The Oral Dissolution Rate of Transitional Snack Foods in Adults with and without Dry Mouth

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Learning Outcome: Upon completion, participant will be able to understand the variance between transitional food behaviors in the mouth, and understand broader uses for IDDSI testing.

Transitional foods can offer people on a texture modified diet the ability to each crunchy foods as long as the food dissolves quickly enough into a tolerable texture level for ease of swallowing. No research to date has measured the rate of dissolution of known transitional foods in adults. This study aims to understand the extent of dissolution of 5 transitional snacks items in relationship to time, tongue pressure and amount of saliva. 30 older adults, with and without dry mouths were recruited. 5 known transitional foods were tested for dissolution in the mouth over time and evaluated using IDDSI methods of fork pressure test. The transitional snacks tested were: 1) shrimp chips 2) Baby mum mums 3) The EAT bar 4) Savorease carrot cracker 5) Savorease carrot cracker with 5 mL of dip Each participant calibrated their tongue pressure (TP) to 17 KPa (moderate pressure) with an Iowa Oral Performance Instrument. Fork tests were carried out after 5 and 12 seconds, both with and without TP.

Results: At 5 and 12 seconds, with and without TP, there was a large difference in fork test results between the different products with the most noticeable difference being found with Savorease crackers with or without dip having greater dissolution with all test types than the other transitional products.

Conclusion: There was a wide difference in results amongst the 5 transitional snack types. In Baby Mum Mums, the EAT bar, and shrimp chips, time and tongue pressure influenced the dissolution level.

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The Relationship Between Neuroticism, Self-Esteem, and Disordered Eating Attitudes: Examining the Health at Every Size Theory

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Learning Outcome: Upon completion, participants will be able to describe the clinical significance of considering an individual’s mental health attributes when planning an intervention for the treatment of weight-related nutrition problems.

In the current treatment of overweight/obesity, conflicting recommendations have been released by the Academy of Nutrition and Dietetics (AND) and advocates of the Health at Every Size (HAES) movement. While the AND has indicated support for utilizing dietary self-monitoring practices, HAES advocates claim that these restrictive practices may result in increased disordered eating tendencies and poor self-esteem. Study participants included 410 students at Grand Valley State University. Participants completed three self-report measures through the online survey system Qualtrics: the Rosenberg Self-esteem Scale, the EAT-26, and selected items from the Big Five Inventory. Data was analyzed using regression models, correlation, and Mann-Whitney U tests conducted with SPSS v.20 software. Diet tracking was significantly correlated with both increased disordered eating attitudes and behaviors and lower self-esteem. Self-esteem was a significant negative predictor of scores on a measure of disordered eating attitudes and behaviors. Diet tracking individuals scored higher on a measure of disordered eating. Lower scores on a measure of neuroticism significantly predicted greater frequency of meeting dietary goals. This study confirmed previous findings on the correlative links between self-esteem, diet tracking, and disordered eating attitudes. Recommendations provided by the AND and HAES proponents each have value in treatment, as previously demonstrated. However, the limitations of the available research and lack of data in more diverse populations suggest that further study is required to comprehend the most optimal integration of treatment methodologies. Findings from this study support a multi-modal approach to weight management combining mental health screening with traditional diet tracking approaches.

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The Prediction of Dietary Protein Intake with Body Weight and Weight Loss in Pancreaticoduodenectomy Surgical Candidates

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Learning Outcome: Upon completion, participants will be able to identify individuals with low protein intake and offer them supportive interventions before resection of pancreatic cancers and precancers.

Background: Pancreatic cancer has a poor prognosis; surgery is the only cure. Although adequate dietary protein intake matters during surgery, pre-operative assessment by nutrition professional may not be routinely available. Non-nutrition healthcare professionals need a way to quickly evaluate protein intake.

Purpose: This analysis seeks to predict patients’ protein intake status (whether they met protein goals) with demographics, anthropometrics, and self-reported symptoms before surgery.

Methods: This cross-sectional analysis of baseline data from a pilot RCT of multimodal probabillization before pancreatoduodenectomy included 62 patients (46.8% female, age 68.0 ± 11.5 yrs, 90.3% non-Hispanic white). Patients completed a 24-hour food recall with a registered dietitian, which was analyzed for protein intake. Protein intake was described in grams of protein consumed per kilogram of body weight (BW). Protein goals were set at 1.3 g/kg BW. BW was assessed with a bioelectrical impedance analysis scale. Patient-reported weight loss was assessed with a Likert scale from “Not at all” to “Very much” as 0 to 4. A multiple regression model was applied for statistical analysis.

Results: Only BW and WL had significant effects on predicting protein intake with B = -0.002, p < 0.05 and B = -0.126, p < 0.05, respectively.

Discussions/Conclusions: Higher BW and WL are associated with lower protein intake in pancreatoduodenectomy surgical candidates. Results support the need to consider BW and WL when predicting protein intake in this population; patients with greater BW and WL may be at higher risk for inadequate protein intake and benefit from nutrition counseling.

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The Relationship Between Parental Feeding Practices and Current Food Neophobia in College Students

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Learning Outcome: Upon completion, participants will be able to understand the relationship between childhood parental feeding practices and food neophobia in college students.

Background: Food neophobia (FN) has been linked to adverse health behaviors in children and adults such as higher preference for high-fat, energy-dense foods, low intake of fruits and vegetables, and poor dietary variety. Negative parental feeding practices such as pressure to eat, restriction, high levels of monitoring as a child have been linked to increasing food neophobic tendencies within children. Young adults who remembered being forced to eat certain foods had a higher dislike for those foods. However, little to no research has been conducted on the lasting impact of childhood parental feeding practices on college student’s FN. The purpose of this study was to compare college student’s FN scores to parental feeding practices experienced during childhood.

Methods: Participants were limited to undergraduate and graduate college students from the ages of 18-25. Participants completed an online survey with demographic information, childhood parental feeding practices statements, and a Food Neophobia Scale (FNS) to assess current FN.

Results: There was no significant relationship found between childhood parental feeding practices and FNS score (p=0.9302). This study population showed primarily positive parental feeding practices as remembered by the participants.

Conclusions: No relationship was found between childhood parental feeding practices and food neophobia scores of college students. The study has several implications such as (1) expanding the research on FN in adults (2) providing further evidence for healthcare professionals on how to educate parents on the importance of proper child feeding techniques (3) provides opportunity for future research on strategies to combat FN in adults.

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