New mobile app increases vegetable-based preparations by household cooks

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Abstract

Vegetables in the diet contribute to better health, yet remain under-consumed, especially among low-income people. In response, we built a mobile phone app designed to increase household cooks’ use of vegetables in meals and snacks. The app, Quick Help for Meals, provides practical kitchen help, such as recipes and other food ideas. The app was tested in a randomized field trial at 15 community food pantries serving low-income people. In the experimental group, household cooks and a 9-14-year-old child were given a smartphone, loaded with the app, and a 3-month data plan. Mom and child learned to use at app at the same time. The experimental group also received additional vegetables for four consecutive weeks. The control condition also consisted of moms and a 9-14-year-old child. The control group received additional fresh vegetables (the same types and quantities as the experimental group) for four consecutive weeks, but they did not have access to the app.

Personal interviews, phone interviews, and electronic capture revealed extensive use of the app by both mother and child. Cooks in the experimental condition prepared 38 percent more vegetable-based meals and snacks than control cooks. Baseline and final interviews, spanning 10-11 weeks, also showed that use of a broad array of vegetables increased among experimental households, but did not increase among control households. Experimental cooks often reported healthier eating by their families and a sense of increased mastery of kitchen skills, whereas control cooks seldom described these experiences.

Our experiences of building and testing the app suggest principles of effective communication that may contribute to healthier eating by many publics, not just low-income people.

Biography:

Peter Clarke (Ph.D., University of Minnesota) and Susan Evans (Ph.D., University of Michigan) teach and conduct their research at the Annenberg School for Communication and Journalism, University of Southern California, Los Angeles. Together, they direct two projects that improve nutrition among low-income people. These are From the Wholesaler to the Hungry, which has launched 157 programs at charitable food banks across the U.S. that distribute 3+ billion pounds of fresh vegetables and fruits to more than 30 million people each year, and Quick Help for Meals, a mobile app that helps recipients of fresh foods prepare healthy meals and manage their food consumption in other ways. This work by Clarke and Evans recently received the 2018 Award for Applied Research by the International Communication Association, and has won earlier recognitions and awards from the U.S. Department of Agriculture and others.

Evans is also an award-winning producer of multi-media tools in health outreach and patient education. Clarke and Evans wrote Surviving Modern Medicine (Rutgers Press), which helps readers discover how to establish better communication with their doctors, make more thoughtful choices among options for care, and get support from friends and family that promotes healing and wellness.

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