

P149 (continued)

strong positive correlation between pre-program approval and current program satisfaction, $r = .61$, $P < .001$.

Conclusion: Overall, teachers are generally supportive of the BATB program, and those who were originally supportive were most likely to continue to support it. Addressing some of the teachers' concerns about the healthfulness and variety of the foods offered, as well as about mess, could help to further improve perceptions of the program.

Funding: Rutgers University.

Nutrition Education Program Design Implementation and Evaluation

P150 A Comparison of Adherence to Pediatric Nutrition Requirements Among Kuwaiti Boys and Girls

Abdulaziz Kh. Al-Farhan, MS, alfarha4@msu.edu, Food Science and Human Nutrition, Michigan State University, 469 Wilson Rd, East Lansing, MI 48824; Lorraine J. Weatherspoon, PhD, Food Science and Human Nutrition, Michigan State University; Karin A. Pfeiffer, PhD, Department of Kinesiology, Michigan State University; Wei Li, PhD, Food Science and Human Nutrition, Michigan State University; Nayef F. Bumaryoum, PhD, The Public Authority for Applied Education and Training, Kuwait; Joseph J. Carlson, PhD, Department of Radiology & Department of Food Science and Human Nutrition, Michigan State University

Background: Limited evidence that Kuwaiti children consume high calorie, low nutrient dense diets, suggests a link to the increased obesity rates. Identifying the role of specific nutrition parameters and gender differences is needed to inform nutrition intervention efforts.

Objective: Compare the proportion (%) of boys and girls meeting Dietary Reference Intakes (DRIs) for macronutrients, selected micronutrients and USDA Dietary Guidelines for food groups.

Study Design, Settings, Participants: Cross-sectional study of 313 5th graders (10.4 ± 0.4 years; 53% girls), from 16 schools in six Kuwaiti cities.

Measurable Outcome/Analysis: Children completed Block Kids Food Frequency Questionnaire (Arabic/English). Variables/cut points were as follows: total dietary energy (Kcals): 1600-2000 (girls), 1800-2200 (boys); percent of energy from macronutrients: protein 10-30%; total fat 25-35%; saturated fat <10%; trans fat < 1%; carbohydrate 45-65%, and added sugar <10%; fiber 22.4-25.2g, calcium 1.3g, potassium 4.5g, magnesium 3.5g, sodium < 2.2g, and vitamin D 600 IU; fruit 1.5c, vegetables 2-2.5c, dairy 2c, and whole-grains 3oz. Logistic regressions adjusted for physical activity and screen time.

Results: Proportions (%) of boys vs girls meeting nutrition recommendations were: Kcals (18.2% vs 15.8%); total fat (67% vs 65%), saturated (28% vs 40%) and trans-fat (0% vs 0%); protein (96.6% vs 97.6%); carbohydrate (90.3% vs 91.5%); added sugar (19% vs 15.2%), and fiber (45% vs 43%); calcium (22% vs 17.6%); potassium (15% vs

10.3%); magnesium (43% vs 40%); sodium (12% vs 22%); vitamin D (0% vs 0%); fruit (75.7% vs 62.4%); $P = .037$; vegetables (14% vs 12%); dairy (31.5% vs 33.3%); and whole grains (0% vs 0%).

Conclusion: Most children exceeded calorie intake recommendations. Few met micronutrient, saturated fat and added sugar, while none met trans-fat, whole-grain, or vitamin D recommendations. The only significant ($P < .05$) gender difference was more boys meeting fruit recommendations. Findings highlight diet-related health risks warranting attention in Kuwaiti children.

Funding: None.

P151 A Study on the Actual Practice of "Lunchbox Diet Method" for Students in the Training Course of Registered Dietitian

Yukiko Hasebe, PhD, RD, hasebe@nayoro.ac.jp, Nayoro City University, Department of Nutrition Science, W4-N8, Nayoro, Hokkaido 096-8641, Japan; Yasuo Nagashima, MS, RD, Nayoro City University, Department of Nutrition Science; Aya Shimosaka, MS, RD, Nayoro City University, Department of Nutrition Science

Background: Regarding "Lunchbox Diet Method" validated as dietary composition for one meal, with the consideration of the current students' circumstances, it is necessary to examine an approach method from a viewpoint of continuous efforts for eating grain dishes, fish and meat dishes, and vegetable dishes in a balanced manner.

Objective: To assess the real situation and examine difficult aspects when students actually prepared lunchbox.

Study Design, Settings, Participants: The seminar of the "Lunchbox Diet Method" was held for 41 first-year students in the training course of registered dietitian in Japan from October 2017 to January 2018. After the first lecture, the students actually tried to prepare lunchbox four times, then at the fifth preparation, they carried out a practice of lunchbox packed with their own appropriate amount of dishes and also conducted a self-administered questionnaire survey. We analyzed 36 students with their consent (29 females/7 males).

Measurable Outcome/Analysis: We examined their meals at nutrient, food, and dish levels during the fifth preparation, then also examined the questionnaire survey results in terms of difficult aspects in actual practice.

Results: Because many female students packed meal box as less than the appropriate amount of grain and fish and meat dishes in theory, the energy amount tended to be lower (mean: 538 ± 90 kcal). Conversely, many male students packed meal box more than the appropriate amount and the energy amount tended to be higher (mean: 1001 ± 116 kcal). As difficult aspects in actual practice, we found the subjects tended to face difficulties when preparing appropriate meals by themselves.

Conclusion: It was suggested that we need to examine specific reasons to prevent actual practice and approach method for improving cooking skills and increasing repertoires of the dishes.

Funding: None.