

AB005. Post-disaster solo dining and healthy food behavioral change through cooking class participation

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Background: Natural disasters affect residents’ eating patterns and behaviors. However, post-disaster changes in residents’ eating patterns and behaviors have not been examined. Thus, we aimed to examine the association between eating patterns (solo dining or not) and healthy food awareness/behavioral change through post-disaster cooking class participation.

Methods: We conducted a questionnaire-based survey in disaster-affected areas by the 2011 Great East Japan Earthquake and Tsunami (GEJET) in 2020. We applied Poisson regression models to a cross-sectional dataset of cooking class participants, examining their food awareness and cooking behavioral change by their eating pattern. Dependent variables were changes to (M1) cook more than before; (M2) be more conscious of nutritional balance; (M3) intake low salt; (M4) pay attention to hygiene, and; (M5) increase the opportunity to eat with families/friends. In each model, adjusted rate ratios (ARRs) were calculated by sociodemographic characteristics.

Results: We applied 242 valid data. The mean age of the participants was 70 yrs. and approximately 80% were aged 65 or older. Seventy-five percent of participants were female and 18% of them ate alone. Poisson models showed positive behavioral changes among solo diners [M1: ARR, 1.62; 95% confidence interval (CI) 1.19–2.21; M2: ARR, 1.28; 95% CI: 1.07–1.53; M3: ARR, 1.15; 95% CI: 1.01–1.30; M4: ARR, 1.29; 95% CI: 1.07–1.55] (*vs.* not solo diners). Eating alone was not associated with M5 ($P>0.05$). In contrast, the

interaction effect of eating alone and living alone showed negative association with their behavioral changes (M1: ARR, 0.60; 95% CI: 0.36–1.01; M4: ARR, 0.61; 95% CI: 0.45–0.82; M5: ARR, 0.24; 95% CI: 0.08–0.62).

Conclusions: This study suggests that cooking participation would be positively associated with solo diners’ healthy food behavioral change, but it may negatively affect those who live alone. We conclude the importance of re-establishing a post-disaster support system in cooking class activities for solo diners who live alone.

Keywords: Volunteer activity; solo dining; eating behavior; health promotion

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Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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