Rice
Puree Broccoli | Puree Green Beans
Puree Carrots | Puree Corn
Puree Peas

Desserts
Pudding: Vanilla | Chocolate
Puree: Lemon Cheesecake | Mint Patty

Beverages
thickness per liquid diet order
Coffee: Regular | Decaf
Hot or Iced Tea: Decaf | Regular
Juice: Apple | Cranberry | Grape
Orange | Prune
Milk: Whole | Skim | 2% | Soy

TO PLACE YOUR ORDER:
PLEASE CALL
3535
(443) 643-3535
BETWEEN
6:30AM - 6:30PM

Some foods may not be appropriate based on your diet or food allergies.

MINCED & MOIST (L5)

Breakfast

Hot Cereal
Oatmeal | Cream of Wheat
Apple Cinnamon Cream of Wheat
Grits

Cold Cereal
Puree Raisin Bran®
Puree Cornflakes®

Breakfast Entrées
Puree Scrambled Eggs
Puree Pancakes
Puree Waffle
Puree French Toast

Breakfast Sides

Sautéed Breakfast Potatoes

Turkey Sausage Links

Yogurt: Strawberry
Raspberry | Peach
French Vanilla

Fruit
Applesauce
Peaches | Pears
Puree Mixed Berries

Lunch & Dinner

Soups
Puree Chicken Noodle

Chef's Featured Entrées
Baked Chicken Breast
Roasted Pork Loin
Roast Beef
Roast Turkey Breast
Orzo Pasta with Marinara Sauce
Meatloaf

Sides
Orzo Pasta with Cheese Sauce
White Rice | Mashed Potatoes
Steamed Broccoli | Zucchini
Seasoned Green Beans | Carrots
Puree Bread

Desserts
Pudding: Vanilla | Chocolate
Puree: Lemon Cheesecake | Mint Patty

Beverages
thickness per liquid diet order
Coffee: Regular | Decaf
Hot or Iced Tea: Decaf | Regular
Juice: Apple | Cranberry | Grape
Orange | Prune
Milk: Whole | Skim | 2%| Soy

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BETWEEN
6:30AM - 6:30PM

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SOFT & BITE-SIZED (L6)

Breakfast

Hot Cereal
Oatmeal | Cream of Wheat
Apple Cinnamon Cream of Wheat
Grits

Cold Cereal
Puree Raisin Bran®
Puree Cornflakes®

Breakfast Entrées
Puree Scrambled Eggs
Puree Pancakes
Puree Waffle
Puree French Toast

Breakfast Sides

Sautéed Breakfast Potatoes

Yogurt: Strawberry
Raspberry | Peach
French Vanilla

Fruit
Applesauce
Peaches | Pears
Puree Mixed Berries

Desserts
Pudding: Vanilla | Chocolate
Puree: Lemon Cheesecake | Mint
Patty

Lunch & Dinner

Soups
Puree Chicken Noodle

Light Fare
Protein Salads:
Chicken | Tuna | Egg

Chef's Featured Entrées
Baked Chicken Breast
Roasted Pork Loin
Roast Beef
Roast Turkey Breast
Orzo Pasta with Marinara Sauce
Meatloaf

Sides
Orzo Pasta with Cheese Sauce
White Rice | Mashed Potatoes
Steamed Broccoli | Zucchini
Seasoned Green Beans | Carrots
Chopped Egg Noodles

Beverages
thickness per liquid diet order
Coffee: Regular | Decaf
Hot or Iced Tea: Decaf | Regular
Juice: Apple | Cranberry | Grape
Orange | Prune
Milk: Whole | Skim | 2% | Soy

TO PLACE YOUR ORDER:
PLEASE CALL
3535
(443) 643-3535
BETWEEN
6:30AM - 6:30PM

Some foods may not be appropriate based on your diet or food allergies.

*This will aid with ease of ordering the new dysphagia diets.

*Please provide menu insert with a Regular menu

References

Chang, C., Cheng, T., Lin, C., Chen, J., Lu, T., Kawachi, I. (April, 2013). Reporting of aspiration pneumonia or choking as a cause of death in patients who died with stroke. *Stroke 44*(4) pp1182-5.

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National Safety Council (2021), Historical Preventable Fatality Trends. Retrieved October 15, 2021.

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Any Questions?