

Title: Obesity is Associated with Limited Engagement in Fruit/Vegetable Incentive Programs.

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Background: Incentive programs to increase financial accessibility of fruits and vegetables (FV) may increase Supplemental Nutrition Assistance Program (SNAP) participants' consumption of healthful food and support weight management. This study describes participants enrolled in a supermarket-based incentive program and compares factors for relationship to incentive engagement.

Methods: SNAP shoppers at two Rochester, NY supermarket locations completed an online survey set of validated measures including FV intake and food security (FS). Participants received two weekly discounts on their store loyalty card for \$5 off a \$10 purchase of fresh FV for 16-weeks. Baseline measures were summarized (mean, standard deviation); chi-square and independent t-tests compared differences.

Results: Participants (n=101) mostly self-identified as white (55%) or black (26%), mean age=51 ± 16 years. Education attainment was limited; 17% did not graduate high school and 36% achieved a high school diploma, only. Most participants were overweight/obese (24% overweight, 59% obese). Mean daily intake (cups) of common FV was low including: whole fruit (1.0 ± 1.5), lettuce (.34 ± .45), potatoes (.17 ± .21) and beans (.16 ± .32). FS was limited (23% high/marginal FS, 39% low FS, 38% very low food security). Using a 10-point scale, high levels of stress were reported (mean= 7.2 ± 2.4). Stress was significantly higher among food insecure compared to FS individuals (mean=7.8 ± 2.0 vs. 5.4 ± 2.7 ; p<.01, respectively). A subset of 70 participants who received the incentive ≥ 6 weeks demonstrated that 77% (n=55) used their incentive, and 41% (n=29) used the incentive ≥ 50% of the weeks. Obese participants were less likely to use the incentive ≥ 50% compared to others (p=.05). Participants redeeming the incentive ≥ 50% trended toward lower reported levels of stress vs. participants with redemption < 50% (p=.07).

Conclusions: Being obese or feeling stressed may limit engagement with FV purchase incentive programs.