

## Abstract #

A Facebook impression (ad) was tested as a recruitment strategy for evaluation of digitally-delivered nutrition programs about family meals (FM) and folic acid (FA). Ads targeted English-speaking, low-income PA residents 18–55 y with key profile words (e.g., SNAP, food bank). Ads linked to pre and post program evaluation surveys developed with Qualtrics Pro (Provo, UT). Ad clicks were recorded for 807 FM and 795 FA responders; surveys were initiated by 73 and 109, respectively. Completers (n=47 FM; 70 FA) were similar in demographics, cognitive behaviors, and evaluative effort. FM completers were white (75%), young (mean age 35.5 ± 9.4 y), overweight/obese (59%; mean BMI 30.0 ± 7.4) and 51% were low-income with 22% SNAP participation.

FA completers were white (69%), young (mean age 36.1 ± 11.9 y), overweight/obese (63%; mean BMI 29.6 ± 8.6) and 71% were low-income with 28% SNAP participation. Evaluation findings informed program revision decisions. Number of ad clicks determined overall costs for FM and FA, which were \$1197.45 and \$1321.52 respectively. Respective FM and FA evaluation recruitment costs were \$25.48 and \$18.88/person; recruitment cost for each low-income evaluator was \$39.92 (FM) and \$27.53 (FA). Advantages of cost, efficiency, and speed associated with Facebook were moderated by duplicated response incidents, which were detected and considered in analyses and for future use. USDA funded.

## Background and Purpose

Facebook can be a recruiting tool. Internet and social networking sites are mainstream. 73% low-income persons (less than \$30,000 per annum) use the internet and 71% of all internet users use Facebook<sup>1</sup>. Social networking and searching for health information are the top activities for 73-92% of internet users between the ages of 18-45 years<sup>2,3</sup>. Preliminary indications are that internet and Facebook are effective means for recruiting low-income respondents to nutrition education programs<sup>4,5</sup>. The **purpose** of this study was to assess the effectiveness of Facebook for recruiting the low-income to nutrition education and was used for 2 programs, **Family Meals (FM)** and **Folic Acid (FA)** as described below.

### Family Meals (FM) Program

17 slides highlight benefits of eating as a family and provide hints and tips on how to integrate family meals into a busy lifestyle.

### Folic Acid (FA) Program

15 slides emphasize the need for folic acid for people of all ages and suggest how to obtain folic acid from foods and supplements.



## Study Procedures

For each study a 3-step process was followed:

1. Decision to use cost per click on impression/ad (CPC).
2. Budget allowance of \$100 per day for each Facebook campaign.
3. Creation of a Facebook impression (ad) to reach target audience of low-income Pennsylvania residents. Respondents who clicked on the ad were directed to the study website.

The ad was written to reach the Facebook page of our target audience. Impressions were limited to Pennsylvania residents 18-55 y, English speakers, and profile/likes linking to one or more of the following words:



## Data Collection

### Facebook (Ad) Impression and Estimated Population Reach

#### Family Meals-Fuss or Joy?



Let Penn State study know of YOUR family meals & if our info helps. Earn \$15 Walmart Card.

- 124,460 projected reach
- 4,278,732 impressions<sup>1</sup>
- 343 recruitment hours over 21 days

#### Is Folic Acid for You?



Earn \$15 gift card instantly for your thoughts on a Penn State research lesson: Folic Acid

- 201,380 projected reach
- 4,192,197 impressions<sup>1</sup>
- 344 recruitment hours over 17 days

<sup>1</sup> Number of times ad was displayed

### Real Time Performance Management



Facebook ad management optimizes the campaign through stop, pause, restart of the study, creation of edits or modifications, and real time performance monitoring. Cost mechanism determined by 2 factors: choice of cost per click (CPC) or per thousand ad impressions (CPM), and maximum daily \$ allowance. These studies used CPC option.

## Findings

### Ad performance

Family Meals	Folic Acid
807 clicks on Facebook impression	795 clicks on Facebook impression
111 initiated survey	119 initiated survey
How much did each campaign cost?	
\$1197.45 TOTAL Cost	\$1321.52 TOTAL Cost
\$1.484 / click	\$1.662 / click
\$16.40 / survey initiated	\$12.01 / survey initiated
\$25.48 / survey with program evaluation completed	\$18.88 / survey with program evaluation completed
\$32.36 / survey initiated by low-income *	\$24.03 / survey initiated by low-income *
\$39.92 / survey with program evaluation by low-income *	\$27.53 / survey with program evaluation by low-income *

\* Any program use and/or worry about money for food

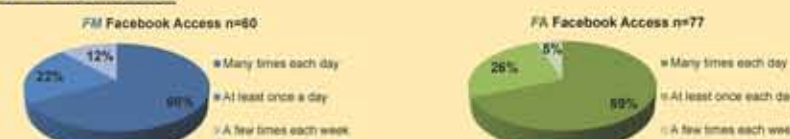
## Findings

### Respondent Demographics

	Family Meals * (n=73)	Folic Acid * (n=109)
Overweight/obese	59	63
SNAP Use	22	28
WIC Use	24	21
Medical Assistance Benefits	24	23
Food banks/pantries	15	12
Not eating competent	60	62
Low income *	51	71

\* Table entries are percentages  
\* Any program use and/or worry about money for food

### Use of Facebook



Respondent daily use of Facebook ranged from 88% to 95%.

## Conclusions

Facebook successfully recruited low-income Pennsylvania participants

Facebook:

- Allowed for real time data management
- Facilitated use of online surveys for data collection
- Proved cost effective when compared to traditional research/recruitment strategies
- Facilitated use of online surveys

Caveats:

Use of anonymous link may increase the possibility for duplicate survey attempts if payment is involved. Time spent on log analyses and data cleaning may be greater as a result. However link sharing with respondents who may not have access to the ad in their Facebook page or who may not have a Facebook page may increase response, which is the nature of social media.

## Acknowledgements

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## References

- <sup>1</sup> Pew Research: <http://pewinternet.org/Infographics/2012/Internet-Use-and-Home-Broadband-Connections.aspx>, Dec 2012 WebCite Cache.
- <sup>2</sup> Facebook: 2012. [http://www.facebook.com/ad\\_guidelines.php](http://www.facebook.com/ad_guidelines.php), Dec 2012 WebCite Cache.
- <sup>3</sup> Lohse, Barbara (2013). Facebook is an effective strategy to recruit low-income women to online nutrition education. Journal of Nutrition Education and Behavior. 45(1): 69-76.
- <sup>4</sup> Neuenschwander, L.M., Abbot, A., Mobley, A.R. (2012). Assessment of low-income adults' access to technology: implications for nutrition education. Journal of Nutrition Education and Behavior. 44(1): 60-65.

