



# MECHANICALLY ALTERED DIETS NUTRITION EDUCATION

*By, Lindsay K. Johnson, RD, LD*  
Clinical Registered Dietitian, BJEC

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# WHAT YOU WILL LEARN

- Who can benefit from a mechanically altered diet
- Terms commonly associated with mechanically altered diets
- National Dysphagia Diet (NDD); Diets offered at BJEC
- Pureed Diet
- Mechanical Soft Diets
- Tips often helpful when on a texture modified diet
- Risk factors
- Potential diet advancements
- Take-home tips

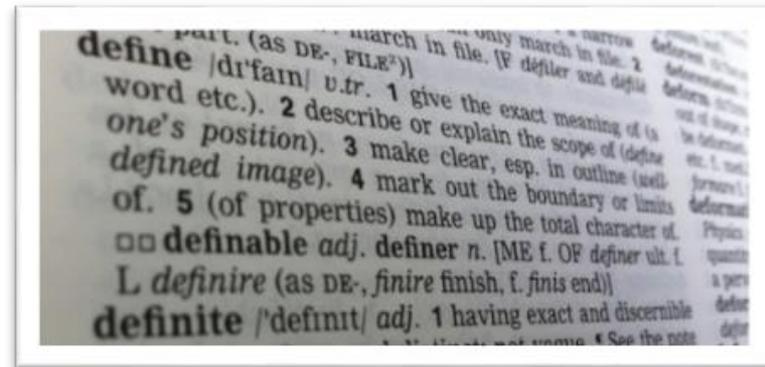


# WHO CAN BENEFIT FROM A MECHANICALLY ALTERED DIET?

- Persons that may have dental issues (missing teeth, poor fitting dentures)
- Cancers that effect how food transitions from mouth to stomach (head and neck cancer most common); chemotherapy and radiation therapy
- Trauma injuries to the head and neck
- Certain disease processes: Parkinson's, Multiple Sclerosis, Alzheimer's, ALS
- Respiratory conditions placing one at risk for aspiration of food particles into the lungs, or if a trach is in place for breathing support
- A recent stroke or past stroke with residual swallowing weakness
- A brain injury that effects swallow function
- Weakness with chewing and swallowing, often associated with the natural aging process

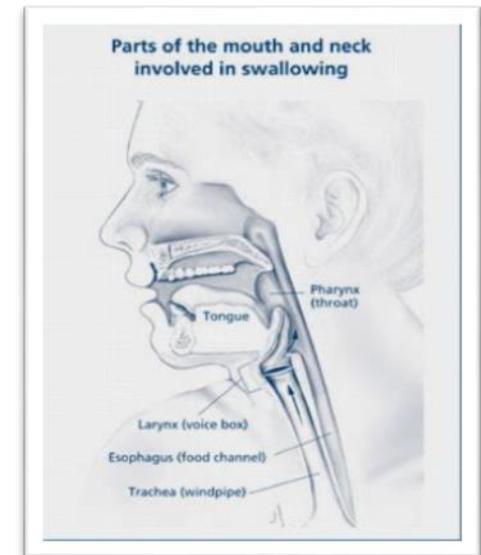
# TERMS COMMONLY ASSOCIATED WITH MECHANICALLY ALTERED DIETS

- NDD – National Dysphagia Diet
- Dysphagia – Difficulty swallowing foods or liquids (mouth down to stomach)
- Mechanically altered diet – A diet that is modified in its texture
- Thickened liquids – potentially needed after a swallow exam Nectar thick (easily conducted by Speech Therapy, packets of thickener are added to all liquids before you drink them for safety reasons. There are three consistencies:
  - “Thin liquids” are what you drink on a regular diet (water, tea, coffee)
  - Honey thick (slightly less pourable, drizzles from a spoon)
  - Pudding thick (holds its own shape)
  - Pourable (similar to soups)



# NATIONAL DYSPHAGIA DIET (NDD)

- NDD Level 1: Dysphagia – Pureed
  - Requires very little chewing
  - Pudding-like or applesauce-like texture
- NDD Level 2: Dysphagia – Mechanically Altered
  - Requires some chewing ability, taco ground beef-like texture, moist
- NDD Level 3: Dysphagia – Advanced
  - Requires more chewing ability, soft food items, ½” cubed meats
- NDD Level 4: Regular texture foods (Regular Diet)



# MECHANICALLY ALTERED DIETS OFFERED AT BJEC

- Pureed Diet
  - Option to add fortified foods
    - Kitchen provides extra nutrition per bite that is safe to chew/swallow
    - Super cereal (oatmeal, butter, syrup)
- Mechanically Altered
  - Option to add:
    - Ground meats (or other food items if Speech recommends i.e. vegetables)
    - Chopped meats, extra sauce or gravy
    - Fortified foods (extra nutrition from a variety of heart healthy fats)
    - Olive oil, canola oil, butter, cream, sauce, gravy



# PUREED DIET EXAMPLES AND TIPS

Foods to Choose	Foods to Avoid
<b>Favorite food items blenderized (in a blender) to applesauce texture moistened with:</b> broth, creams, fruit juice, vegetable juice, gravies	Any food items <b>dry, coarse, too chunky</b> and not prepared in a smooth pureed texture
<b>Breakfast:</b> grits with butter, pureed: eggs, favorite fruit	No raw vegetables, fruits
<b>Lunch:</b> cream or broth based soups, pureed vegetables and chicken, small cup of juice	No fibrous/gritty textured breads, cereals, crackers
<b>Dinner:</b> pureed chili, olive oil/canola oil added, applesauce	No regular texture meats (burger patty, chicken thigh, deli meats)
<b>Snack:</b> yogurt (plain), option to add honey (low-fat or whole milk) or ice cream (dessert)	No raw nuts, seeds, hard candies, sticky dried fruits

# MECHANICAL SOFT DIETS

## Foods to Choose

**Food items that can be cut into small ½ “ cubes** and chewed well to a soft texture before swallowing

**Breakfast:** toast, butter, jelly, scrambled eggs and sausage; or oatmeal with milk, butter, berries, and a hard boiled egg on the side

**Lunch:** shredded lettuce side salad with oil and vinegar dressing or well steamed greens; ½ a sandwich with deli meat and a cup of fruit cocktail

**Dinner:** pasta and sauce, with diced chicken, well steamed soft vegetables, slice of soft cake or a small cookie for dessert

## Foods to Avoid

Any food item with **tough texture that cannot be cut into small bite size pieces** and chewed well before swallowing

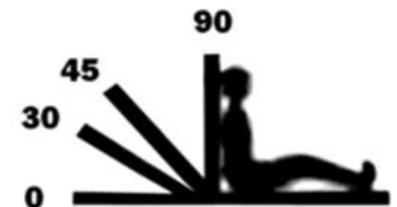
Fibrous fruits (pineapple) or fruits with skins (recommend cut into ½” pieces); instead try canned soft

Whole grains that are too coarse of a texture: granolas, chips, large sized crackers; Large chunks of raw vegetables (choose well steamed/canned), large squares of salad greens

Regular texture tough meats: steak or well done meats; instead choose marinated tender meats cooked with moist methods (soups)

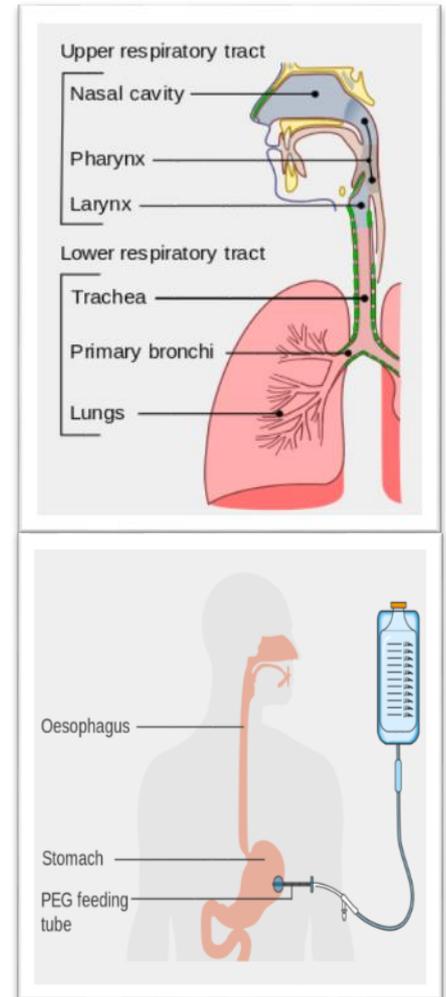
# TIPS HELPFUL WHEN FOLLOWING A TEXTURE MODIFIED DIET

- Follow aspiration (coughing/choking) precautions recommended by Speech Therapy when enjoying meals
- Common precautions include:
  - Sitting upright 45 degrees for tube feeding or 90 degrees during meals and remain sitting upright ~45 minutes after
  - Take small bites, chew well, alternate bites of food with sips of water as needed, tucking the chin, swallowing hard, avoiding distractions (TV)
  - Moisten food items with extra sauce, gravy, cream, milk, broth, juices
  - Have supervision during meals as needed
    - Some may benefit from verbal cues to chew, swallow, sip water, etc.
  - Allow for a longer meal time in a comfortable environment to ease digestion



# RISK FACTORS

- Unplanned weight loss
- Lean body mass loss (muscle loss)
- Dehydration
- Coughing and aspirating food into the lungs which may lead to pneumonia
- Bacterial overgrowth in the mouth, often avoidable with proper oral hygiene (or use a special mouthwash that can be prescribed by your Doctor)
- Potential need of a temporary feeding tube to provide nutrition support



# POTENTIAL DIET ADVANCEMENTS

- As your condition improves often the diet can be advanced with Physician approval
- Speech Therapy may be working with you on specific exercises and a swallow study may be ordered by your Doctor to see if it is safe to advance your diet
- Your Speech Therapist may then trial different textures with you during meals and/or thickened liquids
- When your clinical team feels you are safe to consume the upgraded diet texture, your diet orders will be changed and a Registered Dietitian may offer you new nutrition education to help meet your specific goals
- If you required a feeding tube, a Registered Dietitian will slowly wean you off of your tube feedings as your diet is advanced

# TAKE-HOME TIPS



- A natural part of the aging process often includes being on a texture modified diet
  - Keep your eye out for signs that your loved one may need a diet texture change
  - Pale complexion, decreased intake at meal times, coughing during meals, weight loss unplanned, spitting out food, holding food in their cheeks, loss of fluids from the corners of the mouth, or loss of teeth/dentures fitting poorly
- Brain injuries may need a temporary diet change until conditions improve, ask your Doctor for referrals to work with a Speech Therapist and Registered Dietitian as needed
- When on a texture modified diet it is very important to follow recommendations prescribed by your clinical team to avoid the risk of choking which in extreme cases can lead to death
- Supplements (Ensure, Boost, Thrive ice cream) and/or fortified foods (a more natural approach) added to your diet are often helpful to prevent weakness and unplanned weight loss, ask to talk to your Registered Dietitian
- Always check with your Doctor before making any changes to your current dietary plan

# REFERENCES

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THANK YOU!

*LEARN, GROW & LIVE WELL*

