**B1-11: Knowledge: A Predictor of Folic Acid intake in North Carolina College Students**

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**Abstract:**

**Introduction:** Despite the 1992 Centers for Disease Control and Prevention’s (CDC) recommendation for daily folic acid (FA) intake to prevent neural tube defects (NTDs), only about 27% of women, aged 18-24 take daily FA supplements. The Healthy People 2010 goal is
for 80% of women in this age group to take daily FA. FA knowledge also is low in this population, with only 11% knowing that FA needs to be taken prior to pregnancy to prevent NTDs. Because knowledge is a modifying factor in changing behavior, improving FA knowledge may help increase daily FA intake among college students. Objectives: a) describe participants’ FA knowledge, b) examine FA knowledge in relation to participants’ demographic and lifestyle variables, and c) explore the relationship between current FA intake, knowledge, demographic, and lifestyle variables.

**Method(s):** Secondary analysis was applied to pre-test data from a larger pre-test/post-test intervention study across 60 NC college campuses that aimed to increase FA knowledge and intake among 18-24 years old students. The convenience sample consisted of 1,921 of the study’s original subjects who completed a 30-item questionnaire that included demographic, lifestyle, and FA knowledge questions. The FA knowledge component consisted of 13 multiple choice questions adapted from a CDC knowledge test. Quantitative analyses included descriptive statistics and logistic regression.

**Results:** Out of a possible correct score of 13, participants’ mean knowledge score was 8.11 (sd = 2.1). Age, year in school, gender, vitamin intake, and knowledge of FA were associated with FA intake. For each correct answer on the FA knowledge pre-test, there was 17.1% increased odds the subject took FA. The variable most predictive of FA intake was taking another vitamin supplement. No significant relationship was found between lifestyle variables and FA intake.

**Discussion & Conclusions:** The study identified a lack of knowledge about health-promoting effects of FA. Determining variables associated with FA intake may guide future health promotion programs that include education related to FA supplementation, which may directly impact FA intake among college students as their knowledge of FA increases.

**Abstract History:**
This abstract has been presented or accepted for presentation in whole or in part at the SNRS or other scientific meeting.
A portion of the abstract was presented at the SNRS conference 2009 in Baltimore, Maryland. The data was reanalyzed using an additional variable (a total score of 13 knowledge questions not included in the previous model) creating a new model for folic acid use in college students.

**Financial Disclosure:**
No, I (or a member of my immediate family) have not received something of value* from or own stock (or stock options) in a commercial company or institution related directly or indirectly to the subject of my presentation.

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