

## Research in Dietetics Fall 2017

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The objective of this study was to compare

the dietary intake of international students

living in America as opposed to their intake

while living in their home countries.

### How do international student's dietary patterns change after moving to the United States?

What are their perceptions of American diets compared to their native diet?





## **Review of Literature:**

American diet and its impact on health

**Characteristics** 

### College students at risk

- Convenience or pre-packaged foods
- High in sodium and added sugars
- Low in plant foods

- Eating out and Fast food
- Snacking
- Skipping breakfast
- Grocery shopping

Obesity rates of college students have risen from 12% to 36% from 1991-2004.

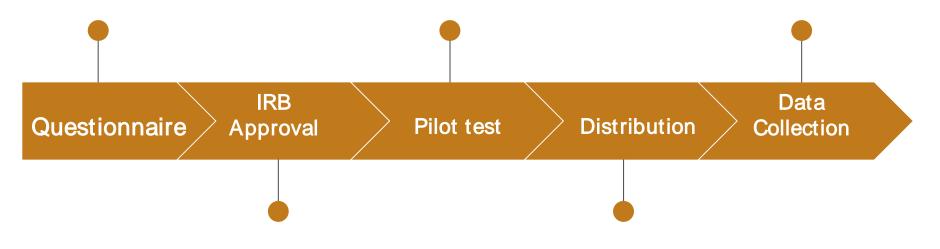
# Effects of dietary acculturation on international students living in the US

- Weight gain
- Raised blood glucose levels
- Larger portion sizes
- Increased snacking high in added sugar and salt
- Skipping meals
- Skipping breakfast
- More frequent consumption of fast foods

Methods



Focussed on food intake and perceptions of the American diet. Questionnaire was edited for clarity following pilot test. Collected and analyzed using Google sheets.

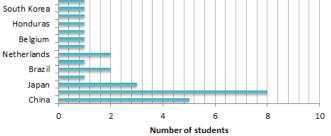


Submitted to, and approved by, Ouachita's International Review Board.

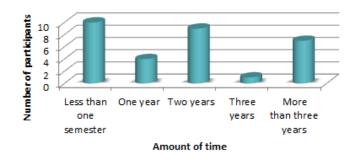
Paper copies of questionnaire to 31 international students.

## Demographics

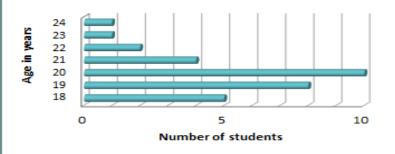
## South Africa South Korea

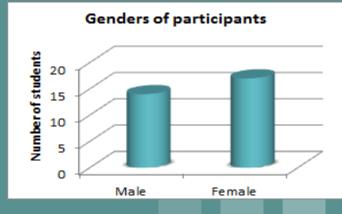


### How long have you lived in the US?

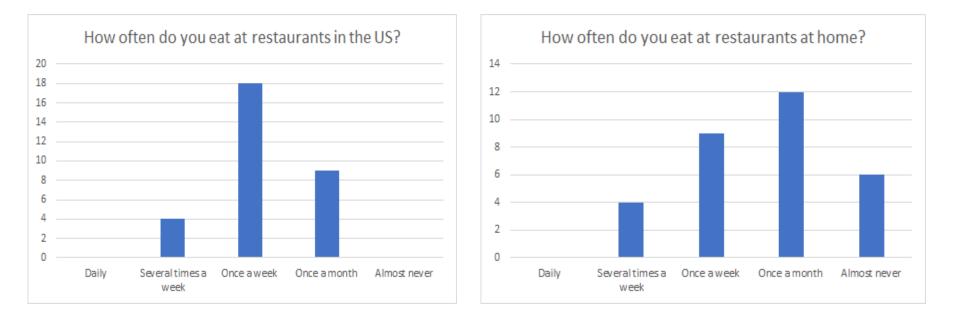


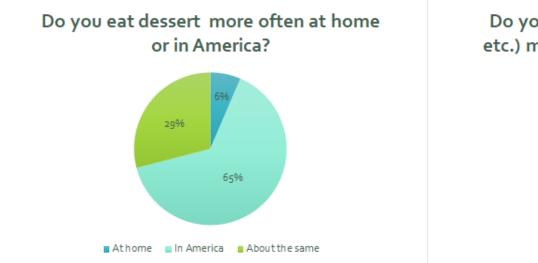
### Age Range of Participants



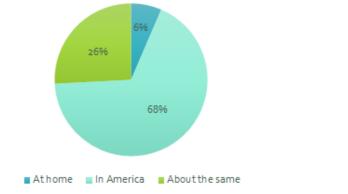


Results





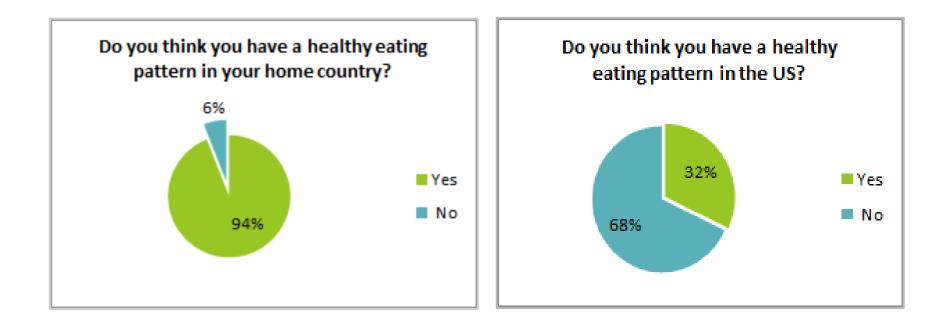
Do you drink soft drinks (Coke, Sprite, etc.) more often at home or in America?



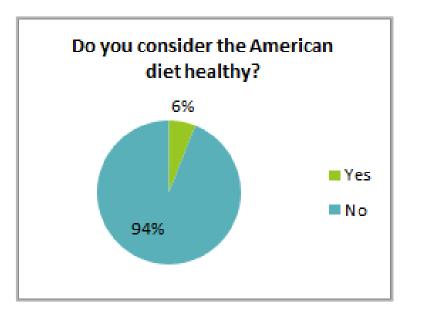


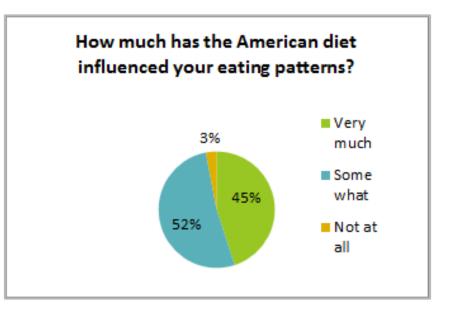


## **Results: Perceptions**

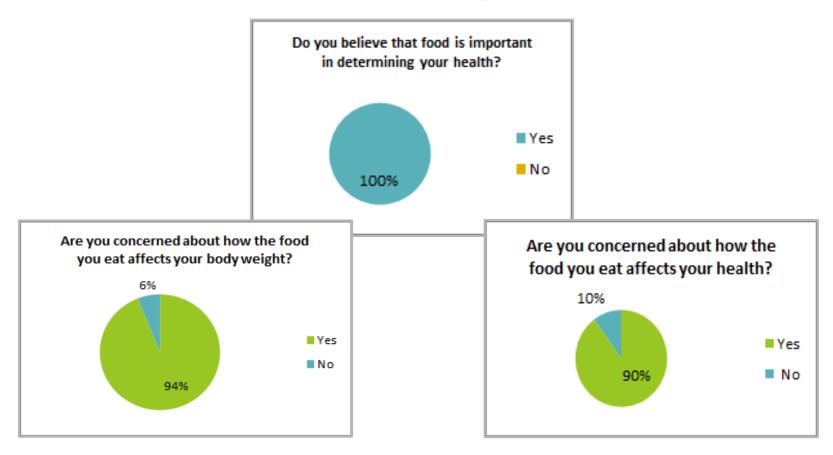


## **Results: Perceptions**





## **Results: Perceptions**





## Conclusion

International students studying in the US are susceptible to dietary acculturation as evidenced by increased consumption of desserts, soft drinks, and meats, decreased consumption of vegetables, eating larger portion sizes and dining more frequently at restaurants.

International students perceive the American diet and their eating pattern in the US as being less healthy than their usual diet. They recognize the impact of food on one's well-being and are concerned about the impacts it has on their health and weight.



## Limitations

- Sampling was not randomized, and the sample size was small.
- Sample was taken from a private, Christian university in rural Arkansas, and is not representative of typical international students.



## Implications for Further Research

A structured interview with international students to identify the specific ways in which their dietary patterns have changed since moving to the US.

Collection of anthropometric data (BMI, waist circumference), and lab values (blood pressure, serum glucose and triglycerides) to see the clinical impact and risk for disease that dietary acculturation may have had.

# Questions?

## References

1. Alakaam A, Catellanos D, Bodzio J, Harrison L. The **factors** that influence dietary habits among international students in the united states. *Journal of Int Students*. 2015:5(2):1104-1118.

2. Amohanna, A, Conforti F, Eigel W, Barbeau W. **Impact** of dietary acculturation on the food habits, weight, blood pressure, and fasting blood glucose levels of international college students. *J of ACH*. 2015:63(5):307-314.

3. Brunt A, Rhee Y. **Obesity** and lifestyle in u.s. college students related to living arrangements. *Appetite*. 2008;51:615-621.

4. Brunt A, Rhee Y, Zhong L. **Differences** in dietary patterns among college students according to body mass index. *J of ACH*. 2008;56(6):629-634.