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BACKGROUND and STUDY RATIONALE

Obesity/overweight is a public health epidemic, with one in every three children in the United States being overweight or obese.¹ While the causes of the obesity are multifactorial, obesity has been linked with the ingestion of food (calories) in excess of needs and with increased consumption of away-from-home (versus at-home) meals.²⁻⁴ The away-from-home meals also contribute to higher dietary fat and sodium intakes, which may increase the risk for other chronic diseases.²⁻⁴

Faith Communities (FC) represent sites where children/youth consume away-from-home meals and/or snacks. Food at FC is served in association with religious programs as well as within school programs, enrichment activities, and sport's programs. Because children often attend several FC activities/programs on multiple days each week, they may consume many away-from-home meals provided by the FC.⁵

Little research has been conducted examining the food culture at FC. Food that is served at FC has been shown to be for the purposes of entertainment and fellowship, promoting attendance, and providing basic nutrition needs.⁵ Cost and preparation time have been identified as key factors affecting the decision on what foods are served at FC with little or no consideration of the food's nutritional content.⁵

Given the identified constraints on foods served at FC, the common practice of providing food at multiple FC events, and the potential impact to children/youth, a direct examination of the foods/beverages (and their nutrient contributions) served at FC is imperative.

PURPOSE

To determine what foods and beverages, including their nutrient contributions, are provided at FC in association with programs/ events which are attended by children/youth.

METHODS

- Participation from at least 10 churches was sought via initial communication with FC leaders (i.e. Pastors).
- Direct observation methodology⁶ was used to document foods / beverages provided at children/youth-related activities.
- All researchers were trained on data collection methods prior to the start of the study.
- Foods/beverages provided by the FC were entered into a nutrition analysis software program (Food Processor, ESHA, Salem, OR) and analyzed for energy and nutrient contents.
- Descriptive statistics were conducted using InStat (GraphPad, v3).
- The project was reviewed by FAU's Institutional Review Board and considered to not be human research.

RESULTS

Ten churches located in Southeastern Florida were visited on 29 occasions (25 meals, 4 non-meals) to document foods / beverages provided at child/youth oriented events. Most churches were visited on two to five different occasions.

- Both middle- and high-school aged children/youth attended the events. The number of children/youth in attendance ranged from 5 to 30 (mean 15).
- The foods / beverages provided by the churches tended to be similar. Table 1 shows the frequency with which selected foods were served.

Table 1. Frequency of selected foods served at faith-based child/youth-oriented activities

Main Course	Frequency	Church (numbers)
Pizza (restaurant bought)	10	5
Pasta-based dish with hamburger (baked ziti, lasagna, meatballs and pasta, ...)	4	4
Hamburger-based chili and sloppy joe sandwiches	3	2
Hamburger and hot dog sandwiches	2	1
Sandwiches (processed-meat, home-made)	2	1
Chicken wings, nuggets, casserole/ stir-fry	3	1
Chinese food (restaurant bought)	1	1
Beverages		
Milk (chocolate)	1	1
Sodas (sugar-sweetened)	11	5
Lemonade, ice tea, fruit punch (sugar-sweetened)	11	7
Diet soda or sugar-free lemonade	3	2
Water (bottled or pitcher)	4	4
Other	1	1
Salty Snack Foods - Chips	9	6
Desserts		
Cookies and candy	15	7
Cake / cupcakes	5	4
Ice Cream	2	2

Additional findings showed that:

- Grain-based side dishes were only rice, served twice, and white rolls or French bread served at four meals.
- Salad was provided two times.
- The only other vegetables served were French fries and potato salad.
- Fruit was provided five times.
- Desserts (often several) were served at a majority of the events.

Recommendations for youth indicate that daily fat intake should provide 25 to 35% of total energy, and saturated fat <10%. Added sugar should be limited to 25 g and sodium intake limited to 1500 mg per day.

Findings from this project showed:

- Main courses averaged 424 kcal with 35.5% of energy from fat and 14.6% as saturated fat.
- Desserts averaged 167 kcal with 37.7% of energy from fat and 15.1% of energy as saturated fat.
- Snack chips contributed on average 150 kcal mostly from fat.
- Sugar-sweetened beverages served at most events contributed 26 g of added sugar.
- Sodium from the main courses averaged 893 mg and from snack chips averaged 238 mg.

DISCUSSION

- Most of the foods served at meal times were casserole-type dishes (e.g. pasta and meat) or convenience-type foods (e.g. pizza), and tended to be high in fat and sodium.
- Provision of fruits and vegetables was minimal.
- Beverages served contributed mostly added sugar to the diet and little to no other nutritional benefits.
- Snack chips and desserts tended to be high in fat.

CONCLUSIONS

The findings of this project provide nutritional evidence to initiate dialogues within faith communities about healthier food provisions at children/youth-related activities.

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SUPPORT

Christine E Lynn College of Nursing and the Office of Undergraduate Research and Inquiry