

IN VIVO BEHAVIOR OF TRANSITIONAL FOODS AS COMPARED TO PUREEDS: A VIDEOFLUOROSCOPIC ANALYSIS

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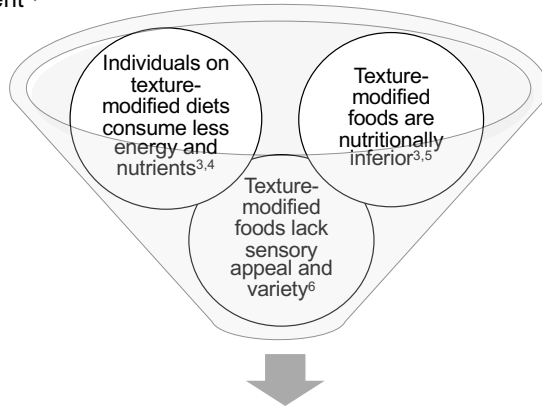
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BACKGROUND

- Diet texture modification has become standard practice in dysphagia management^{1,2}

• However:



Increased malnutrition risk, decreased eating pleasure and QOL^{6,7}

- Transitional foods (TFs), or foods that start as one texture and change to another given moisture or temperature, may offer one novel solution for increased texture variety and intake for these individuals.⁸
- Yet, potential swallow safety risks associated with TFs, particularly as compared to standard pureed, have not yet been explored.



The purpose of this pilot study was to examine swallow function with use of TFs as compared to pureed foods.

METHODS AND PARTICIPANTS

- Retrospective analysis of data from 15 heterogeneous long term acute care hospital (LTACH) adult inpatients with dysphagia
 - Primary dx: acute respiratory failure
 - Underlying conditions included: COVID-19, TBI, CVA, brain tumor
 - Mean age 64.4±9.7; 12 males
- All patients consumed TFs (Savorease™ Crisps) during their modified barium swallow studies as part of standard clinical practice.
- Swallow function was characterized by Modified Barium Swallow Impairment Profile component scores and oral and pharyngeal composite scores (excluding lip closure and pharyngeal contraction).
- Wilcoxon signed-rank tests were calculated to determine difference in function between TF and pureed trials.

CONCLUSIONS AND IMPLICATIONS FOR CLINICAL PRACTICE

TFs did not increase apparent risk as compared to pureed:

- No significant differences in overall swallow function scores
- No significant differences across the majority of individual swallow physiology and bolus flow parameters

These results support the clinical utility of integrating TFs into evaluation protocols. As part of this process, we must consider:

- Are TFs a viable alternative for pureeds *in this given patient*?
- Can TFs offer increased food and texture variety for this patient given their current safety needs and swallow function as observed on instrumental assessment?
- Could TFs assist this patient in transitioning toward more chewable solids, providing a therapeutic benefit?

RESULTS

Component/Composite	Pureed Median (Range)	Transitional Median (Range)	P-value
Bolus Hold	0 (0-3)	3 (0-3)	.194
Bolus Preparation/Mastication	1 (0-3)	1 (0-2)	1.00
Lingual Transport	0 (0-2)	0 (0-2)	.655
Oral Residue	1 (0-3)	1 (0-3)	1.00
Initiation of Pharyngeal Swallow	0 (0-2)	1 (0-2)	.035
Soft Palate Elevation	0 (0-1)	0 (0-0)	.317
Laryngeal Elevation	2 (1-2)	2 (1-2)	1.00
Anterior Hyoid Excursion	1 (0-2)	1 (0-2)	1.00
Epiglottic Movement	0 (0-2)	0 (0-2)	1.00
Laryngeal Vestibular Closure	1 (0-1)	1 (0-1)	.317
Pharyngeal Stripping Wave	1 (0-2)	1 (0-2)	1.00
Pharyngoesophageal Segment Opening	1 (0-2)	1 (0-2)	1.00
Tongue Base Retraction	1 (0-3)	1 (1-2)	1.00
Pharyngeal Residue	1 (0-3)	2 (0-3)	.589
Oral Total Composite Score	5 (1-10)	6 (1-10)	.088
Pharyngeal Total Composite Score	8 (3-17)	8 (3-15)	.458

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