



DESIGNING FOR HEALTH AND APPETITE: NUTRITION AND INTERIOR DESIGN PROFESSIONALS CREATE APPROPRIATE ENVIRONMENTS TO ACHIEVE MEAL TIME SATISFACTION IN DEMENTIA RESIDENTS OR PARTICIPANTS

KRISTIN KABAY, LESLIE BOYD, ALLISON BECK, VALENCIA B. KEEN, LAURA BURLESON

Abstract

Objective: to assess current practices used by facilities caring for dementia residents to determine their understanding of the benefits of appropriate foodservice environmental design which may contribute to meal satisfaction and reduce unintentional weight loss.

Study Design: One hundred and fifteen surveys were provided to administrators to assess knowledge of menu and design appropriateness of facilities to achieve meal time satisfaction.

Setting/Participants: 31 facilities completed the survey, including elder residential communities, elder daycare support communities, an inpatient acute care hospital, an acute care/rehab unit and Meals on Wheels Senior Center.

Results: 55% of participants allow their dementia residents an hour or longer to consume their meals. Seventy-one percent use plated meal service and only 2 facilities use family meal service; 41.9% of facilities play background music during periods of eating but no universal design was identified to enhance appetite in all the facilities to reduce unintentional weight loss;

Conclusions: There are still gaps present in the implementation of policies of universal design that were obvious to enhance food intake and mealtime satisfaction in dementia residents. It is apparent that many facilities need to be educated on the appropriate care to enhance mealtime satisfaction and ensure that dementia residents are receiving proper nutritional care.

Potential Implications: Education tailored to the lack of knowledge in these facilities would be beneficial in order to maximize meal satisfaction in the dementia resident. Dietitians need to continue to work with foodservice operators to apply medical nutrition therapy at the center of the plate with a

Overriding Objective

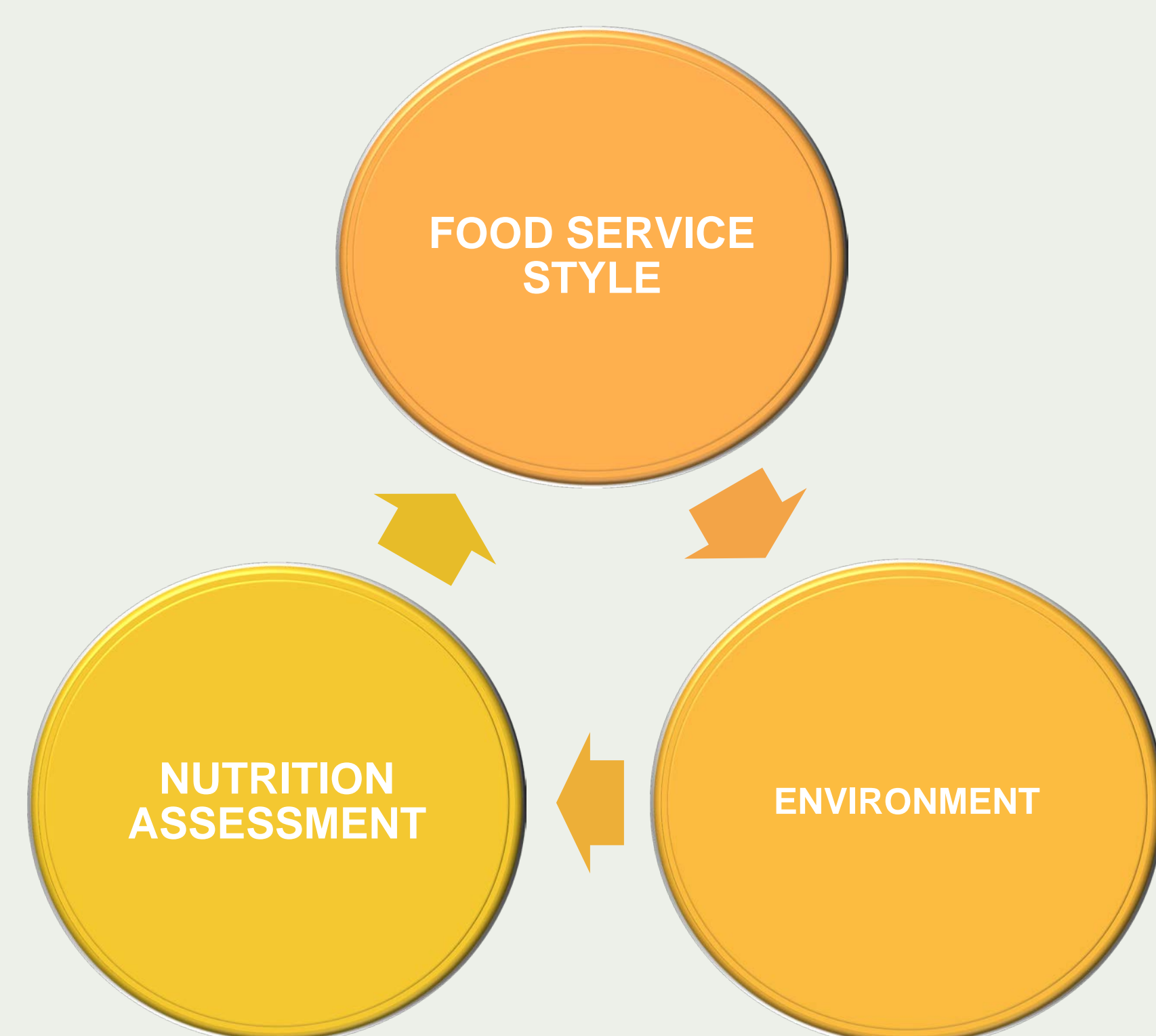
The dementia and Alzheimer's patient experience many physiological and environmental changes which commonly lead to unintentional weight loss and malnutrition, the purpose of the study was to investigate what can be done to improve problems associated with food intake and enhance mealtime satisfaction.

Hypotheses

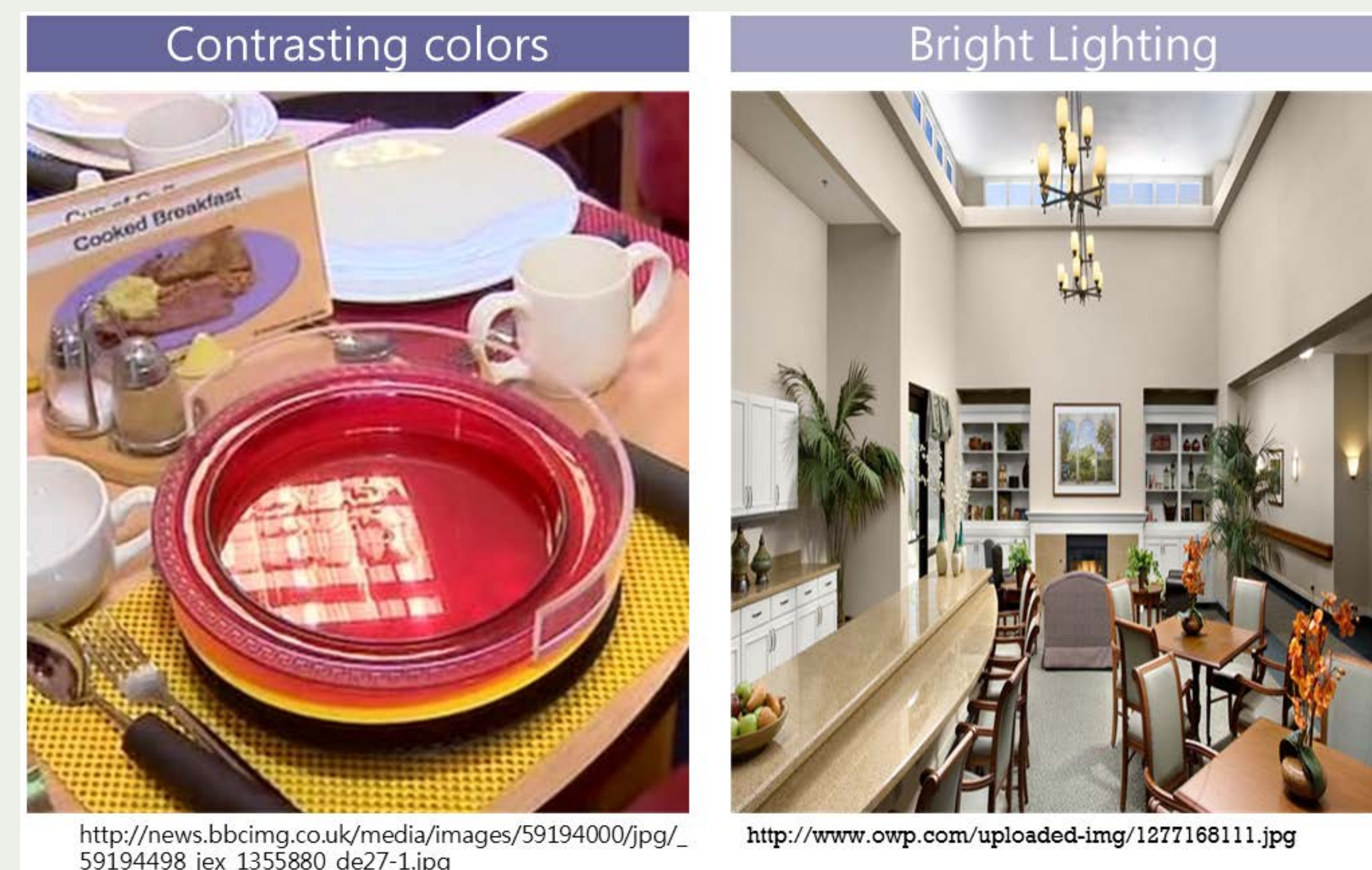
The hypothesis is that the choices in food selection made by RDs, chefs, foodservice operators and/or interior designers in facilities which care for dementia patients were made to enhance appetite and nutrient dense foods and reduce unintentional weight loss.



Core Elements



Environmental Characteristics



Creating Ambience

- 2004 research by Wansick laid some of the ground work.
- Soft lighting, temperature, odors, noise may influence food consumption by increasing the duration of eating, comfort, and enjoyment.
- Preferred or familiar soft music increased consumption and calmed the senses, whereas ambient noise that is too loud or fast creates discomfort & anxiety during dining.
- Enhance aesthetics of the dining area with tablecloths, placemats and place settings, and flowers.

Individualizing the Dining Experience

- Individualize the dining experience for dementia and Alzheimer's patients.
- Dining is not just about food intake. It's a social experience linked to lifelong memories!
- Research suggests that choices in food selection may improve food intake and enhance mealtime satisfaction.
 - Serving favorite Foods
 - Providing a variety of Foods
 - Culturally Familiar Foods
 - Use of less Restrictive Diets



Nutrition Assessment

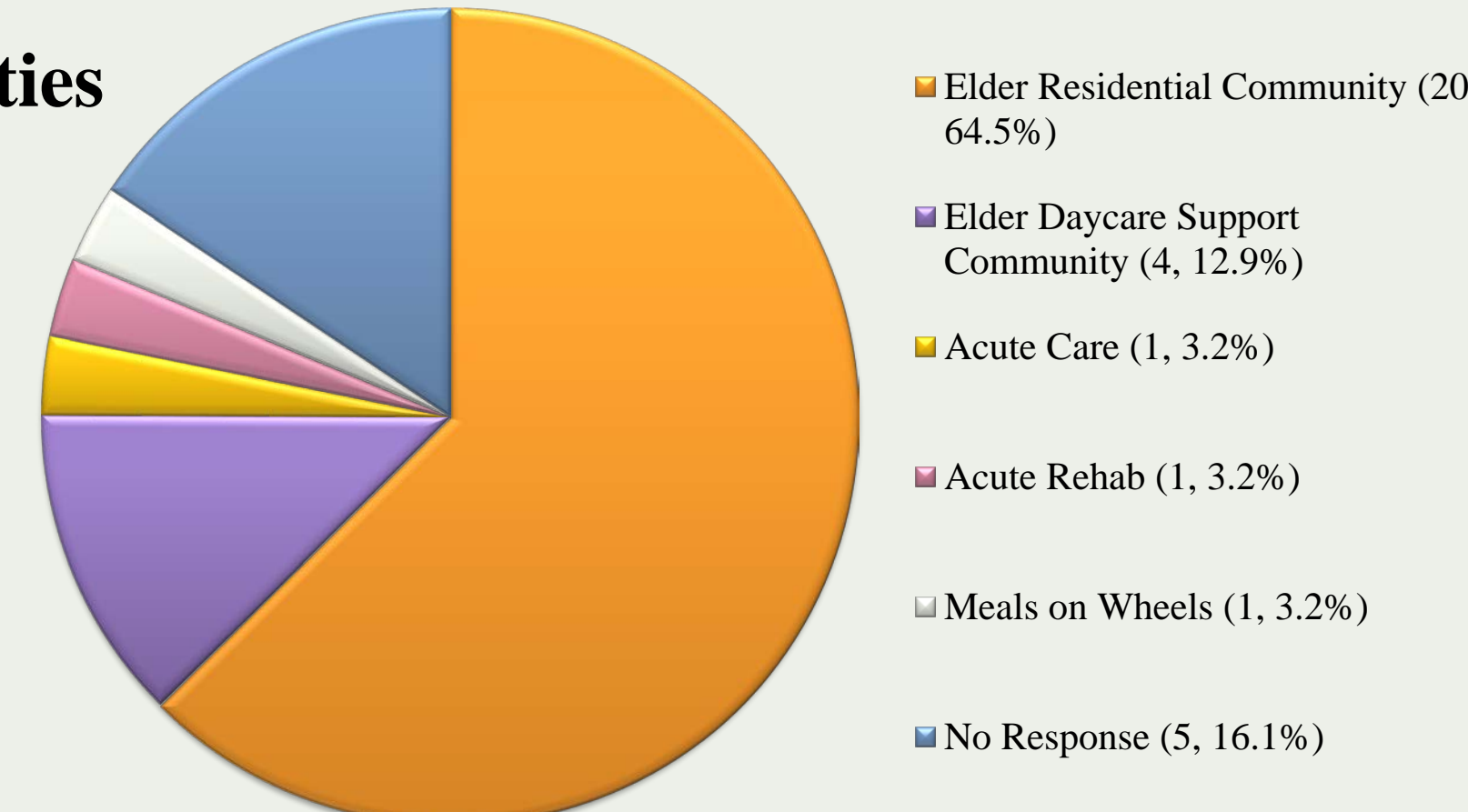
- Providing nutritional supplements and snacks between meals, serving nutrient dense foods, and having staff to aid patients with consumption of supplements and snacks may improve intake.
- Supplements and snacks offered between meals may improve the nutritional health of dementia and Alzheimer's patients.
- Providing foods that are nutrient dense may improve the nutritional status of dementia and Alzheimer's patients.
- Vitamin B12, B6 and folate plus omega-3 fatty acids with the addition of antioxidant rich spices such as turmeric and cumin, may provide protective healthful benefits.
- Research shows an antioxidant rich diet may have protective effects against the development of Alzheimer's disease due to a reduction in oxidative damage to the brain.

Methods

- Descriptive study design
- Survey was developed based on research
- Survey responses were used to determine the administrator's knowledge of providing an adequate menu and designing a dining service that is appropriate for achieving meal time satisfaction in dementia patients/residents.
- Sample: Facilities that care for dementia patients/residents

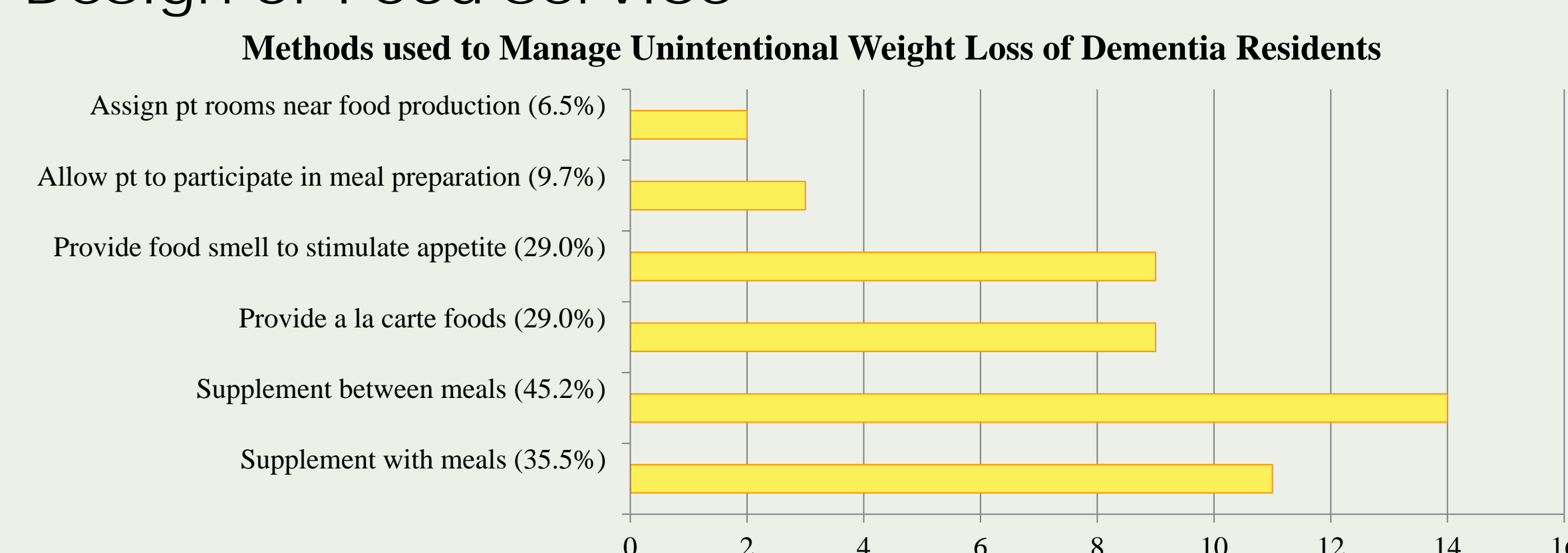
Results

Types of Facilities



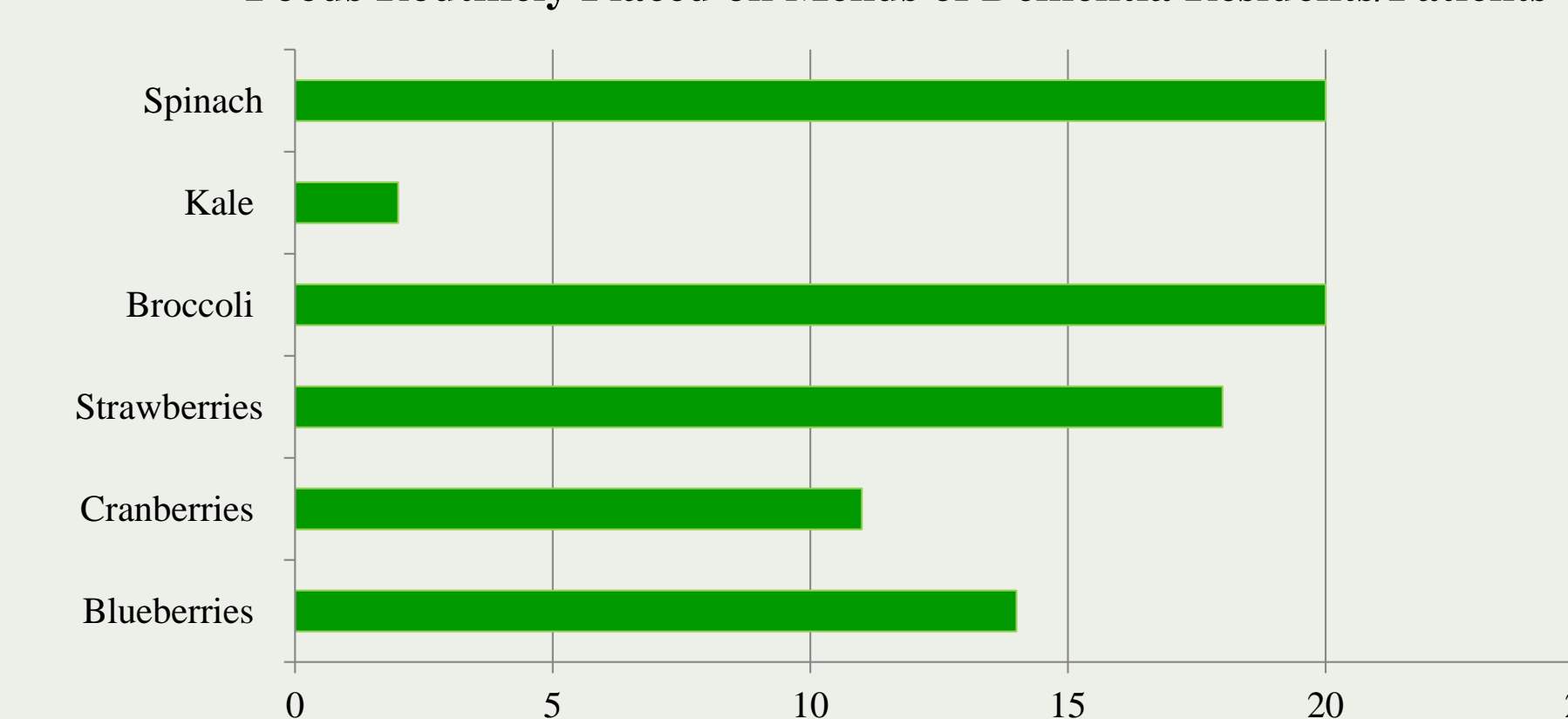
Results (Continue)

- Style of food service
 - Time allowed for dementia residents/patients to eat
 - Style of meal service
 - Strategies used to manage dementia patients that have forgotten to eat
- Design of Food service



- Design of Environment
 - The use of contrasting colors on place settings for dementia patients:
 - Avoidance of patterned dishes or table coverings:
- Design of Environment
 - Background noise during periods of eating:
 - Colors selected for dining facilities:
 - Lighting:
- Nutrition Issues Related to Menu

Foods Routinely Placed on Menus of Dementia Residents/Patients



- Nutrition Assessment

Discussions

Ambiance Affects

- Use of finger foods
- Supplementation
- Meal Preparation
- Nutritional Status
- Food Selection
- Fluid Needs
- Appetite Enhancement
- Weight Management
- Staff Involvement
- Color
- Lighting
- Patterns
- Noise
- Music



Conclusions

- There are still gaps present in the implementation of policies and activities that can be used to enhance food intake and mealtime satisfaction in dementia patients.
- Facilities need to be educated on the appropriate care supported by research to enhance mealtime satisfaction and ensure that dementia patients are receiving proper nutritional care through proper design principles and color and shape of table appointments to enhance appetite;
- These interventions may be the difference between dementia patients that are malnourished and those that are meeting their nutritional goals.
- Important to get the registered dietitian, chef, and interior designer involved.
- Working as a team, these professionals can aid in the eradication of nutrition risk among the dementia population and enhance their mealtime satisfaction.

Review of Literature

- Abbott, R., Whear, R., Thompson-Coon, J., Ukoumunne, O., Rogers, M., Bethel, A., ... Stein, K. (2013). Effectiveness of mealtime interventions on nutritional outcomes for the elderly living in residential care: A systematic review and meta-analysis. *Ageing Research Reviews*, 12, 967-981.
- Alzheimer's Association. (2013). 2013 Alzheimer's Disease Facts and Figures. *Alzheimer's & Dementia*, 9(2), 1-71.
- Berstein, M., & Munoz, N. (2012). Position of the Academy of Nutrition and Dietetics: Food and Nutrition for Older Adults: promoting Health and Wellness. *Journal of the Academy of Nutrition and Dietetics*, 112(8), 1255-1277.
- Brush, J., & Calkins, M. (2008). Environmental interventions and dementia: enhancing mealtimes in group dining rooms. *ASHA Leader*, 13(8), 24-25.
- Dewing, J. (2009). Caring for people with dementia: noise and light. *Nursing Older People*, 21(5), 34-38.
- Domer, B. (2010). Individualized Nutrition Approaches for Older Adults in Health Care Communities. *Journal of the American Dietetic Association*, 110(10), 1554-1563.

Contact information

Dr. Valencia Browning-Keen, Ph.D., R.D., L.D.
Associate Professor in Food Science and Nutrition
Sam Houston State University, Department of Family & Consumer Sciences
T: 936-294-1245 E: vbk001@shsu.edu