Application of Dissemination Science to Expand Reach, Implementation, and Adoption of the Online program "About Eating" across New York State

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Background

"About Eating," developed in several stages by experts in nutrition, physical activity and behavior change. Participants reported better food resource management skills e.g., less frequent running out of food before the end of the month, increased use of nutrition labels to make food choices, planning meals to include all food groups, and increased confidence in managing money to have healthy food available[1]. Dissemination and implementation science can bridge the gap between evidence-based interventions and real-world implementation.

Objective

Dissemination science is the study of how evidence-based (EB) programs can be actively spread using pre-determined strategies to promote adoption and desired outcomes[2-4]. **The purpose of this study was to utilize dissemination science to enhance low-income New York (NY) state residents' reach, implementation and adoption of "About Eating," an on-line program that enhance food resource management skills.**

Methodology

Using web-based searches and community contacts, a dissemination inventory of potential implementers was developed for each of NY states' ten fiscal regions, targeting food pantries, housing offices, libraries, churches, schools and private organizations. Focusing on the processes domain of dissemination science, email and/or phone outreach to potential implementers elicited preferred dissemination strategies to promote program access. Consequent program access by the target audience was monitored and included a companion online survey to detail region-specific program awareness, engagement, information use, receptivity and behavioral outcomes.

Images. Promotional flyer and sample recruitment email.

Results

The Dissemination Inventory detailed 11,626 possible unique contacts across the ten NY State fiscal regions. Of these, 3286 were contacted by phone/email with offers to tailor and suggest adaptations to messages, promotional materials, social media posts, as well as suggest alternate delivery methods of program information. The largest numbers of contacts were to low-income housing offices (n=796), food pantries (n=588), and libraries (n=547) with 205 Facebook groups contacted. 706 organizations responded to outreach, with 472 not interested in program information, 109 requested more information but did not respond after receipt, and 125 asked for information with intention to disseminate program to their communities.

Results

Figure 1. Sample section of the Dissemination Inventory.

SNAP/Goverment (Total: 101)			Food Pantries/Soup Kitchens/Farmer's Market (Total: 47)			Low Income Housing/Apartments/Halfway houses (Total: 64)			Apartments (Total: 5)			Private Organ
Primary	Website	Notes	Primary	Website	Notes	Primary	Website	Notes	Primary	Website	Notes	Primary
Maggie McHugh, MS, RDN, CDN **SNAP-Ed NY** Project Director 315-331-8415 mbm32@cornell.edu	https://www.snapedny.org/nfl-region/		King Ferry Food Pantry Debbie Patrick Executive Director kingferryfoodpantry1@gmail.com (315) 497-2049	https://kingferryfoodpantry.org/		DePaul Yvonne Adams, Intake Director yadams@depaul.org Phone: (585) 426-8000 Fax: (585) 426-8082	https://www.depaul.org/about/		The Nathaniel (585) 626-2153	https://www.thenathaniel.com/residents		Cameron Community Ministries 48 Cameron Street Rochester, NY 14606 (585) 254-2697 info@cameronministries.org
Justine Cobb, MS **SNAP-Ed Project Director – Southern Finger Lakes region**. 607-664-2572 jec445@cornell.edu	https://www.snapedny.org/	additional contact per county in region: https://www.snapedny.org/2020/01/southern-finger-lakes-region/	Seneca County House of concerns Michael Bellone, President Phone (315) 568-2433 mbellone@tracteam.org; director@houseofconcern.org	https://houseofconcern.org/our-board/		The Housing Council at Pathstone Mary Leo Executive Director 585-546-3700 x 3033 Mleo@pathstone.org	https://www.thehousingcouncil.org/our-team		Tower 280 - Call us at (585) 232-1120	https://tower280.com/contact/	electronic form for questions	**Urban League of Rochester** Anne Beyer Vice President of Program Planning, Research & Evaluation (585 325-6530 info@ulr.org

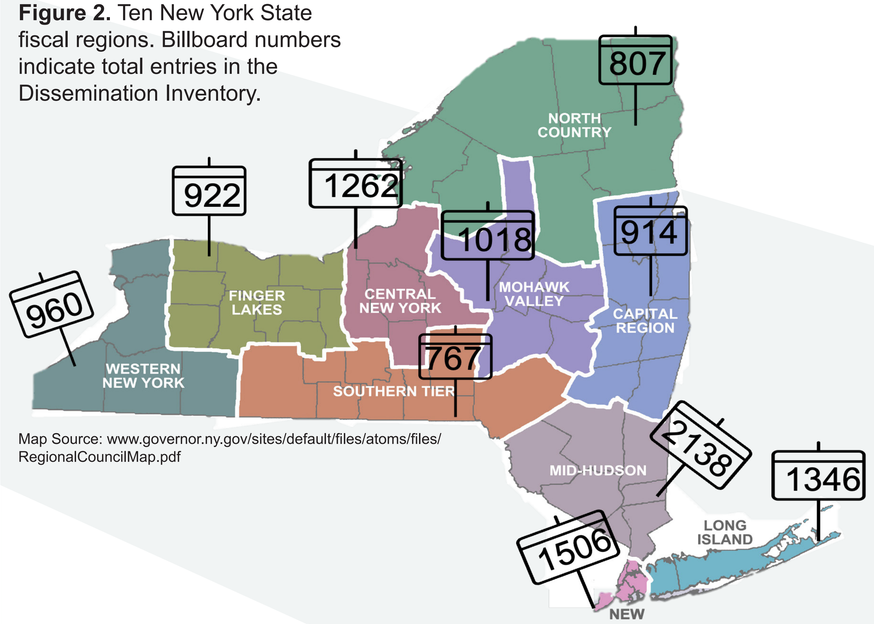


Figure 2. Ten New York State fiscal regions. Billboard numbers indicate total entries in the Dissemination Inventory.

Map Source: www.governor.ny.gov/sites/default/files/atoms/files/RegionalCouncilMap.pdf

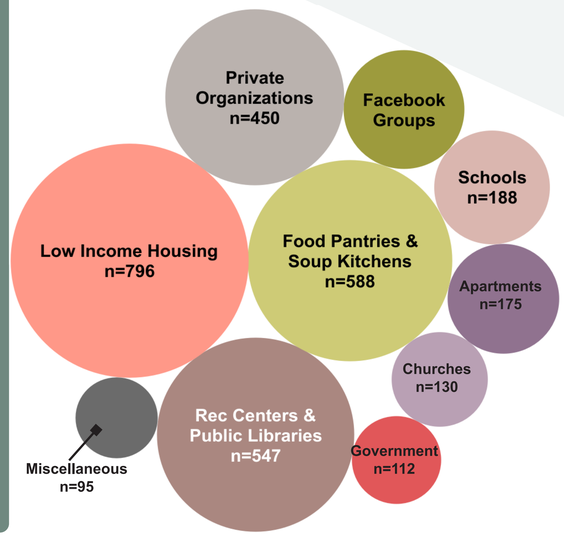


Figure 3. Total contacts to organization types, listed on the Dissemination Inventory.

In addition to the types of organization in figure 3, hospitals/rehab centers, fire departments, and correctional facilities/ police departments were researched and included in the Dissemination Inventory.

Results

Of the 125 organizations who asked for more information, 87 confirmed dissemination of materials through various channels (e.g. social media, flyers posted,email or e-newsletter shared).

Figure 4. Organization outreach results.

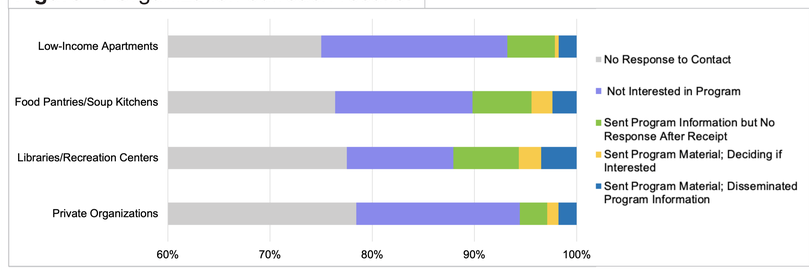
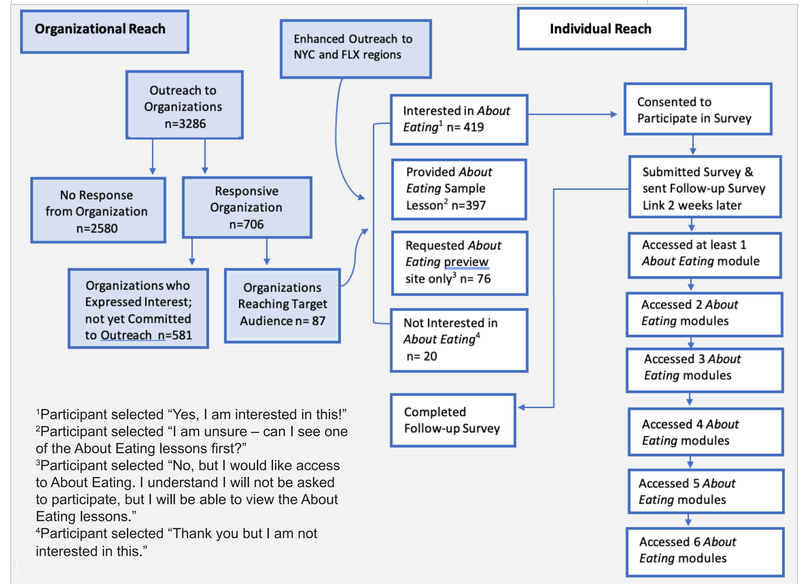


Figure 5. Flowchart of recruitment and participation activities.



[1]Participant selected "Yes, I am interested in this!"
[2]Participant selected "I am unsure – can I see one of the About Eating lessons first?"
[3]Participant selected "No, but I would like access to About Eating. I understand I will not be asked to participate, but I will be able to view the About Eating lessons."
[4]Participant selected "Thank you but I am not interested in this."

Dissemination using community-specific venues and channels prompted responses from 916 individuals. Of the 210 that completed the informational survey, 88% identified as female, 70% were non-Hispanic white and 67% were college educated. Assistance program use was not congruent with intended reach, with low SNAP (14%), WIC (8%), and foodbank (18%) participation.

Conclusions

Dissemination of evidence-based (EB) nutrition education requires robust and rigorous strategizing. Adopting dissemination science process domain concepts rather than a previously used passive, untargeted approach, facilitated broader target audience reach. However, findings reveal an ongoing need to design for dissemination to reach target audiences. It often took a "champion" to advocate for dissemination of the program within an organization.

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