P131 Survey Research of Convenience Store Usage for Lunch Among College Students and Nutritional Examination of Convenience Store Box Lunches

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Objective: Convenience stores are popular for quick food such as box lunch and rice ball in Japan. In order to obtain the lunch habit of college students, we conducted questionnaire survey for convenience store usages. Additionally we examined the nutritional values of convenience store box lunches as a part of the study whether student's diet meet the Dietary Reference Intakes for Japanese.

Study Design, Settings, Participants: Subjects were 450 college students (male 27, female 422) with two colleges in Tokyo. The questionnaire consisted twelve items concerning lunch including healthy diet awareness and convenience store usage. For box lunch, 37 kinds were examined with its nutritional labeling.

Results: For lunch at campus, 58% of students brought the lunches from home, 25% bought at the convenience store, and 14% ate at the cafeteria. The most popular choices at the convenience store were rice balls (66%) and breads (56%). The ratio of male students chose cup-noodles was 22.2%, significantly higher than female. Regarding the side dishes choice of box lunch, 44% picked deep-fried chicken, 23% teriyaki-meat, and 20% hamburger steak, the meat dishes were preferred. The maximum salt amount of box lunches was 7.1g and the mean was 3.7 ± 1.2 g, thus some of them contains more than recommended daily intake value.

Conclusions and Implications: Although the subject students knew vegetable and small amount of salt are important for healthy diet, they chose lunch with less vegetable and much salt. We learned that further consideration is necessary when purchasing lunch at convenience store to correspond with nutritional requirement.

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P132 The Association of Food Insecurity and Stress Among College Students in Rural North Carolina

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Objective: To describe food insecurity status among college students and examine possible relationships with stress.

Study Design, Setting, Participants: A cross-sectional design was used to analyze food security status of students

by use of an online survey that included the USDA Household Food Security Survey Module and questions associated with stress. The setting was a public university located in rural NC. A total of 381 students participated in the research study in February, 2016. The response rate was approximately 94%.

Outcome Measures and Analysis: Variables include food security status and stress level. Statistical analysis included descriptive statistics and one-way ANOVA with Bonferroni corrections.

Results: The percentage of student respondents who were considered food insecure was 38%. There was a significant mean difference on stress level between food security status ($p = .004$). Bonferroni test illustrated the statistically significant difference occurred between the very low food security and high food security ($p = .008$).

Conclusion and Implications: This study indicated the students with very low food security had significantly higher stress level than those with those high food security. Understanding the impact on stress level by food security may be useful in developing programs for those in need on college campuses.

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P133 The Relationship Between Past Eating Habits and Occurrence of Disability in University Female Athletes

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Objective: To investigate the relationship between past eating habit and exercise energy expenditure (EEE) and the subsequent menstrual condition and experience of fatigue injury and to provide a basic material for considering future nutrition education contents.

Design, Setting and Participants: The study was a retrospective survey involving 20 university female long distance athletes aged 18-22 years old.

Outcome Measures and Analysis: We conducted a questionnaire survey on body composition, weight loss consciousness, dietary consciousness, menstruation situation during high school days, and competition history and experience of fatigue fracture up to the present. Energy intake (EI) was assessed from the 1-day diet record on week-days practice day based on the record of practice diary in high school days. Unpaired t-tests were performed using SPSS.

Results: Participants who experienced fatigue fractures had significantly higher EEE ($p < 0.01$), lower energy availability (EA) ($p < 0.05$) than did those without fatigue fractures. Participants with abnormal menstruation had significantly higher EEE ($p < 0.05$) and lower EA ($p < 0.01$) and carbohydrate intake ($p < 0.05$) than did those with normal one. However, there was no significant difference in EI between the two groups in the

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presence or absence of fatigue fracture experience and menstrual condition. People who restricted diet for weight loss had significantly less EI ($p<0.05$) and carbohydrate ($p<0.05$) intake and higher EEE ($p<0.05$) than those who did not.

Conclusions and Implications: It was suggested that EI corresponding to the EEE was not made in high school days, and they became low EA as a factor of the disorder at the time and thereafter. A nutritional approach should be introduced in the junior high school period.

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P134 The Role of Self-Identity in Predicting College Students' Intention to Consume Fruits and Vegetables

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Objective: The purpose of this study was to examine psychosocial determinants influencing college students' intention to consume fruits and vegetables.

Study Design, Setting, Participants: The cross-sectional study was conducted in January, 2017. The setting was undergraduate classes at The University of Alabama. A total of 162 undergraduate students with a mean age of 21 (standard deviation = 1.84) participated in this study.

Outcome Measure and Analysis: Participants completed validated instruments measuring Theory of Planned Behavior variables and self-identity. Structural Equation Modeling was used to analyze the data. Chi-square statistic, CFI, RMSEA and TLI were used to assess model fit.

Results: Model fit indices showed the hypothesized SEM model provided a good fit to the data ($\chi^2(80)=181.32$, $p<0.05$; CFI=0.94; RMSEA=0.08; TLI: 0.91). Self-identity was the most significant predictor of intention to consume FV, followed by attitude, perceived behavioral control (PBC) and subjective norm among college students.

Conclusions and Implications: Findings from the present study indicate that college students' view of themselves has the biggest impact on their intention to consume FV. In addition, attitude, PBC, and subjective norm predicted intention to consume FV. Therefore, nutrition education advocating the role of increased FV consumption on positive self-identity, such as handouts incorporating images relatable to college students, could possibly increase college students' intention to consume FV. Additionally, positive attitudes towards FV intake should be encouraged and barriers to FV consumption should be eliminated to increase intention among college students.

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P135 Health Information for Men (H.I.M.)

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Objective: To design a health education curriculum for men that would promote increased knowledge and health behavior changes.

Theory, Prior Research, Rationale: Men are twenty-five percent less likely than women to have visited a physician in the last year and nearly forty percent more likely to have skipped a cholesterol screening. On average, men die five years earlier than women. A literature review revealed that there were handouts available from various states' extension service or special interest organizations such as the Men's Health Network, but not a comprehensive curriculum available that provided practical information for men's health.

Description: Focus groups were conducted with middle-aged blue collar men in both rural and urban settings to determine if men would participate in classes designed for them, find out how men would like to receive health information, and the health topics they were most interested in. Lesson plans were developed based on focus group results.

Evaluation: After the initial writing and graphic design of the curriculum was completed, the hypertension lesson was piloted with approximately 650 (98% male) Department of Transportation employees. The employees provided feedback regarding the format and length of the lesson, format of handouts, likelihood of participating in a class, and input on the curriculum logo.

Conclusions and Implications: Based on pilot project evaluation, major edits were made to the curriculum, i.e. more white space on handouts, including one participant activity for each lesson, and information that is straight to the point. Lessons were made more interactive and include ample opportunity for discussion and feedback. In each class, participants are challenged to set a health goal.

Funding: None

P136 Healthy Schools Challenge: Fuel Your Body, Get Moving and Feel Your Best

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Objective: To improve the nutrition, physical fitness and overall wellness of students. The challenge focuses on changes in policies regarding nutritional offerings to students, increased physical activity in the school day and promoting healthy social interactions with students.

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