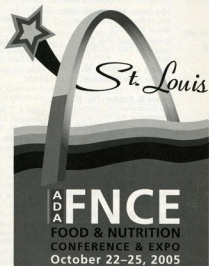


Abstracts



Education || Networking || Solutions

TITLE: METABOLIC CONTROL IN YOUTH WITH TYPE 2 DIABETES SUMMER VS. SCHOOL YEAR PATTERNS

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LEARNING OUTCOME: To identify whether there are differences in metabolic control between summer and school year for youth with Type 2 diabetes, and whether dietary factors explain the differences.

TEXT: Type 2 diabetes (T2D) is now a problem of youth. Proper management of T2D includes consistency in eating patterns, activity and medication, with weight reduction, if needed. Seasonal changes in diet may impact hemoglobin A1C levels (A1C). This study compared A1C level and dietary intake of 75 T2D youth evaluated either during the school year or the summer. A1C and 3 24-hour dietary recalls were collected and compared by season using ANOVA. Mean age of the group was 14 (± 2) years; 37% were evaluated during the summer; 61% were girls; 43% were African-American, 44% Hispanic, and 13% other ethnicity; mean BMI percentile was 96. Overall, the youth consumed 1531 (± 489) kilocalories (kcal), 37% ($\pm 7\%$) of kcal from fat, 0.82 (± 0.96) serving of fruit, 0.31 (± 0.50) serving of juice, and 0.45 (± 0.54) serving of nonfried vegetables. A1C was significantly higher for the youth evaluated in the summer [9.0% (± 2.7)] compared with those evaluated during the school year [7.8% (± 2.2)] ($p < 0.05$). Mean kcal intake was higher during the school year [1641 (± 483) kcal] compared to summer [1346 (± 419) kcal] ($p < 0.01$) as was nonfried vegetable intake [0.58 (± 0.59) school year serving and 0.24 (± 0.34) summer serving] ($p < 0.01$). Changes in dietary behavior, as a result of changes in supervision, routine and structure may explain these differences between summer and school year. There is a need for closer examination of dietary intake across seasons for youth with T2D. More targeted counseling may be in order for youth with T2D during the summer months.

FUNDING DISCLOSURE: Bristol Myers Squibb/Mead Johnson and USDA.

TITLE: SUBCLINICAL B12 DEFICIENCY IN POST-ROUX-EN-Y GASTRIC BYPASS PATIENTS: PREVALENCE, IMPLICATIONS AND PREVENTION

AUTHOR(S): G.E. Maleskey, MS, RD

LEARNING OUTCOME: To recognize and treat subclinical B12 deficiency in post-gastric bypass patients.

TEXT: Roux-en-Y (RY), the form of gastric bypass that currently dominates surgery for morbid obesity, can cause vitamin B12 deficiency. While overt deficiency is easily diagnosed, subclinical deficiency (serum B12 of 200–300 pg/mL) is less likely to be recognized and treated, even though it can cause neuropsychiatric or neurological abnormalities in the absence of anemia or macrocytosis. A retrospective analysis of medical records of 40 post-RY patients found that five subjects (12.5%) had serum B12 levels between 200–300 pg/mL for one or more laboratory measurements, even though subjects were ingesting 6 micrograms or more of supplemental B12 daily. Post-RY patients may benefit from life-long serum B12 monitoring; testing for plasma methylmalonic acid and homocysteine levels if serum B12 levels fall <300 pg/mL; and monitoring of neuropsychiatric and neurological symptoms (paresthesia, sensory loss, ataxia, dementia and psychiatric disorders.) If patients' physician has not prescribed monthly B12 injections, dietitians should discuss the appropriateness of additional oral B12, but should be advised that the literature suggests that the amount of B12 found in most multivitamins is inadequate to maintain long-term optimal serum B12 levels in many post-RY patients. Patients with serum levels <300 pg/mL may require B12 injections to return to optimal serum B12 status, and then, either continued injections or an oral dosage that maintains serum B12 levels above 300 pg/mL.

FUNDING DISCLOSURE: None

TITLE: PREVALENCE OF EATING DISORDERS IN DIETETIC AND OTHER HEALTH-RELATED MAJORS: A STUDY OF COLLEGE STUDENTS

AUTHOR(S): R.J. Mehr, BS; L.H. Clemens, EdD, RD, LDN; R.R. Raab, EdD, RD; B.M. Beech, DrPH; The University of Memphis

LEARNING OUTCOME: To determine which of three health-related majors (dietetics, pre-medicine, pre-nursing) scores higher on a measure of eating disorders.

TEXT: It is thought that students in some college majors have a higher prevalence of eating disorders (EDs) and that those in fields related to nutrition are more prone to have EDs because of a preoccupation with thoughts of food. Although earlier research has concluded that dietetic majors have a greater tendency toward EDs when compared to those in home economics and other non-health majors, it would be more appropriate to compare dietetic students to those in similar majors and curriculum, particularly pre-medicine and pre-nursing. This study compared dietetic students to pre-med and pre-nursing students. Participants were selected from the 10 universities in Tennessee that have a dietetics undergraduate program. Data for the participants was collected via an online survey service using the EAT-26 and was analyzed using ANOVA. It was found that pre-med were significantly higher than the pre-nursing ($p = 0.031$) and dietetic majors ($p = 0.049$) in the oral control subscale, the dietetic and pre-nursing were not significantly different. It was also found that the EAT-26 scores between the pre-med and dietetics majors were significantly different ($p = 0.04$), with the pre-med students scoring significantly higher. Out of the 18 participants that had EAT-26 indicative of EDs, only 4 (3 pre-med, 1 dietetic) had previously/currently sought help. This study could help program directors to establish a dialogue about EDs with their students, if they know the particular group is at a greater risk.

FUNDING DISCLOSURE: Not applicable

TITLE: RENAL DIET AND MEDICATION COMPLIANCE—COULD YOU DO IT?

AUTHOR(S): R.E. Carroll, RD; N.E. Hipsh, MA; C.L. Nelms, RD; G.C. Vigiotti, RD; T.U. Weihe, RD; Children's Mercy Hospitals and Clinics, Kansas City, Missouri

LEARNING OUTCOME: To list three challenges health care professionals had following a mock renal diet and medication regimen.

TEXT: Dialysis patients report that following diet restrictions is one of the most difficult parts of their therapy. Staff caring for these patients is often frustrated with their lack of compliance with the renal diet/medication regimen, resulting in barriers to effective teaching. Design: Hospital staff ($n = 20$) currently working with dialysis patients consented to follow a mock renal diet and medication regimen for 7 days. The purpose of the study was to: (1) increase staff knowledge of the renal diet/medication regimen, (2) increase staff empathy, and (3) assess education materials currently being used to educate patients. Procedures: Staff completed pre and post tests regarding diet/medication knowledge and empathy. They were instructed on a 3000 mg sodium, 3000 mg potassium and 900 mg phosphorus diet. They were also given medication bottles filled with candy to represent vitamins, zinc, blood pressure medicine, and binders. Staff were asked to record intake and medications for 7 days. Compliance with record keeping as well as compliance with diet order and medication regimen was measured. Findings: Post test results showed an improvement in diet/medication knowledge (57%) and an increase in empathy. Only 19/20 staff were compliant with record keeping. Diet compliance was poorest with the phosphorus restriction (61%). Medication compliance was lowest with binders at snack time (24%). Conclusions: Compliance with renal diet/medication regimen among staff currently working with dialysis patients was poor. They were made aware of the extreme difficulty in following a renal diet/medication regimen and expressed an increased empathy toward their patients.

FUNDING DISCLOSURE: Self-funded