No.54

Motivations for Food Consumption during Specific Eating Occasions in Turkey

Sirichat Chanadang[1], Uyen Thuy Xuan Phan[1], Delores Chambers[1], Curtis Maughan[1],Karolina Sanchez[1], Brizio Di Donfrancesco[1], David Gomez[1], Federica Higa[1], Han Li[1],Edgar Chambers IV[1] and Eyyup Esen[2]

[1]Sensory Analysis Center, Department of Food, Nutrition, Dietetics and Health, Kansas State University, Manhattan, KS 66502, USA

[2]Dialog Institute of the Southwest-Kansas, 2710 S 42nd St, Kansas City, KS 66106, USA;

INTRODUCTION

- Understanding why people choose to consume certain food items in specific eating occasions is beneficial
  - *Improving people's lives by giving dietary advice to prevent health issues*
  - *Help facilitate new food product development*
  - *Better understand marketing of these new products*
- Culture is one significant factor that shapes people's dietary patterns and preferences



https://breakingthenewsanglo.wordpress.com/

- Turkey is located in both Europe and Asia with the Mediterranean Sea to the south, thus it has Mediterranean nutritional influences on the coast side, and European and Asian influences in other parts of the country.
  - *Little work has been done with the Turks regarding important factors that influence food choices*

OBJECTIVE

- To investigate the motivations of specific food and beverage choices for specific eating occasions of Turkish people.

MATERIAL AND METHODS

Participants

- Volunteers – recruited primary through e-mail, personal contact, flyers, and word of mouth.
- 141 respondents completed the online questionnaire
  - *Be older than 18 years of age,*
  - *Be a resident of Turkey for at least 10 years*

Online Survey Questionnaire

- Core questionnaire was developed based on The Eating Motivation Survey (TEMS) (Renner *et al*., 2012)
- Modification:
  - *Add two motivation constructs, Variety Seeking and Choice Limitation.*
  - *Use a Check-All-That-Apply (CATA) procedure to collect data for motivations instead of using 7-point rating scales.*

Liking	Choice Limitation
Habits	Sociability
Need and Hunger	Price
Health	Visual Appeal
Convenience	Weight Control
Pleasure	Affect Regulation
Traditional eating	Social Norms
Natural concern	Social Image
Variety Seeking	

Figure 1 : List of 17 motivations for modified TEMS

Each motivation was measured by 2-4 items

For example

- "because I have an appetite for it", "because it tastes good", and " because I like it" were three items used to examine ***Liking.***
- "because it was what was served", and "because it is the only choice" were two items for ***Choice Limitation***.
- "because it is quick to prepare", "because it is easy to prepare", "because it is the most convenient", and "because someone made it for me and it is the choice" were four items for ***Convenience***.

- Questionnaire was translated into Turkish by native Turkish speakers.
- Questionnaire was launched in Qualtrics software (Qualtrics, Provo, UT, USA).

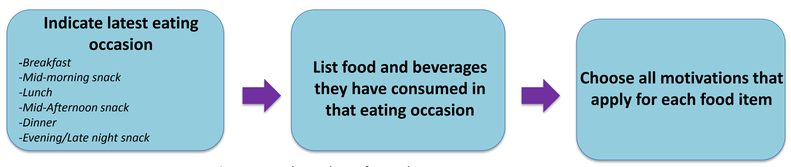

Figure 2 : Flow chart for online survey questionnaire

RESULTS

Choices of different food groups

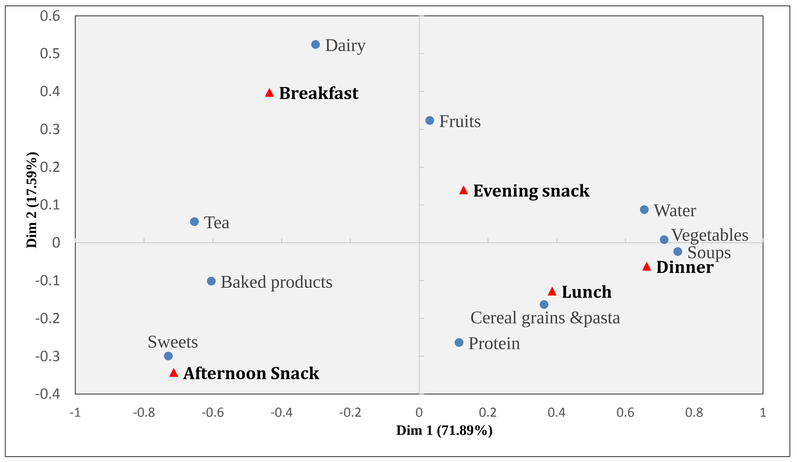

Figure 3 : The correspondence Analysis factor map representing five eating occasions and 10 food categories.

- **Dairy**: consumed much more at breakfast than other meal time
- **Fruits**: preferred for evening snacks more than the others
- **Baked products** and **tea**: consumed more for breakfast and afternoon snack
- **Sweets**: consumed more at afternoon snacks
- **Water, soups** and **cereal grains & pasta**: associated more with Lunch and dinner than other eating occasions

Motivations associated with meals and snacks

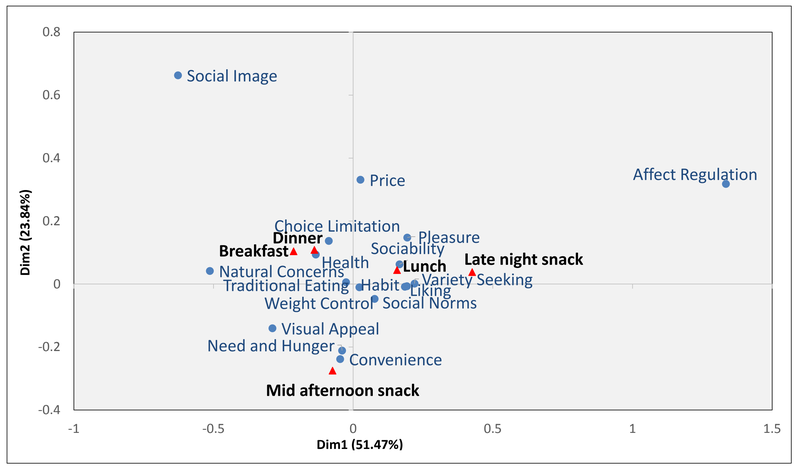

Figure 4: The Correspondence Analysis factor map representing five eating occasions and seventeen corresponding motivations.

- **Liking**: main driver of food chosen for lunch, dinner, and late night snacks.
  - *Breakfast and mid-afternoon snacks: driven by liking, but equally or slightly more so by some other factors.*
- **Breakfast**: driven by Natural Concerns, Liking and Need & Hunger as well as Habit and Health.
- **Lunch**: additionally driven by Pleasure, Sociability , Variety Seeking and Social Norms.
- **Dinner**: also by Natural Concerns, Need and Hunger, Choice Limitation, and Traditional Eating.
- Motivations for **snacks** varied depending on the time of day with mid-afternoon snacks being driven more by convenience which late night snacks were driven more by pleasure.

ACKNOWLEDGEMENTS

- The Dialog Institute of the Southwest
- Pervin Ari Akin from department of Grain Science and Industry at Kansas State University

Motivations associated with choices of different food groups

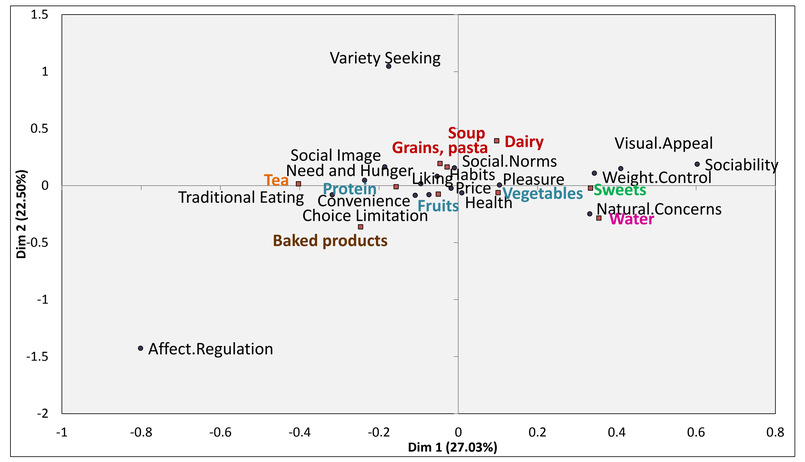

Figure 5 : The CA factor map of the motivations associated with different food groups. Six clusters were obtained from the hierarchical clustering applied on the CA factors. Cluster 1 was the sweets category (green). Cluster 2 was water (pink). Cluster 3 included baked products (brown). Cluster 4 was the tea category (orange). Cluster 5 consisted of protein, fruits and vegetable products (blue). Cluster 6 included cereal grains and pasta, soups and dairy products (red).

Motivations for each cluster

<u>Cluster 1 : Sweet Categories</u>

Predominantly associated with the Liking, Traditional Eating, and Natural Concerns motivation constructs.

<u>Cluster 2 : Water</u>

Associated with Natural Concerns, Health, Liking, and Choice Limitation.

<u>Cluster 3 : Baked products category</u>

Associated with Liking, Need and Hunger, and Habits, and consumers did not associate baked goods with Social Norms, Variety Seeking, Visual Appearance, and Sociability motivation factors.

<u>Cluster 4 : Tea</u>

Consumers linked its consumption with Liking and Choice Limitation, whereas they showed no concern about Sociability.

<u>Cluster 5 : Protein, fruits and vegetable products</u>

Associated with Liking, Need and Hunger, Pleasure, Habits, and Natural Concerns.

<u>Cluster 6 : Cereal grains and pasta, soups, and dairy food groups</u>

Motivation constructs associated with these products were Liking, Habits, Need and Hunger, Pleasure, and Health.

CONCLUSIONS

- Different motivations played different roles in food choices of the Turkish people.
- Breakfast and dinner shared similar patterns in food motivations which included Need and Hunger, Liking, and Natural Concerns while motivation for lunch choices involved Sociability, Variety Seeking, and Social Norms.
- Liking was found to be an important driving factor whether for choosing foods for meals or snacks or from a particular food group.
- This study helped better understand the current dietary patterns of Turkish people as well as the motives underlying their choices of foods and beverages for different meals and snacks.

REFERENCES

- Lyerly, J.E.; Reeve, C.L. Development and validation of a measure of food choice values. Appetite **2005**, 89, 47–55.
- Renner, B.; Sproesser, G.; Strohbach, S.; Schupp, H.T. Why we eat what we eat. The eating motivation survey (TEMS). Appetite **2012**, 59, 117–128.
- Aboud, F.E. Cultural perspectives on the interactions between nutrition, health, and psychological functioning. Psychnol. Cult. **2011**.
- Furst, T.; Connors, M.; Bisogni, C.A.; Sobal, J.; Falk, L.W. Food choice: A conceptual model of the process. Appetite **1996**, 26, 247–266.
- Sahingoz, S.A.; Sanlier, N. Compliance with Mediterranean Diet Quality Index (KIDMED) and nutrition knowledge levels in adolescents. A case study from Turkey. Appetite **2011**, 57, 272–277.