

Promoting Use of Canned Fruits and Vegetables to Low-Income Families

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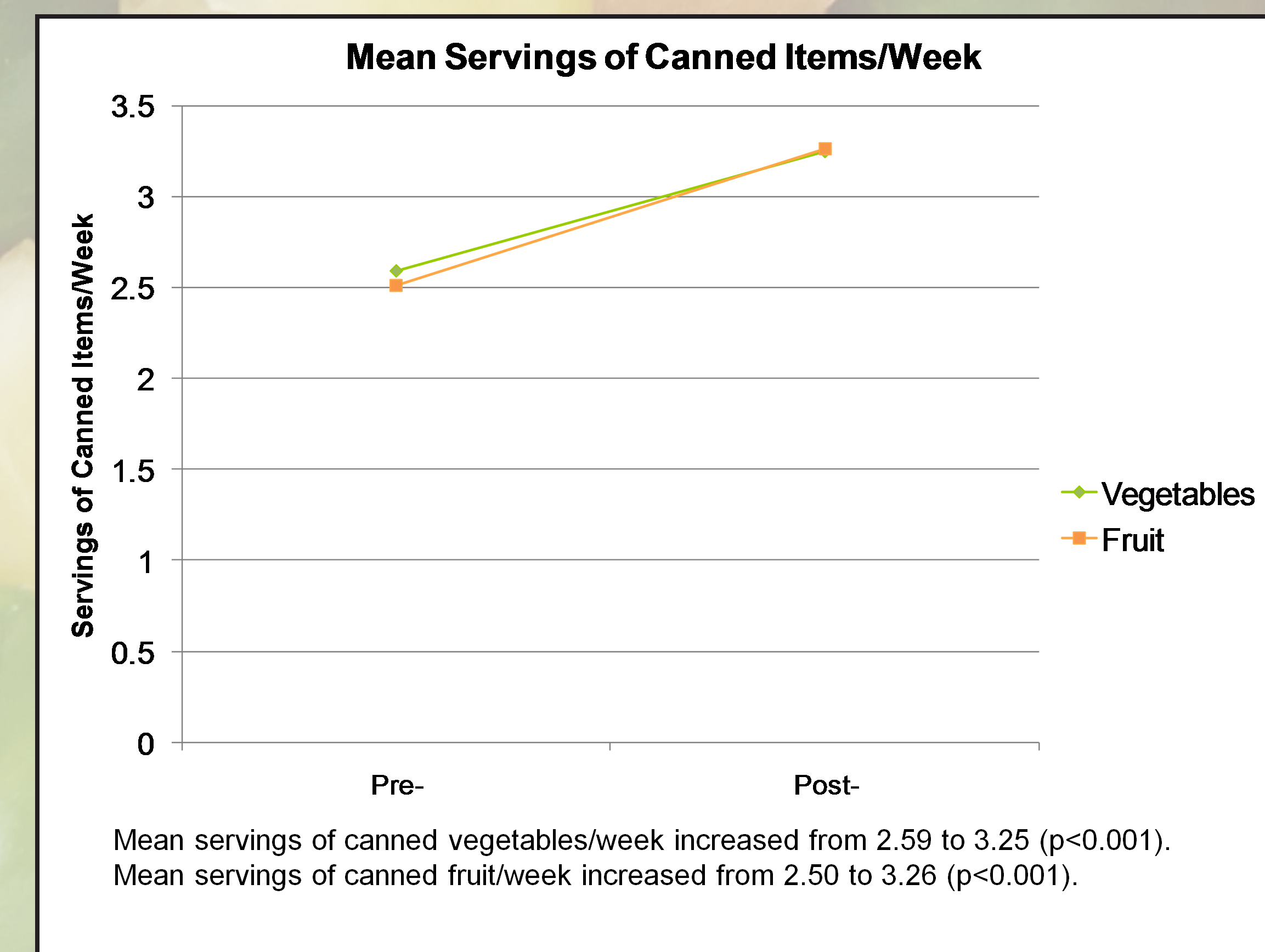
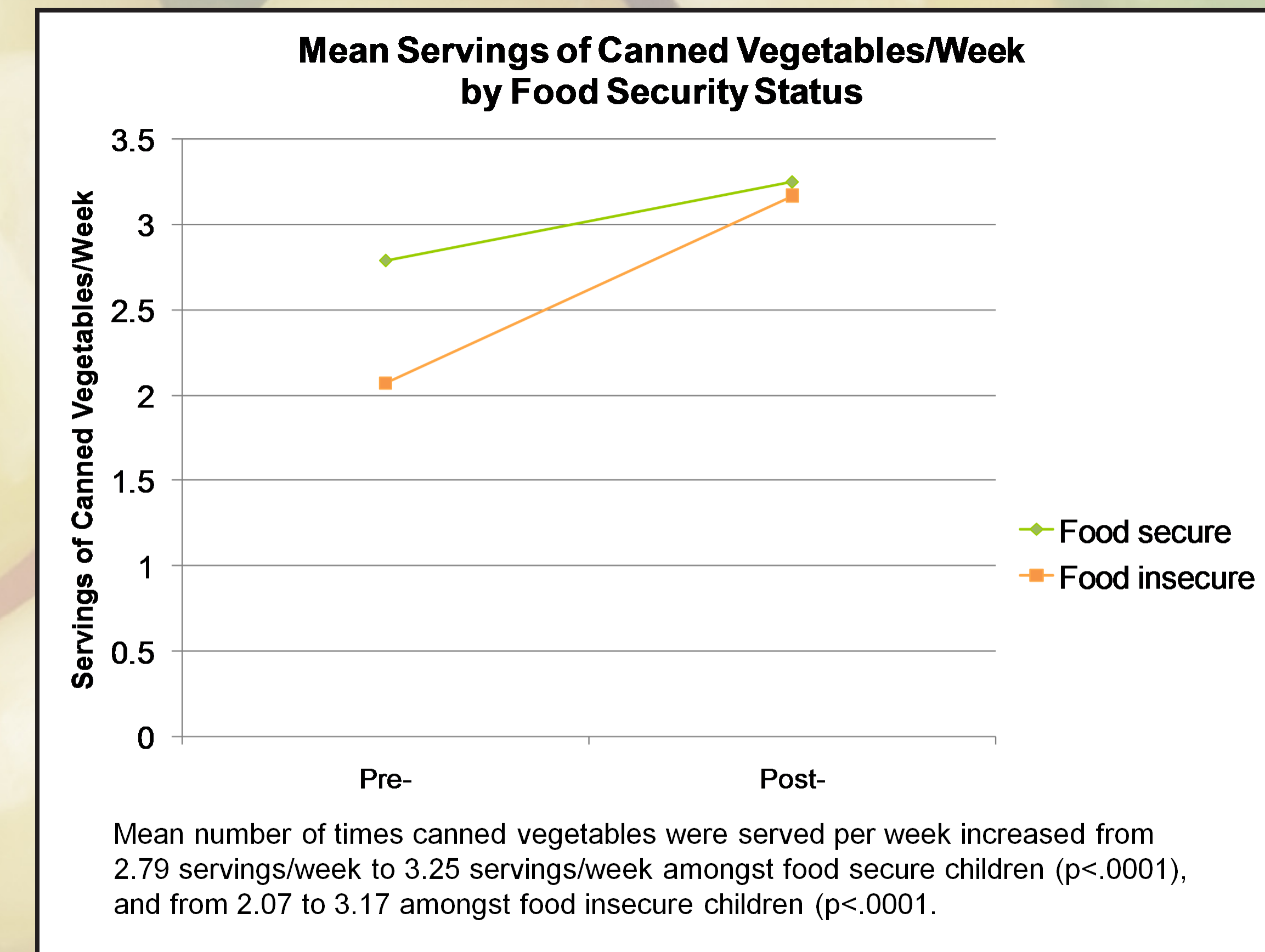
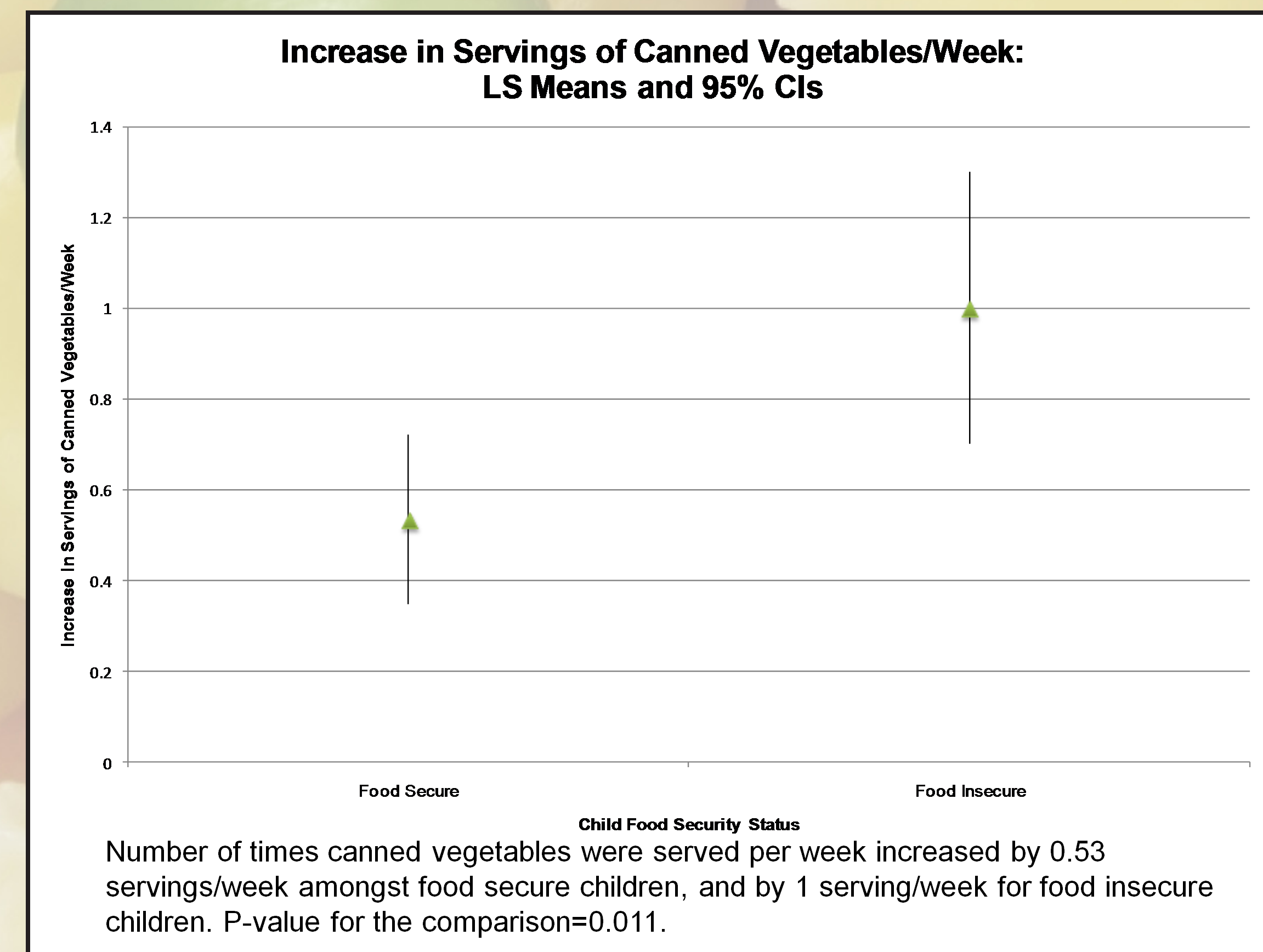
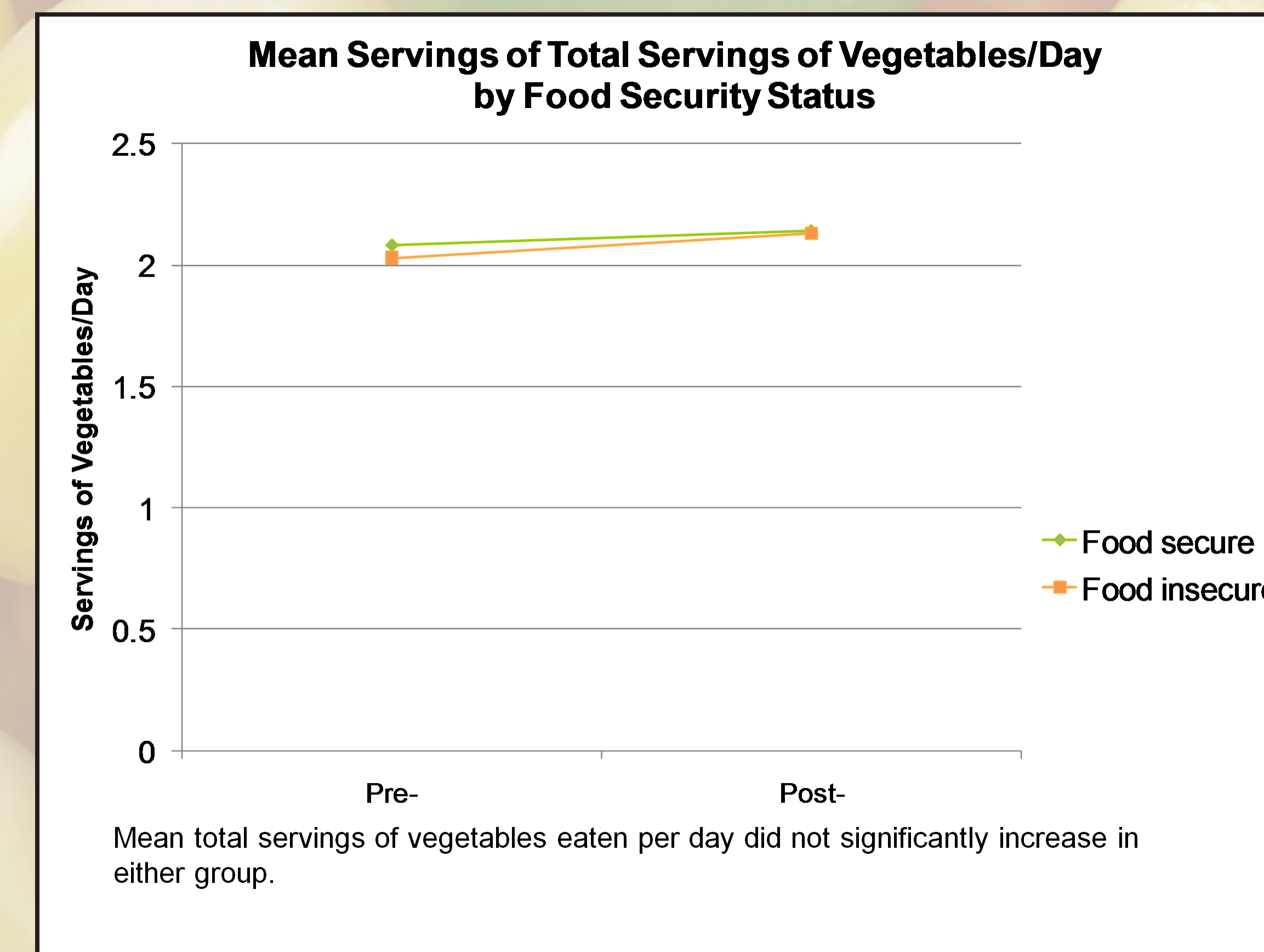
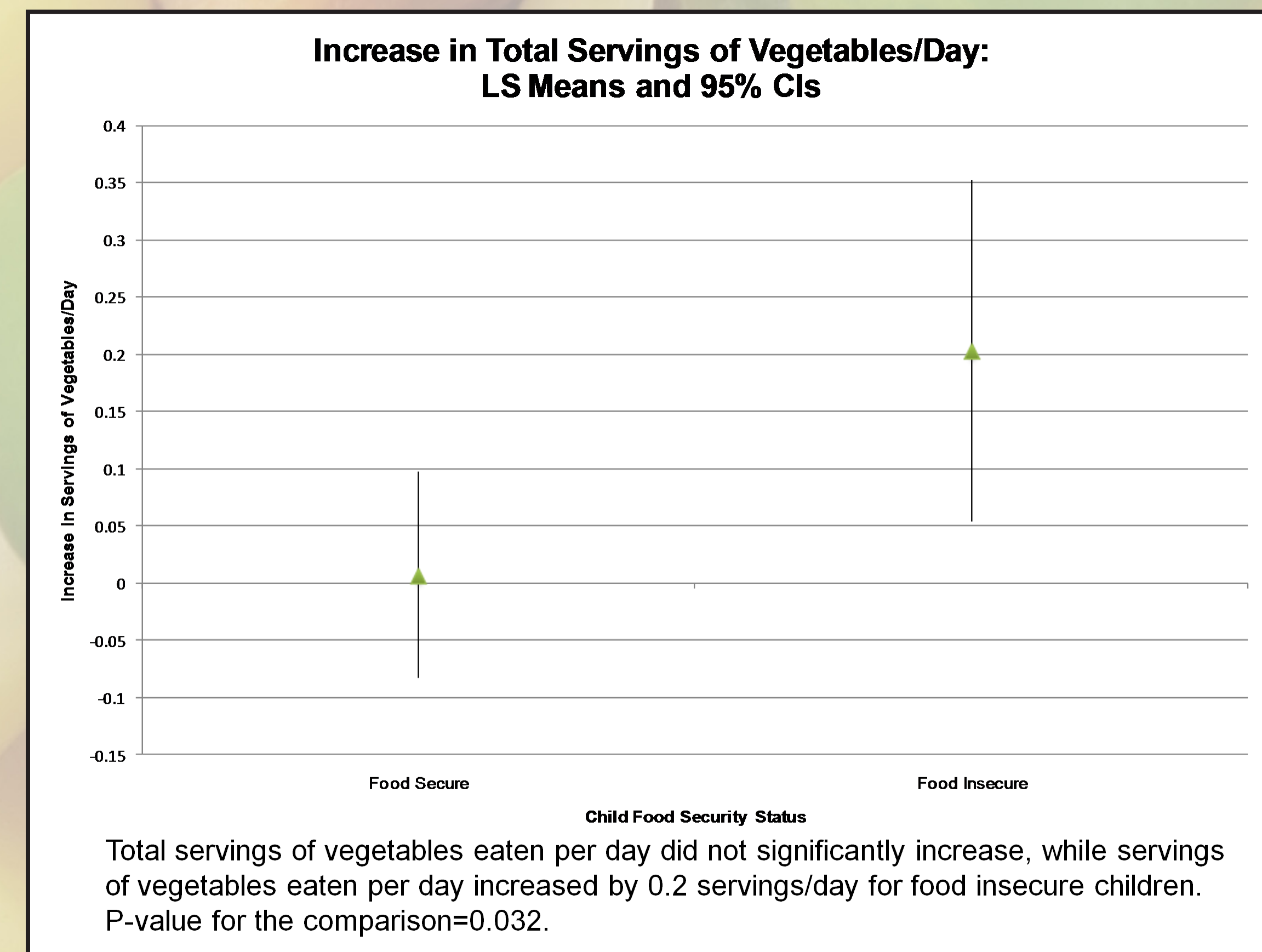
Issues: Low-income children have lower intakes of fruit and vegetables. Low intakes of fruit and vegetables are associated with higher risks of cancer and obesity. Canned fruits and vegetables are affordable and nutritious options but are not always promoted by nutrition education programs.

Description: From April 2008 to March 2009, caregivers of 592 low-income, preschool children in a Minneapolis inner-city ambulatory pediatric clinic were provided a 10 minute nutrition education lesson by native speaker community health workers. The lessons promoted canned fruits and vegetables as being low cost, nutritious, convenient and safe and families were given food samples to try at home. Caregivers were surveyed in English, Spanish and Somali about fruit and vegetable knowledge, beliefs and practices prior to the intervention and over the phone at 4 to 6 weeks after the intervention. Demographic information and child food insecurity as measured by the child subscale of the United States Food Security Scale were also collected prior to the intervention.

Lessons Learned: Multivariate analyses examined differences in fruit and vegetable use pre and post intervention. The GLM procedure in SAS 9.2 was used to determine predictors of changes in fruit and vegetable consumption. All models included child characteristics (food security, race/ethnicity, age), maternal characteristics (marital status, immigrant status, education), and household size. Paired t-tests were used to compare means pre- and post-intervention.

Average servings of canned vegetables/week increased from 2.59 to 3.25 ($p < 0.001$). Overall, servings of canned fruit/week increased from 2.50 to 3.26 ($p < 0.001$). Total servings of vegetables eaten per day and total servings of fruit eaten per day did not change significantly. Food insecure children, representing 28.4% of the sample, had a greater improvement in canned vegetables/week with a mean increase of 1.00 servings/week vs. 0.53 servings/week for food secure children ($p = 0.011$).

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Recommendations: Nutrition education programs should include canned fruits and vegetables as an acceptable and affordable option for low-income families, particularly among food insecure households.



So What? While servings of canned vegetables per week increased for both food secure, and food insecure children, total servings of vegetables eaten per day did not increase for either group. It is possible that servings of canned vegetables are replacing servings of fresh vegetables. Another possibility is the use of a different metric. Parents were asked how many servings of canned vegetables they served in a week, and how many total servings of vegetables the child ate.

Future research should be conducted to see if an intervention promoting canned vegetables can increase consumption of all vegetables.

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