

Weekday Diets of Burmese Refugee School-Aged Children

Report prepared by:

Roberta D. Baer
Sarah Taylor
Adriana Dail
Cori Bender
Sean Baird

Department of Anthropology
University of South Florida
Tampa, Fl.

■Table of Contents

Executive Summary	iii
Introduction.....	1
Methods	1
<i>Sampling</i>	1
<i>Food Consumption Data</i>	1
<i>Anthropometric Data</i>	3
<i>Focus Group Data</i>	4
Results.....	5
<i>The Sample</i>	5
<i>Food Consumption Data</i>	5
<i>Food Consumption and Percentage of Life in the U.S.</i>	10
<i>Ethnicity, Place of Birth, and Food Recalls</i>	13
<i>Anthropometric Data</i>	15
<i>Focus Group Data</i>	22
Overall Key Findings.....	24
Recommendations.....	24
References	26
■Appendix A	27

Executive Summary

1. Initial research on the health needs of the Tampa Burmese community indicated that a dietary transition was in progress (Baer et al. 2011). On the basis of that, a subsequent study focused on diets of a small sample of adults and children on a weekend day (Baer 2014). Much of that food consumption was of Burmese meals and foods. This study was designed to investigate actual diets among Burmese refugee children during the week, the children's heights and weights, as well as food likes/dislikes, and desires for dietary changes.
2. Methods: All of the school-aged children in the Burmese community in north Tampa were sampled (N=24). Children were weighed and measured, and their food consumption for 3 days was recorded. Three focus groups were held.
3. Findings: While an earlier study of this population (Baer et al 2014) suggested that school lunches would be the problem, the children's lunch choices seem reasonable; they take fruit and eat salads. Much of the junk food/liquid calories comes from home supplies. As the percentage of one's life in the USA increases all children are likely to increase junk food snack consumption, particularly at home. Girls are also likely to increase liquid calorie consumption.

The children who spent time in the refugee camps are shorter than average on height/age, but at or above average weight for their ages. This pattern may mean that in the short time the children have been in the U.S., they have developed lifestyles (diets and patterns of exercise) that are leading them to gain weight.

The children who have lived in the U.S. a greater percentage of their lives (the younger boys) have more favorable perceptions of American food. The children are culturally isolated—they do not have Burmese children to interact with at school, and outside of school have very little contact with American culture, except through the media.

4. Recommendations

- Culturally appropriate nutritional education programs for parents (and children) should be offered:
 - Educational programs should teach about wider range of “American” meals/foods, including healthy options when eating away from home.
 - The community should be encouraged to continue using Burmese meals/foods.
 - Parents should be encouraged to decrease liquid calories and junky snacks at home.
 - Parents should continue and increase use of healthy snacks at home.

- Organizations might develop programs for children (and adults) to interact with those from other ethnic groups. For example sports teams (soccer, flag football, etc.), dance, or arts and crafts activities might be organized.

- The community garden should:
 - Grow fruits that can be made into smoothies and other healthy drinks
 - Grow foods that are healthy snacks—green papaya, etc.
 - Consider health in design—the “parking lot” is now usable as a soccer field. Be sure plans for improvement of the area maintain the multiple uses of this space.

- All organizations working with the Burmese (and other refugees) should:
 - Model good habits—don’t serve soda or “juice” at functions/meetings. Explain that you care about the community’s health and teeth. Do serve fruit and healthy food at all opportunities.

- Don't use food (and especially unhealthy food) as a reward—coupons for fast food should be avoided. Consider rewards such as passes to MOSI's ropes course, bowling alleys, and skating rinks.
- Expand the refugees' knowledge of healthy places and activities—Lettuce Lake Park, city (free) water parks.

Introduction

Initial research on the health needs of the Tampa Burmese community indicated that a dietary transition was in progress (Baer et al. 2011). On the basis of that, a subsequent study focused on diets of a small sample of adults and children on a weekend day (Baer 2014). Much of that food consumption was of Burmese meals and foods. This study was designed to investigate actual diets among Burmese refugee children during the week, the children's heights and weights, as well as food likes/dislikes, and desires for dietary changes.

Methods

Sampling

All school aged Burmese children living in north Tampa were asked to participate. The study was explained in English, Karen and Burmese, and one parent was asked to sign a written consent and give the child's birthdate. Then for each activity—weights/heights, focus groups, food recalls--the children were asked for verbal assent. All children were fluent in English.

Food Consumption Data

Data Collection

Data were collected through 24-hour food recalls done with all of the school-aged children from the Tampa Burmese community. Food recalls were done on three consecutive weekdays with 23 children and on two consecutive days with 1 child. The children were asked to list everything they had eaten or drank the day before, what time and where they had it, and who they ate with. We recorded foods consumed; portion sizes were only noted for liquid calories, as well as healthy and junk food snacks. The children were then read a list of foods that they may have forgotten and asked if what they had eaten on that day was "usual" for them. Forgotten foods were most commonly chiles, soda, or fruit. (Table 1).

Table 1: Forgotten Foods

Chiles	6
Soda	6
Fruit	5
Candy	4
Cookies	3
Noodles	2
Chips	2
Tea	2
Popsicle	2
Fish paste	2
Fish sauce	2
Juice	1
Milk	1

Of 71 recorded days, 11 were not usual (usually due to not having attended school) and 60 days or 84.5% were considered usual (Table 2).

Table 2: Reasons for "not usual" day

Sick—did not go to school	6
Doctor's appointment	1
Wanted other food	1
Went out to eat	1
Unusual amount of soda/snacks	1

Data Coding

Data from the food recalls was coded for each child, on each day. Food was coded as Burmese meals, American meals, portions of liquid calories, portions of junk food snacks, or portions of healthy snacks. Food was also coded according to its source (home, school, or other). "Meals" included anything the child reported as eating with breakfast, lunch, or dinner, regardless of size of the meal, or its contents (i.e. cookies eaten with lunch were not considered junk food

snacks, fruit for breakfast was not considered a healthy snack). Liquid calories included any liquids consumed throughout the day, regardless of if they were part of a meal or not and included items such as milk in cereal or popsicles. A portion of liquid calories was considered to be 8 ounces; milk in cereal was counted as 0.5 portions, while a 12 ounce can of soda was 1.5 portions.

We wanted to look at how the length of time in the U.S. related to diets. However, since four years in the U.S. at age 2-6 is very different from the four years in the U.S. at age 13-17, we used percentage of life in the U.S. rather than number of years in the U.S.

Food recalls were explored with scatterplots. However, because there are so many zeros in the food recalls, the distributions are badly skewed in a way that makes it impossible to transform them to run parametric tests. So they were treated as rank-order variables whenever a strong and possibly significant pattern was observed. We looked for patterns between food consumption and age, anthropometric variables (heights and weights), and percentage of life in the U.S. We also analyzed the data by gender, place of birth, ethnicity, and whether or not the individual came to the U.S. directly from a refugee camp.

Anthropometric Data

Data Collection

The children gathered in one apartment. The anthropometric assessment of stature and weight was measured with a stadiometer and digital scale to collect data for each child at one time point to the nearest .1inch/.1lb unit.

Data analysis

Body Mass Index percentiles and z-scores were determined by inputting the age in months, weight and height data into the Center for Disease Control and Prevention program Epi Info 7 (CDC 2013).

All anthropometric data were explored as continuous variables. We looked for patterns between height, weight, BMI, age, and percentage of life in the U.S. We analyzed the data by, gender, place of birth, ethnicity, and whether or not the individual came to the U.S. directly from a refugee camp.

Focus Group Data

Data Collection

The focus groups—one for older boys, girls, and younger boys--provided an opportunity to explore perceptions of American and Burmese food, food and health, desired body images, ideas about prestige of different foods, and the challenges of being a refugee in school and at home (Appendix 1). Not all questions were asked in each focus group. For example, the younger boys were not asked the body image questions. The focus groups were held at the apartment complex where most of the Burmese live. Each focus group took about one hour. All of the participants were given \$15 Walmart gift cards as a thank you.

Data analysis

We taped and transcribed the focus groups. The transcribed data were analyzed for themes. At least 2 coders reviewed the material and differences in coding were discussed and resolved.

Results:

The Sample

The majority of the children were of the Karen ethnic group. All but four of the children came to the U.S. after spending many years in refugee camps in Thailand. These children were Chin and had each spent just 1 year in the U.S. That 1 year equals an average of just 10% of their lives. The Kayah and Karen children all came to the U.S. directly from refugee camps in Thailand. There were only 3 Kayah children in the population. They have spent an average of 3 years or 44% of their lives in the U.S. The Karen children (n=17) have spent an average of 5 years or 47% of their lives in the U.S. (Table 3).

Table 3: Description of Sample Population

		Gender					
		F		M		Total	
		Count	Mean	Count	Mean	Count	Mean
Ethnicity	Chin	3		1		4	
	Karen	5		12		17	
	Kayah	1		2		3	
Birth Place	Burma	5		2		7	
	Thailand	4		13		17	
Arrived from Refugee Camp	No	3		1		4	
	Yes	6		14		20	
Age - yrs. rounded-up			12		11		11
% of life in U.S.			30		47		40

Food Consumption Data

A mean of 1.5 (range 0-4) American meals were consumed by each child/day. Most American meals were consumed at school (Table 4); children often ate both a school breakfast and lunch. Pizza, chicken and muffins were the most common foods eaten at school. Interestingly, the children also often chose a fruit or vegetable selection when those were available (underlined,

Table 4). At home, the American foods most commonly eaten were cake, chicken nuggets, cold cereal, bread, and hot dogs.

Table 4: American Meals

Home 19%			School 81%		
Fruit Loops	2	10%	Pizza meal (pizza—15, pizza, chips—3, pizza, popcorn—2, pizza, chips, cookies—1, pizza, <u>vegetables</u> —1, pizza, fruit—1, pizza, <u>fruit, salad</u> —1, pizza, mac n cheese—1, pizza, hamburger, <u>vegetables</u> --1, pizza, fish, chips—1)	27	32%
Cheerios	1	5%	Chicken meal (chicken—8, chicken nuggets, fries—1, chicken nuggets, hamburger—1, chicken, chips—1, chicken nuggets, chips, cookies—1, chicken, <u>fruit</u> , sunflower seeds—1, chicken, hot dog, <u>vegetables</u> —1, chicken nuggets, <u>fruit</u> , chips—1)	15	18%
Cereal, fruit	1	5%	Hamburger/Cheeseburger meal (hamburger/cheeseburger—3, hamburger, <u>fruit</u> , cake—1, hamburger, chicken patty, <u>fruit</u> —1, hamburger, <u>vegetables</u> --1, hamburger, <u>fruit</u> , sunflower seeds, chips—1)	7	8%
Cake	3	15%	Salad meal (<u>salad</u> —3, <u>salad</u> , chips—1, <u>salad</u> , chips, <u>fruit</u> —2)	6	7%
Bread	2	10%	Mac N Cheese meal (mac n cheese—1, mac n cheese, <u>fruit</u> —1)	2	2%
Hot dogs	2	10%	Pancake	3	4%
Chicken strips/nuggets	3	15%	Muffin	4	5%
Fruit	2	10%	Protein bar	3	4%
Pizza, chips	1	5%	Ham and eggs	1	1%
Pizza	1	5%	Rice and chicken	1	1%
American cheese	1	5%	Cheerios	2	2%
Mac N Cheese	1	5%	Fruit Loops	3	4%
			Peanut butter sandwich	1	1%
			Rice with pork and chicken, <u>salad</u>	1	1%
			White bread, <u>fruit</u> , crackers	1	1%
			Fish	1	1%
			Fish, chips, popcorn	1	1%
			<u>Fruit</u> , crackers	1	1%
			Egg and ham sandwich	1	1%
			Tacos	1	1%
			Rice, beans, chicken, <u>salad</u> , cookie, cake, <u>fruit</u>	1	1%

A mean of 1.2 (range 0-2) Burmese meals were consumed by each child/day (Table 5).

Burmese meals were almost exclusively consumed at home. Only in one case did a child bring lunch to school. Burmese meals are usually mixed dishes of rice, meat and vegetables.

Table 5: Burmese Meals

Home 99%			School 1%		
Rice meal (rice, chicken—8, rice—7, rice, chiles—7, rice, chicken, chiles—5, rice, pork—4, rice, egg—3, rice, pork, vegetables—3, rice, potatoes, tea salad, nuts, onions, dried shrimp—2, rice, chicken, fruit—1, rice, chicken, pork, MSG—1, rice, chicken, pork—1, rice, chicken, noodles, vegetables—1, rice, chicken, fish—1, rice, pork, chiles—1, rice soup—1, rice, egg, chiles—1, rice, chiles, salad, bacon bits—1, rice, chiles, vegetables, MSG--1, rice, vegetables—1, rice, chicken, vegetables—1, rice bamboo shoots, MSG--1, rice soup, bamboo—1, rice, chicken, boiled sour leaves, vegetables, chiles—1, rice, fish—1, rice, soup, pork, chiles, fish sauce, donuts—1, rice, soup, pork, eggs—1, rice and chicken soup—1, rice, fish paste—1, rice, fish paste, soup—1, rice, chicken, vegetables, soup—1, rice, chicken soup—1, rice, onion, beef, chile—1, spicy rice—1, spicy rice, Thai noodles—1, spicy rice, noodles, fish paste—1, maguti, rice, soup—1, maguti, rice, soup, pork—1, beef, vegetables, fish sauce, rice, chile—1)	69	84%	Chicken (from home)	1	100%
Chicken meal (chicken—2, fried chicken from Chinese store—2, chicken, chile—1, beans, chicken—1, chicken gizzard—1)	7	9%			
Noodles meal (noodles, meat—1, noodles, egg, chile—1)	2	2%			
Pork	1	1%			
Gray country food, chiles	1	1%			
Beans, vegetables, chiles	1	1%			
Fish, egg	1	1%			

A mean of 2.9 portions (range 1--8.8) of liquid calories was consumed by each child/day (Table 6). Half of the liquid calories were consumed at home and these were most often soda or “juice.” Liquid calories consumed at school were either flavored milk or apple juice.

Table 6: Liquid Calories (portions)

Home 48%			School 52%		
Soda	49.5	42%	Chocolate/strawberry milk	48	42%
Juice (apple, orange, red, mango, blueberry)	31	26%	Apple juice	46.5	41%
Milk, Milk w/ sugar	18	15%	Milk	13.5	12%
Gatorade	4.5	4%	Soda	3	3%
Chocolate/strawberry milk	4	3%	Gatorade	2.5	2%
Thai tea (milk, sugar)	4	3%			
Popsicle	3	3%			
Coffee (milk, sugar)	3	3%			
Monster energy drink	1	1%			
Kool-aid	1	1%			

A mean of 1 (range 0-6) portion of junk food snacks was consumed by each child/day (Table 7). Junk food snacks were mostly consumed at home. At home they were mostly chips. At school cookies and goldfish were also consumed.

Table 7: Junk Food Snacks (portions)

Home 82%			School 18%		
Chips/ Cheddar cheese chips	25	43%	Chips	5	39%
Candy	7	12%	Cookies	4	31%
Ramen	6	10%	Goldfish	2	15%
Cookies	5	9%	Rice crispy	1	8%
Sweet rice cake	4	7%	Candy	1	8%
Cake	2	5%			
Fries	2	4%			
Ice cream	2	4%			
Corn dog	1	2%			
Chicken nuggets	1	2%			
Pizza	1	2%			
Crackers	1	2%			
Graham crackers	1	2%			

A mean of .4 (range 0-2) portions of healthy snacks was consumed by each child/day (Table 8). Healthy snacks were primarily consumed at home. These were most commonly fruit.

Table 8: Healthy Snacks (portions)

Home 97%			School 3%		
Noodles with mushrooms	1	3%	Rice	1	100%
Fruit (orange, watermelon, banana, blueberries, apple, grapes)	24	75%			
Thai noodles	1	3%			
Red beans	1	3%			
Vegetables (cauliflower, avocado)	2	7%			
Rice and chicken soup	1	3%			
Prunes	1	3%			
Rice and egg	1	3%			

Food Consumption and Percentage of Life in the U.S.

When looking at the relationship between food consumption and the percentage of life in the U.S. overall, case number 21 had to be excluded as an outlier.

Figure 1 shows that as the percentage of life in the U.S. increases, there is a moderately strong and statistically significant increase in the average number of junk food snacks (Spearman's $Rho R^2 = .42, p = .05$). The relationship is stronger for girls alone (Spearman's $Rho R^2 = .55, p = .16$) than it is for boys alone (Spearman's $Rho R^2 = .37, p = .17$), but both relationships lack much statistical significance. This means that the results may be due to the vagaries of sampling, in other words, there are too few cases for each gender in the sample to be sure that they are differentially affected.

Figure 1: Junk Food Snacks by Percentage of Life in the U.S. by Gender

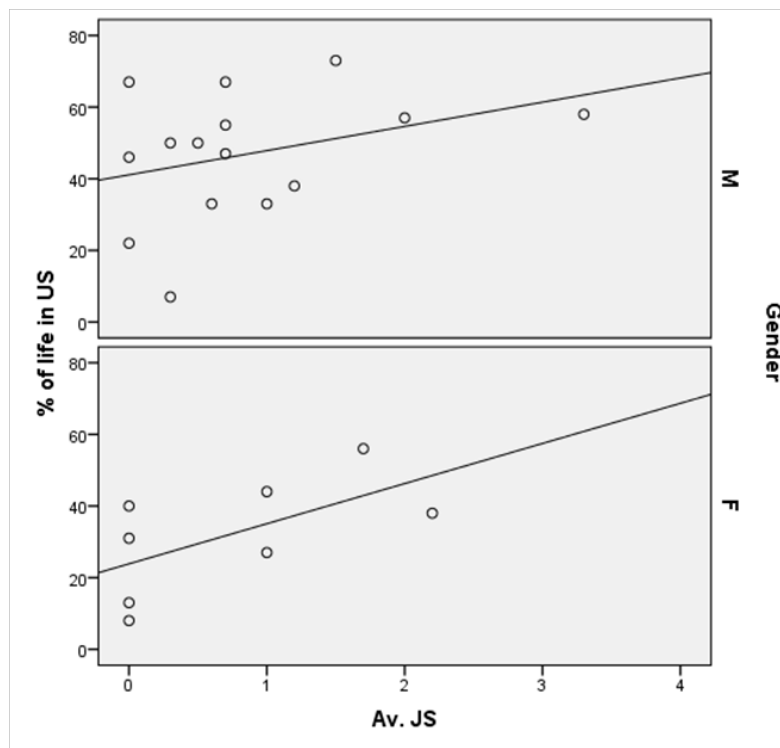


Figure 2 shows that as the percentage of life in the U.S. increases, there is a moderately strong and statistically significant increase in average junk food snack consumption in the home in particular (Spearman's Rho $R^2 = .44$, $p = .04$). In other words, a fair amount of the increase in junk food snack consumption happens in the home and not in school. Gender is not a meaningful distinction in this case.

Figure 2: Percentage of life in the US and junk food snack consumption at home

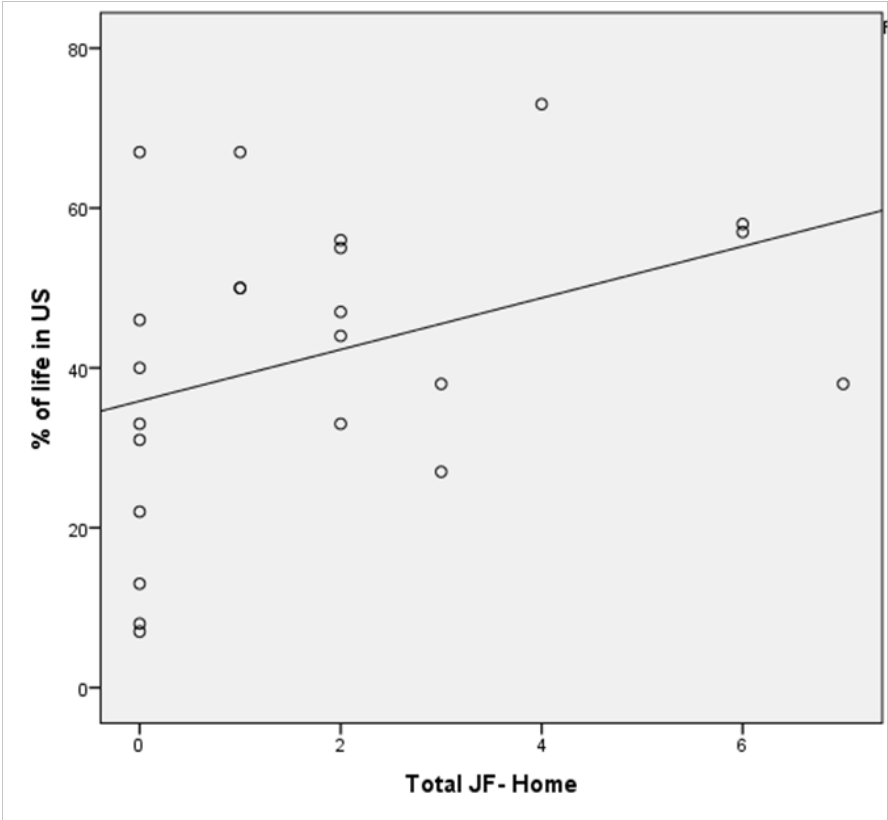
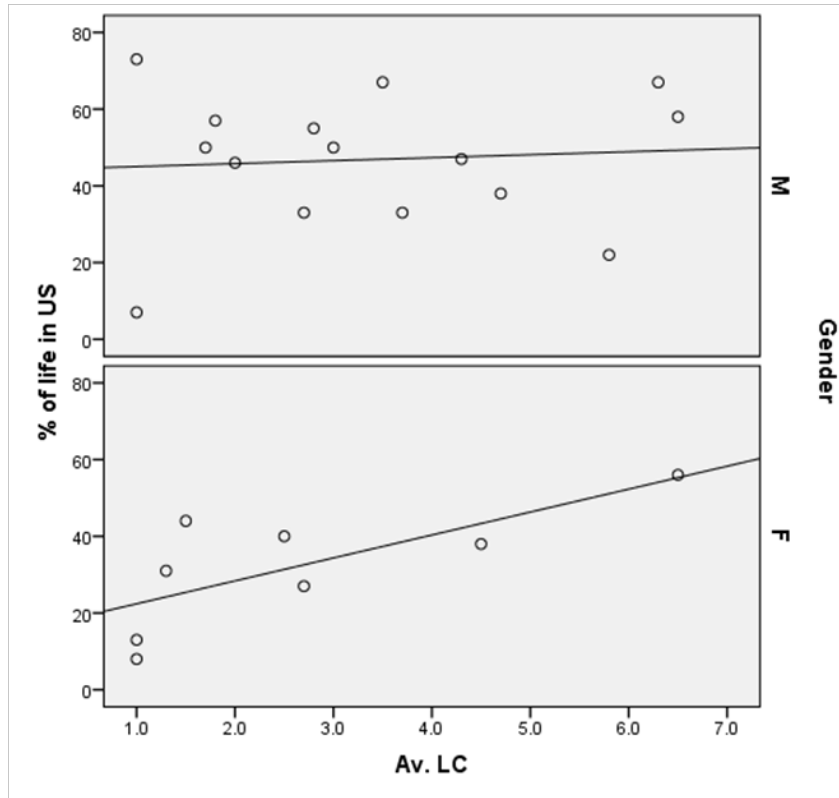


Figure 3 indicates that as the percentage of life in the U.S. increases there is a strong and statistically significant increase in liquid calorie consumption for females (Spearman's Rho $R^2=.71$, $p=.05$; but not for males (Figure 3). The data at this time indicate that the increase happens both at home and at school.

Figure 3: Gender and liquid calorie consumption by percentage of life in the U.S.



To summarize, as the percentage of one's life in the US increases, all children are likely to increase junk food snack consumption, particularly at home. But girls are also likely to increase liquid calorie consumption.

Ethnicity, Place of Birth, and Food Recalls

For exploration of percentage of life in the U.S. and nutrition by ethnicity and place of birth, case number 21 was included since the number of Chin and Burmese participants are so low. Figures 4 and 5 suggest that the Kayah may be largely responsible for the increase in junk food and liquid calories. Because there are only three cases we cannot evaluate this possibility in a meaningful way. This is especially true since they show a more pronounced upward trend in several categories of food intake. No other trends were noted.

Figure 4: Liquid calorie consumption and ethnicity

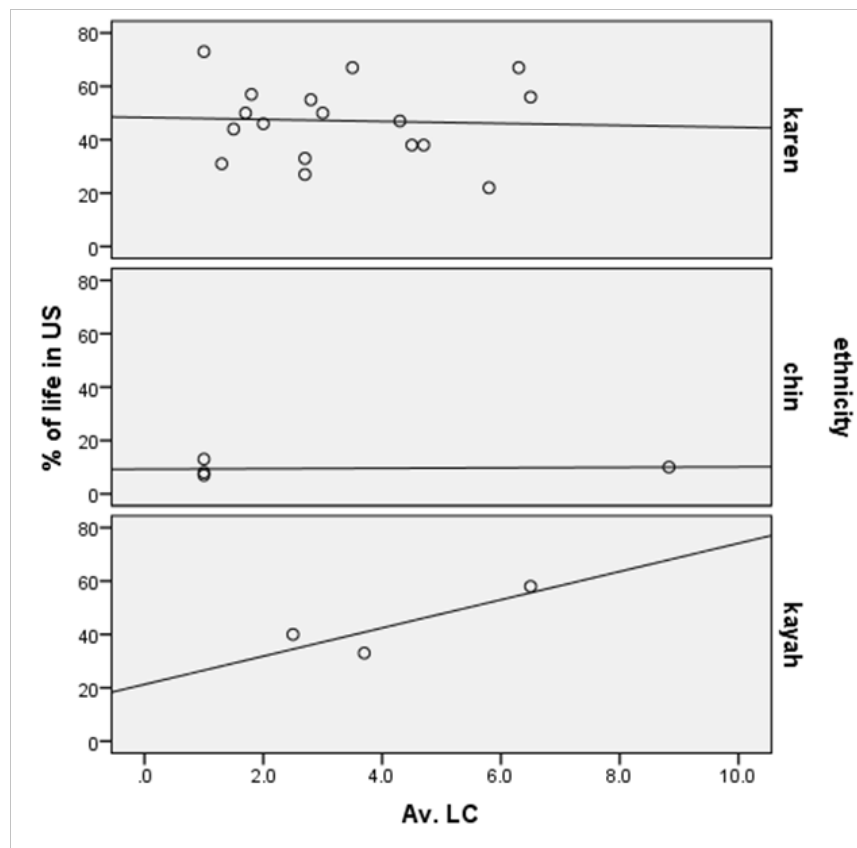
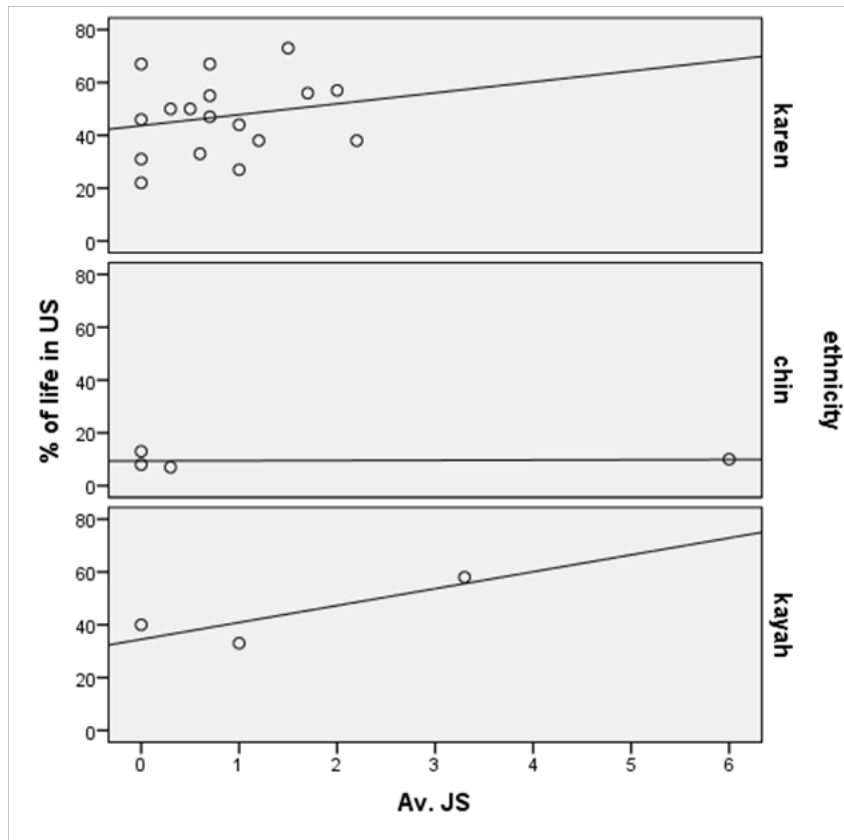


Figure 5: Junk food snacks and ethnicity



Food Consumption data—summary of findings:

The children’s lunch choices seem reasonable; they take fruit and eat salads. But much of the junk food/liquid calories they are eating comes from home supplies.

Anthropometric Data

Histograms were produced to compare the Tampa Burmese refugee children to U.S. children using CDC z-scores . Figure 6 shows that the population is short in comparison to the CDC reference population - the children are on average one standard deviation below the CDC average. Broken down by gender the pattern is the same.

Figure 6: Z-scores for height/age

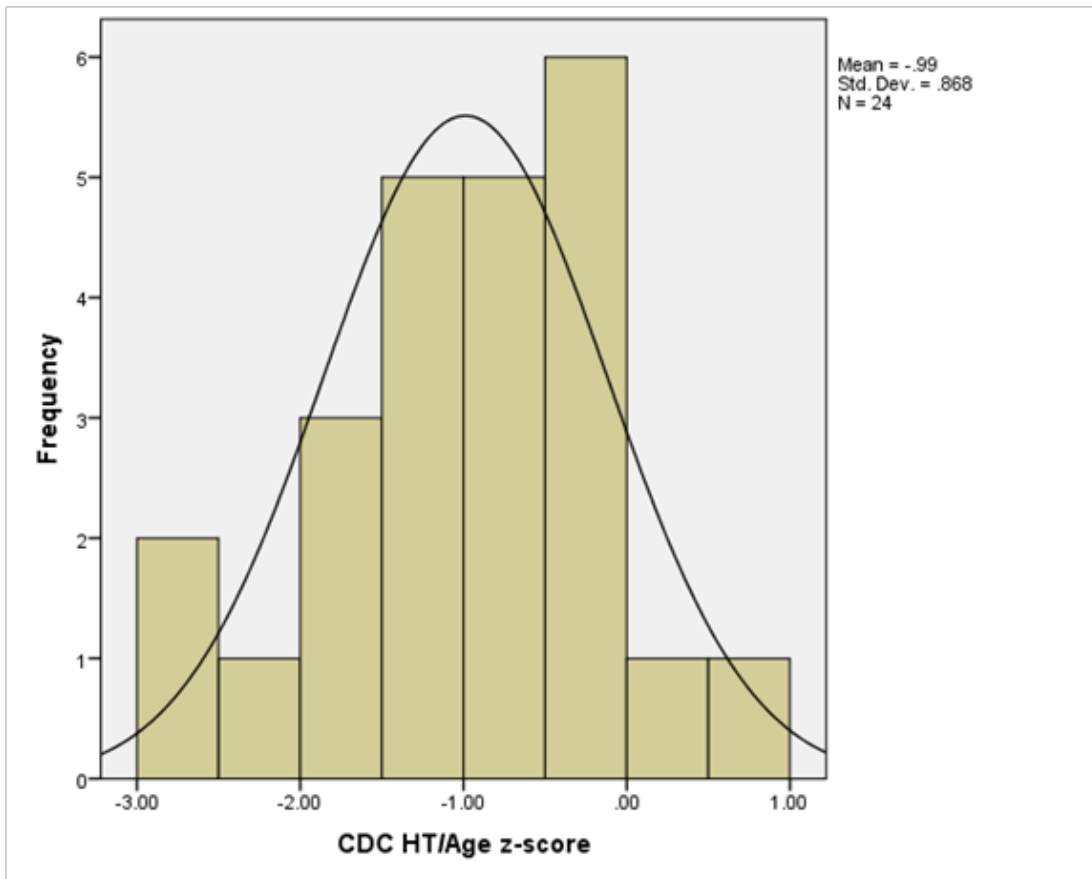


Figure 7 shows that the shorter children are those arriving from refugee camps, while the 4 children who did not arrive in the U.S. from a refugee camp have a mean height similar to that of U.S. children. This pattern repeats itself when the data are considered by ethnicity because all 4 children who did not arrive directly from refugee camps are Chin and there are only 3 Kayah children.

Figure 7: Height/age by refugee camp experience

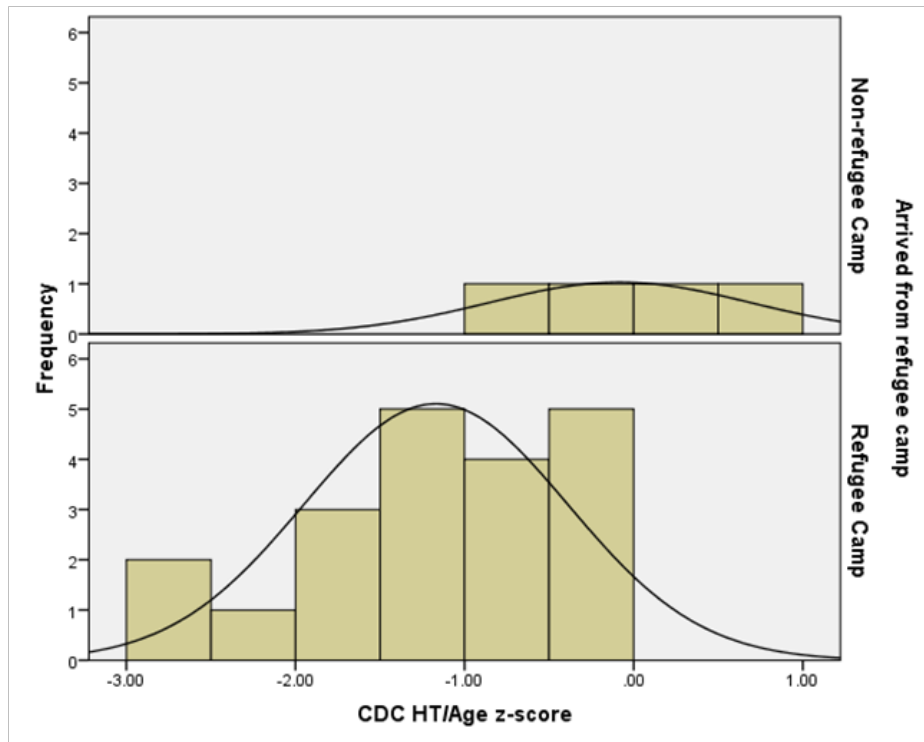


Figure 8 shows that the population tends to have a normal weight (if not a bit underweight) in comparison to the CDC reference population, but there are some heavy children. The pattern holds when gender or place of birth is considered.

Figure 8: Z-scores for weight/age

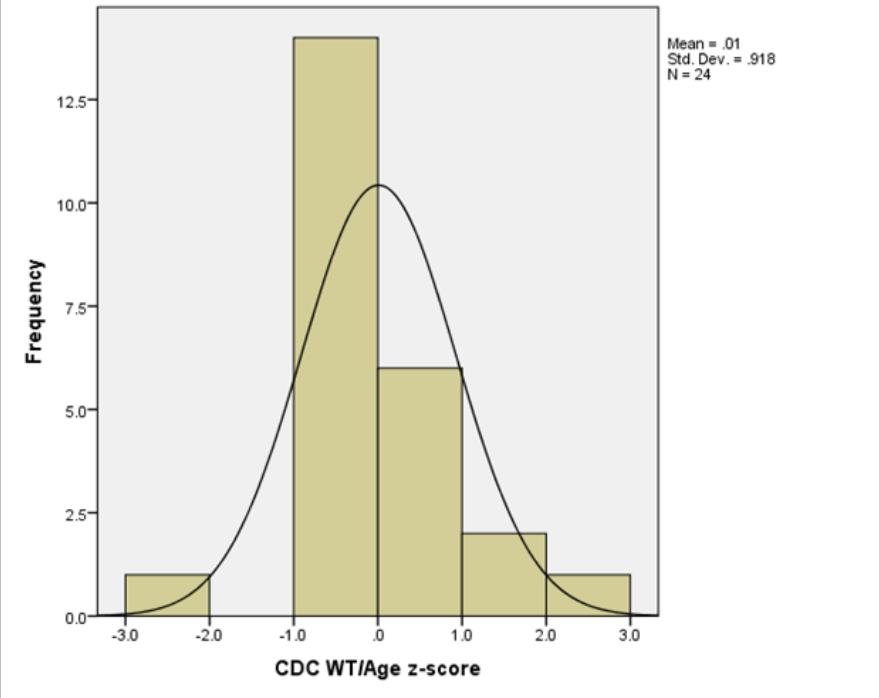


Figure 9 shows that the Kayah and Chin children tend to be a bit heavier than the Karen children who are closer to normal in comparison to the CDC reference population.

Figure 9: Z-scores weight/age by ethnicity

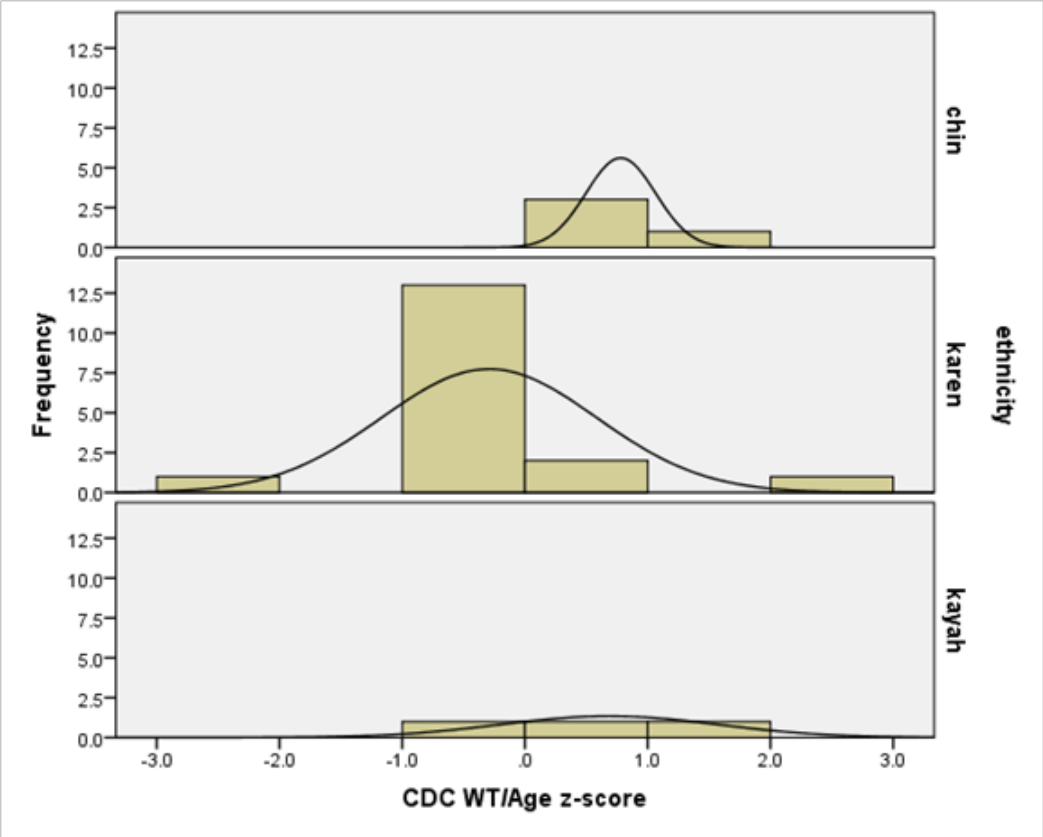


Figure 10 indicates that those not arriving directly from refugee camps tend to be a bit heavier. These are the same 4 Chin children seen in the figure above. Recall that these 4 children are also taller for their age than the others, so we would expect them to be a bit heavier.

Figure 10: Z-scores for weight/age by refugee camp experience

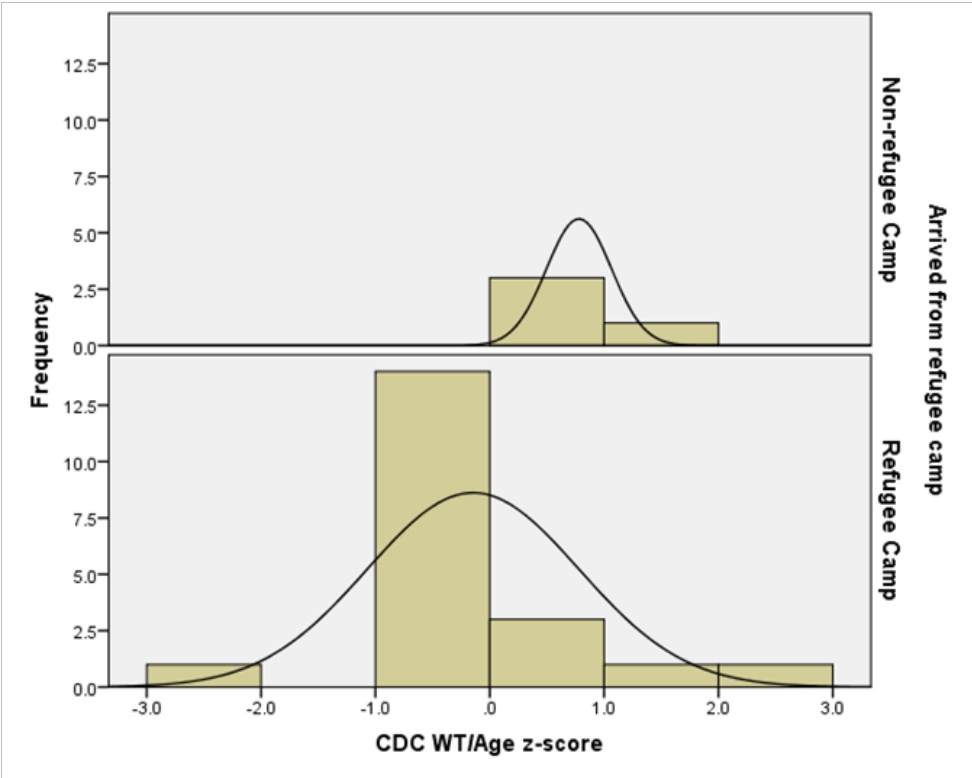
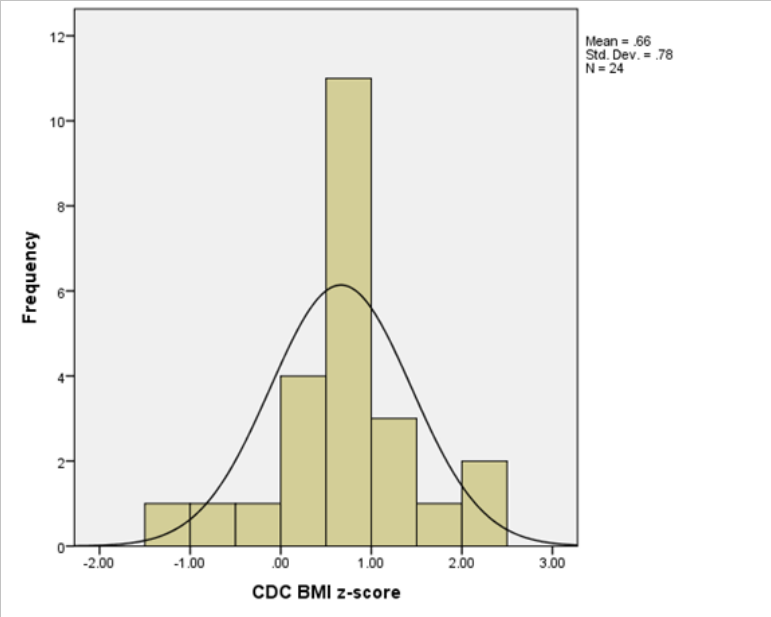


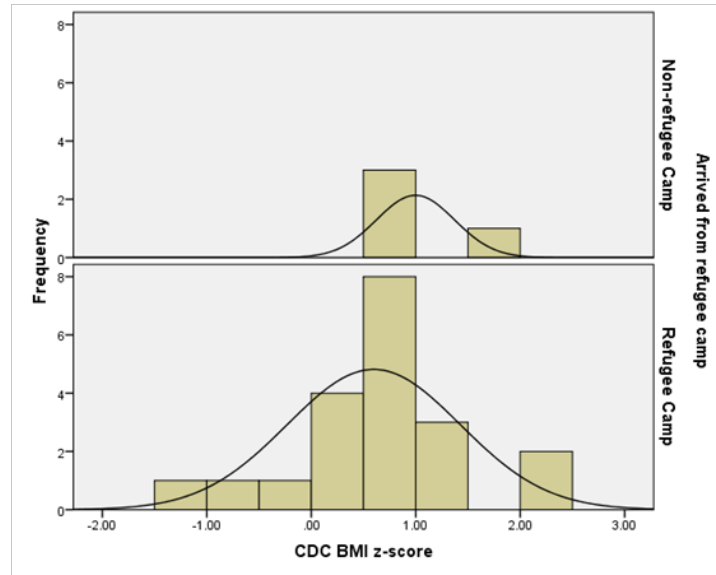
Figure 11 indicates that the population is a bit overweight based on BMI z-scores when compared to the CDC reference population. They are on average .66 standard deviations above normal and two children are obese ($z=2$). One of these was a girl from the Kayah group. Her mother was concerned about her daughter's weight gain and the short time in which it had taken place; she showed us photographs of the girl in the refugee camp where she was of average weight.

Figure 11: Z-scores for BMI



This pattern holds when considered by gender, ethnicity, place of birth, and whether or not they arrived from a refugee camp (Figure 12).

Figure 12: Z-scores BMI by refugee camp experience



Anthropometric data—summary of findings:

The anthropometric data suggest that, on the whole, the Burmese refugee children are shorter than the average U.S. child. However, those arriving from refugee camps are shorter than those who did not spend years in the refugee camps. The sample has a fairly average weight when compared to U.S. children. A second conclusion from the anthropometric data is that the population is overweight but not obese; they have slightly higher than average BMIs. This seems to be true for everyone. If the children's short heights are a reflection of their diets at the refugee camps then this pattern may mean that in the short time the children have been in the U.S. they have developed lifestyles (diets and patterns of exercise) that are leading to them gaining weight.

Focus Group Data

The focus groups revealed that Burmese children have fairly consistent ideas about food across the three age groups we interviewed. When asked for examples of American food, the younger boys listed potatoes, pizza, juice, bacon, hot Cheetos, and cheese. The girls agreed on pizza, but also included hamburgers, hot dogs, fries, milk and donuts. The older boys also agree on pizza, hamburgers, hotdogs, and bacon, but also added “unhealthy foods,” oatmeal, bread, cereal, sandwiches, green beans, black beans, grapes, and tacos. The younger boys preferred American food, the girls (many of whom were recent arrivals from Burma) preferred Burmese, and the older boys said they liked both.

Most of the focus group participants would like to have more cheeseburgers/hamburgers in their school lunches, while the young and older boys wanted more pizza. Interestingly, the young boys wanted to add more American type foods such as mashed potatoes. In contrast, the older boys and girls thought there should be more egg, rice, and chicken offered in school lunches, which are seen as Burmese foods. With regard to the school breakfast, the boys (both young and older) like the biscuits and sausage. The older boys thought it would be nice to have more fruit that was not mixed with jello or applesauce, as well as more Burmese food.

When discussing what a person needs to grow up healthy, the older boys and girls mentioned eating healthy foods, such as fruit and vegetables. The girls felt that pizza, milk, ice cream and cake make you fat, while the boys said that fat, milk, meat, and rice could make you fat.

With more money in their households to purchase food, the older boys would buy more fruit, rice, bacon, and chiles; the girls and younger boys would purchase more fruits and vegetables, as well as more candy. With less money, the older boys recommended purchasing less bottled water, fruit, bacon, and milk; the younger boys said not to buy food, and the girls specified fewer purchases of ice cream and candy. When asked where they eat out when they do not eat at home, McDonald’s and the Chinese buffet were noted as preferred places. It was mentioned by some that the Chinese buffet was more similar to Burmese type foods.

We asked the children what they would serve an American friend who came to their houses. The younger boys said tacos, hot chips and steak, the girls would serve Burmese food and pizza, and the older boys said sandwiches and Burmese food. We also asked the children what they had eaten when they visited the homes of American friends. The younger boys had never done this. A few of the girls and older boys had visited the home of a “Spanish” friend; the girls had eaten apples, juice, and chips, while the boys had eaten fish and cookies.

When discussing body image, the older boys and girls felt that an attractive Burmese girl would have long hair, while the boys would be impressed by girls who have lighter skin tone. The girls thought they would impress boys through their dress and how they act. The older boys and girls thought Burmese boys should be funny, but the girls were more interested in boys who were tall, have short hair, and are smart and respectful. The older boys thought girls would be interested in the “bad boy” type, who is more “gangster.” Interestingly, these questions were attempting to address how boys and girls think they and the opposite gender should look, but the responses also include how they should act.

The children were asked about any challenges they face in school or at home regarding being Burmese. One younger boy noted that shortly after starting school he got in trouble with a teacher due to his limited understanding of English, but that things were better for him now. The girls noted that it was hard for them because sometimes they are called names like “chubby” and/or confused with being “Chinese.” Some of the girls found it difficult because they are shy and lonely. When asked if they needed help with English, some responded in the affirmative. Most eat lunch with classmates who are non-Burmese.

Focus Group data—summary of findings:

The children who have lived in the U.S. a greater percentage of their lives (the younger boys) have more favorable perceptions of American food. The children are culturally isolated—they do not have Burmese children to interact with at school, and outside of school have very little contact with American culture, except through the media.

Overall Key Findings:

While an earlier study of this population (Baer et al 2014) suggested that school lunches would be the problem, the children's lunch choices seem reasonable; they take fruit and eat salads. Much of the junk food/liquid calories comes from home supplies. The children who spent time in the refugee camps are lower than average on height/age, but at or above average weight for their ages. The result is that they are becoming fat.

The children are also culturally isolated.

■ Recommendations

- Culturally appropriate nutritional education programs for parents (and children) should be offered:
 - Educational programs should teach about wider range of “American” meals/foods, including healthy options when eating away from home.
 - The community should be encouraged to continue using Burmese meals/foods.
 - Parents should be encouraged to decrease liquid calories and junky snacks at home.
 - Parents should continue and increase use of healthy snacks at home.
- Organizations might develop programs for children (and adults) to interact with those from other ethnic groups. For example sports teams (soccer, flag football, etc.), dance, or arts and crafts activities might be organized.
- The community garden should:
 - Grow fruits that can be made into smoothies and other healthy drinks
 - Grow foods that are healthy snacks—green papaya, etc.
 - Consider health in design—the “parking lot” is now usable as a soccer field. Be sure plans for improvement of the area maintain the multiple uses of this space.

- All organizations working with the Burmese (and other refugees) should:
 - Model good habits—don't serve soda or "juice" at functions/meetings. Explain that you care about the community's health and teeth. Do serve fruit and healthy food at all opportunities.
 - Don't use food (and especially unhealthy food) as a reward—coupons for fast food should be avoided. Consider rewards such as passes to MOSI's ropes course, bowling alleys, and skating rinks.
 - Expand the refugees' knowledge of healthy places and activities—Lettuce Lake Park, city (free) water parks.

References

Baer, Roberta D. et al.

2011 A Health Needs Assessment of the Burmese Community in Tampa, Fl. (available from baer@usf.edu)

Baer, Roberta D.

2014 Dietary Issues for Burmese Participants in a Community Garden (available from baer@usf.edu).

Center for Disease Control and Prevention (CDC)

2013 Epi Info 7. <http://wwwn.cdc.gov/epiinfo/>, accessed May 7, 2015.

Acknowledgements: The data and preliminary analyses for this project were conducted as part of ANT 4495, Methods in Cultural Research, Anthropology Department, USF, fall 2014. The students who participated in that class were: Sean Baird, Ryan Beigel, Lauren Evans, Elizabeth Guidry, Thomas King, Matthew Norgard, Vivian O'Grady, Zariana Ortiz, Aditi Patel, Amoni Walker, Susanne Witt-Dockery, Matthew Yegge, Mary Young. We appreciate the support of the USF Office of Community Engagement, Father Berhanu and St. Mary's Ethiopian Orthodox Church, the Tampa Bay Burmese Council, the Refugee Task Force and associated agencies, and the Tampa Garden Advisory Board. Thanks also to Lah Ku, Marry Htoo, Bay Khin, and Po Lay who helped with organizing the research activities and dietary data collection, and to Elizabeth Powers for help with the anthropometric data collection.

■ Appendix A

Focus Group Guide

1. How long have you lived in the US? In Tampa?
2. If you could change the lunches at your school what changes would you make? What would there be more of? Less of?
3. If you could change the breakfasts at your school what changes would you make? What would there be more of? Less of?
4. Do you sit with other Burmese kids at breakfast and lunch? If not, what kinds of kids?
5. What should a child do to grow up strong and healthy?
6. If your family had more money, what would you spend it on?
7. If your family could spend more money on food, what would you want to buy?
8. If your family had to spend less money on food, what changes do you think they should make?
9. What do rich people eat? Poor people?
10. Are there foods that make you fat? Which ones?
11. For you, what is American food?
12. Do you like American food or Burmese food better? Why?
13. Is it important to eat rice? Why? How often do you eat rice?
14. What other foods is it important to eat? Why?
15. Are there new foods you would like your mom/dad to learn how to cook? Which? Why?
16. If you had a special Burmese friend come to your house, what would you give them to eat? Why?
17. If you had a special American friend come to your house, what would you give them to eat? Why?
18. Have you ever gone to an American friend's house to eat? What did you eat?
19. What are your favorite places to eat out? Why?
20. How do Burmese boys like girls to look?
21. How do Burmese girls like boys to look?
22. How do American boys like girls to look?
23. How do American girls like boys to look?

24. Is it hard to be Burmese at your school? Why?
25. Do you get hassled by other kids at school? Which ones? What do they say or do?
26. Do you have any problems because English is not your first language? What?
27. What about where you live--do you get hassled there? By who? What do they say or do?
28. Do you want people to know that you and your families are refugees? Why?
29. What kinds of things would you like to be able to do after school and in your free time (ex. sports, cooking/sewing classes, art classes, homework help, help finding jobs, help getting into college, etc.)?