A Pilot Food Store Intervention is Associated with Improved Health Knowledge, Food Purchasing and Preparation in the Republic of the Marshall Islands¹

Research Article

Joel Gittelsohn, Ph.D.*², William Dyckman, M.H.S.*, Kevin D. Frick, Ph.D.**, Malia K. Boggs, M.P.H.*, Heather Haberle, M.H.S.*, Julia Alfred, B.A., , Amy Vastine, B.A.*, Neal Palafox, M.D., M.P.H.

* Center for Human Nutrition, Johns Hopkins Bloomberg School of Public Health, **Health, Policy and Management, Johns Hopkins Bloomberg School of Public Health, Nutrition/Diabetes Control Prevention Programs, Ministry of Health and Environment for the Republic of the Marshall Islands, University of Hawaii Department of Family Practice and Community Health

ABSTRACT: To improve diet and reduce risk for obesity and chronic disease, we developed, implemented and evaluated a pilot intervention trial with 22 large and small food stores in the Republic of the Marshall Islands (12 intervention and 10 control). The intervention included both mass media (radio announcements, newspaper ads, video) and in-store (cooking demonstrations, taste tests, shelf labeling) components. Consumer exposure to the mass media components was high (65% had heard half or more of the radio announcements, 74% had seen at least one of the newspaper ads). Consumer exposure to the in-store components of the intervention was moderate (61% attended at least one cooking demonstrations, 59% received at least one recipe card). After

¹ Supported by a grant from the Center for a Livable Future, Johns Hopkins Bloomberg School of Public Health

² To whom correspondence should be addressed. Johns Hopkins Bloomberg School of Public Health, Room 2041, 615 N. Wolfe Street, Baltimore, MD 21205-2179 Tel: 410-955-3927, Fax: 410-955-0196, email: jgittels@jhsph.edu

adjustment for age, sex and education level, increased exposure to the intervention was associated with higher diabetes knowledge and label reading knowledge, but not with increased self-efficacy for performing promoted healthy behaviors. The intervention was associated with increased purchasing of certain promoted foods, including oatmeal, turkey chili, fish, canned fruit and local vegetables. It was also associated with improvements in healthiness of cooking methods. Food store centered interventions have great potential for changing cognitive and behavioral factors relating to food choice and preparation, and may contribute to lessening the burden of diet-related chronic disease worldwide.

KEY WORDS: grocery stores, environmental interventions, health knowledge, food purchasing, food preparation, Micronesia