
1994 Board #189 June 2 9:00 AM - 10:30 AM
Nutrition Behavior Survey: Comparison between Young Baseball Player and General Population of School-Age Children
Mu-Tsung Chen¹, Li-Chen Lee², Nai-Wen Kan³, Kuei-Yu Chien⁴. ¹*Shin-Chien University, Taipei, Taiwan.* ²*Shih-Hsin University, Taipei, Taiwan.* ³*Taipei Medical University, Taipei, Taiwan.* ⁴*Kainan University, Taipei, Taiwan.* (Sponsor: John. L. Ivy, FACSM)
Email: fish0510@msn.com
(No relationships reported)

Baseball emphasizes strength, power, speed and mental focus. Adequate nutrition is an important issue for exercise performance and health during the growth of young players.

PURPOSE: To investigate the nutrition behavior in young baseball players (BPs) for the nutrition education reference.

METHODS: Two hundred twenty seven BPs (11.0 ± 0.05 years) were interviewed. Weight and high measurements were performed. Food frequency questionnaire and eating behavior conducted by trained surveyors. All values were expressed as the mean ± standard error. The independence t-test was used to examine variables different between BPs and general students (GSs, data from Nutrition and Health Survey in Taiwan Elementary School Children 2001-2002).

RESULTS: Weight and height in BPs are higher than GSs, but body mass index is no difference between two groups. Mean daily protein, dairy products, vegetable and fruit intake in BPs were higher than those in GSs. In carbohydrate, vegetable and fruit intakes, however, still were lower than Dietary Reference Intake in BPs. The major resources of protein were from meat (58-65% of protein) in BPs. Forty percentage of BPs intake food within 30 min after competition.

CONCLUSIONS: Lack of carbohydrate, large portion of meat intake, and delayed food consumption after competition were major nutritional problems in BPs. That would interfere with exercise performance and further health. Therefore, BPs should be encouraged to consume more carbohydrate, vegetables, and fruits. Moreover, the timing of intake food should be emphasized on nutrition education, especially in immediately after competition or training program. Supported by Herberlife Inc's Grant.

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Internal and External Factors Associated with Food Consumption: The Influence of Emotion and Perceived Status
Mark Blegen, FACSM¹, Jessica Arechigo¹, Nicole Neumann¹, Tracey Matthews². ¹*St. Catherine University, St. Paul, MN.* ²*Springfield College, Springfield, MA.*
Email: mblegen@stkate.edu
(No relationships reported)

Current data suggest that 66% of American adults are either overweight or obese. Individuals eat as a result of both internal (emotional) and external (environmental) cues. The eating environment is a strong influence for consumption. Of these environmental factors that lead to increased consumption there are both subtle and obvious external cues. Consuming an extra 10-100 kcal/day⁻¹, thus creating a positive energy balance, has been stated as the estimated size of caloric intake that can lead to obesity in the long term.

PURPOSE: The purpose of this study was twofold, 1) to determine if the perceived status of the food provider influenced food consumption, and 2) to determine if individuals classified as either emotional or situational eaters were influenced by the perceived status of the food provider.

METHODS: Fifty four (N = 54) individuals were approached and offered donuts by a superior. At a later time these individuals were surveyed as to their emotional and situational eating behaviors (Emotional Appetite Questionnaire, EMAQ) and their reason for accepting or rejecting the offered donuts.

RESULTS: Significantly (p < .05) more individuals (observed N = 40, Expected N = 27, Residual = 13) accepted and consumed the food because of the perceived status of the food provider. No significant difference (p > .05) existed for positive emotional eating or negative emotional eating for why the individuals chose the food.

CONCLUSION: Small amounts of additional calories can lead to positive energy balance and thus overweight and obesity over time. Awareness of both why one chooses to eat and the subtle influence on food consumption by perceived superiors may lead to smaller increases in unexpected consumption and thus make energy balance easier to maintain.

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Contingency Management for Decreasing Caloric Intake in University Students
TaShauna U. Goldsby¹, Courtney Jensen¹, Danielle Barry², Linda S. Pescatello, FACSM¹. ¹*University of Connecticut, Storrs Mansfield, CT.* ²*University of Connecticut Health Center, Farmington, CT.*
Email: tashauna.goldsby@uconn.edu
(No relationships reported)

PURPOSE: Rates of overweight and obesity are increasing with 65% of university students being overweight or obese. We examined whether adding Contingency Management (CM), a behavioral intervention that provides tangible reinforcement for completion of target behaviors, to a manual guided behavioral weight loss program with supportive counseling would make the weight loss intervention more effective in decreasing caloric intake among university students with overweight and obesity.

METHODS: Eleven overweight and obese students (7 women, 4 men) (25.5 ± 2.3y, BMI of 30.8 ± 2.8kg/m²) were randomized into one of two conditions: (a) standard counseling, which included weekly weigh-ins and supportive counseling focused on increasing exercise and decreasing caloric intake (n=4, SC); or (b) SC plus CM that included weekly contracting and tangible reinforcement for verified exercise and calorie intake (n= 7, SC+CM). Participants recorded daily food intake on food diaries that indicated frequency, portion size, and type of food. Subsequently, investigators calculated daily (kcal/d), weekly (kcal/wk), and monthly (kcal/m) caloric intake from food diary data using an online database. Repeated measures ANCOVA tested for differences in weekly caloric intake within and between groups (SC vs. SC+CM) at baseline and over 1 month by gender with baseline BMI as a covariate.

RESULTS: SC+CM decreased caloric intake by 738.6 ± 143.9kcal/m, whereas SC decreased caloric intake by 241.7 ± 172.3kcal/m over 1 month. There was a favorable trend toward significance with a group*gender interaction (p=0.07). Men in SC+CM (n=2) tended to decrease caloric intake more than SC (n=2) over 1 month, 1170 ± 224.1kcal/m vs. 299.1 ± 219.3kcal/m, respectively. Among women, there were no differences in decreased caloric intake between groups over 1 month, SC+CM (n=5) 174.7 ± 124.1kcal/m vs. SC (n=2) 171.7 ± 198.8kcal/m.

CONCLUSION: SC+CM decreased monthly caloric intake about 500kcal more than SC over the 1 month monitoring period. The favorable effects of SC+CM on caloric reduction compared to SC were largely attributed to the men. Reasons for these gender differences are not readily apparent and will require further monitoring as part of an ongoing 24wk monitoring period.

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