



Abstract

Eating as a Family is Worth It (Worth It) is a 15- slide program that highlights the benefits of eating as a family, addresses barriers to eating as a family, and provides hints and tips on how to integrate family meals into busy schedules. *Worth It* was developed and evaluated using a two-stage design. Low-income females were recruited using a Facebook ad with key words targeting females with limited economic resources. Participant comments and survey responses about *Worth It* were positive. Item responses revealed all slides were rated as acceptable; open-ended comments suggested revisions to make the slides more salient. Slides were revised and evaluated with a separate sample of low-income women, also recruited with a Facebook ad. *Worth It* reflected information needs, comprehension, and interest level of low-income females.

Background

Worth It was developed to increase appreciation of family meals and encourage the practice of family meals among low-income families with school age children. This report details the evaluation of *Worth It* to assess efficacy for use with the targeted audience. This study was approved by The Pennsylvania State University Internal Review Board for the Protection of Human Subjects.

Study Design

Stage 1: Subjects were asked to view *Worth It* and complete a survey about content and process features.

Stage 2: Revisions were made based on responses from Stage 1 assessment. The

revised program was reviewed as part of an assessment for another ne/Frames program. Recruitment strategy and targeted sample were the same for both study stages.

Recruitment

Subjects were recruited using a Facebook ad also called an impression (Figure), targeted to females between the ages of 18 and 55 years inclusive, who live in Pennsylvania, speak English and who noted “like” on their Facebook page that included any of the following key words/phrases: Welfare, minimum wage, food bank, WIC, Supplemental Nutrition Assistance Program (SNAP), food stamps, food stamp kids, I need more money, I need more cash, or currently unemployed. Data were screened for duplicate computer IP and email address.

Stage 1: Estimated reach of the Facebook ad was 245,580 people; 807 clicked on the ad, and 9% initiated the survey. 64% of these completed the *Worth It* evaluation.

Stage 2: Estimated reach of the Facebook ad was 201,380 respondents; 795 clicked on the ad; 14% initiated the survey. 64% then completed evaluations of the revised slides.

Figure. Facebook Impression (Ad)

Family Meals–Fuss or Joy?



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

Data Collection

Data were collected from an online survey designed with Qualtrics (Provo, UT) and hosted on a Penn State server for 14 calendar days. Item strategies included Likert scale, heat map, ratings (via star or slider scales), and comment box.

Stage 1: Participants completed questions about demographics, (including SNAP-Ed Education and Administration Reporting System items), cognitive behavior and food-related practices, viewed a *Worth It* video loop, and then answered a post-viewing evaluation.

Stage 2: Responses about the revised slides were collected from a separate sample also targeting low-income Pennsylvanians. A Qualtrics-driven (Provo, UT) survey was hosted on The Pennsylvania State University server for 17 calendar days. Revised slides were evaluated with survey items similar to those used in Stage 1.

Results

Respondent Demographics

Most respondents were white with post-high school education. WIC and medical assistance were the most frequently utilized assistance programs; in all, 22% used at least one assistance program in the past year ([Table 1](#)). The majority of households had 2 children under the age of 18. Low-income was defined as using at least one assistance program OR reporting sometimes (34%), often (14%), or always (3%) worrying about money for food: 51% were classified as low-income. The follow-up evaluation sample was similar to Stage 1 respondents ([Table 2](#)).

Attitudes About *Worth It*

Respondents' attitude was assessed by rating agreement using a scale from 1 (Strongly disagree) to 7 (Strongly agree) with 3 statements: 1) . . .helped me think about family meals and feeding my family, 2) Family meals are important for my family, and 3) My family

needs to have more meals together. Mean scores of 5 or higher with a mode of 7 for all 3 items indicated a positive attitude toward the program. The majority of respondents (79%) reported a score of 5.5 or higher for the statement about importance of family meals indicating that family meals are important.

Opinions About *Worth It*

Seven program characteristics or learner responses were listed: Program is easy to read; I learned a lot; This program was helpful; This show was interesting; I understood the information; I liked the pictures in the program; and, I would like to see more like this one. Participants were asked to select all that were TRUE for them, thus more than 1 item could be checked. The average number of items each respondent selected as TRUE for them was 4.2 ± 1.7 . A majority confirmed the program had the right amount of information (75%), indicated that the program was easy to read (94%), was helpful (57%), and understandable (57%). Comments included "I knew some of that information, but it was a good reminder," "I think it is really important for kids in high school to see information like this, before they have kids," and, "I would be surprised if people didn't already know this." Eating competence was related to a more favorable response to *Worth It*. More information on evaluation outcomes is in [Table 3](#).

Response to the Specific Slide Messages

Four slides emphasized the benefits and positive effect of family meals on children and teens:

Slides depicting family meal benefits

- ◆ Kids who eat meals with their families are more likely to be at a healthy weight
- ◆ Kids who help with meals feel important and may try new foods
- ◆ Teens who eat meals with their families are less likely to drink, smoke or do drugs
- ◆ Teens who eat meals with their families have better grades.

These 4 messages resonated with respondents. A slider bar was used to rate the importance of each message from 1 (Not at all important) to 7 (Extremely important). All slide messages were viewed by the majority as either very important or extremely important (Table 4) with means for all slides higher than 5 (very important). From 90 – 98% rated the slide concepts as very important (score of 5).




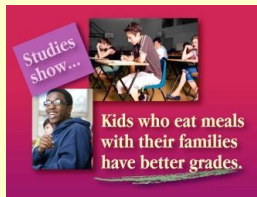
What gets in the way of family meals?

Respondents viewed two slides about barriers to family meals and provided comments in Stage 1. In Stage 2, respondents compared the original and revised slides and chose the preferred version. Choices were included in the final *Worth It* program.

Stage 1: Results suggested that barriers listed either did not match the pictures or were not understood. Participants identified four main barriers to family meals: fatigue, not having ingredients on hand or in the pantry, cooking skills, and distractions (e.g., TV, video, phone). Respondents in Stage 1 agreed that barriers listed were “all good, valid excuses” and added “cell phones & texting, video games and TV.” They were also confused about a slide showing a woman cooking with captions referencing cooking skills and time as barriers. Respondents noted “if she is too busy to cook why is she cooking” and “...the obstacles of time and money are difficult to overcome”. Comments led to caption changes and development of two new slides addressing busy schedules and sharing family meal tasks.





Stage 2: Respondents compared original and revised slides about family meal barriers (Table 5). Comments (e.g. “both [slides] are accurate on the thoughts that cross my mind,” and “. . . they give realistic reasons why families don’t often eat together”) led to inclusion of the revised slides in the final program. Negative slide comments (e.g., “I like the ... slides, but the (single woman slide) indicates a lot of pure laziness,” and “the women look way too upset about a meal”) did not preclude use of the revised slides.

Table 4. Rating the Importance of the Intervention Message ^a

				
Mean	6.27	5.69	6.10	6.13
Standard Deviation	0.76	0.99	1.12	0.82
Median	6.00	6.00	6.00	6.13
Range (min-max)	4-7	3-7	2-7	4-7

^a Respondents rated the importance of the message using a scale from 1 (Not at all Important) to 7 (Extremely Important)

Table 5. Barrier Slides Evaluation

Initial Slide	Original Slide Evaluation	Revised Slide	Revised Slide Evaluation
	Respondents noted a conflict between a woman cooking and the caption “don’t know how to cook”, Suggested adding caption “too tired”		Revised slide was well received by target audience
	Barriers cited were confusing: suggested adding other family distractions		Revised slide was better received by target audience

Perceptions about slides related to meals and implementing family meals

Four slides addressed family meal characteristics.

Slides about family meal characteristics

- ◆ What makes a meal together fun
- ◆ Family meals can be simple
- ◆ Kids who eat meals with families are more likely to be at healthy weight
- ◆ Families can enjoy precious time

Respondents rated feelings about each of the four slides by using a 7-point star rating system (more stars meant a more positive rating) and provided comments on each slide.

Stage 1: All slides were well received with a mean rating of 5 or more stars out of 7 possible. For these four slides, a 5 star rating was recorded for 57%, 72%, 75%, and 70% respectively. However, concerned comments about three slides prompted revision and follow-up comparison with the original slide.

Stage 2: Comparison of the original and revised slides indicated clear preference for the revised “what makes family meals fun” and “families can enjoy precious time together” slides. However, preference for the revised “simple meals” slide was not as strong, so the original was retained. Results are shown in [Table 6](#).



Family Meal

A “Hot Spot” rating strategy directed respondents to view family members eating pizza together, then to click on the area of the slide that first caught their attention.

Stage 1: “Hot Spot” results suggested attention was not directed to the message or to the father eating with the children.

Stage 2: Cropping the picture to delimit the pizza and rearranging the message on the slide increased attention toward family members and the key message that “Eating together is what is important” (Table 7).

Table 7. Hot Spot: Area of Slide that First Caught Attention

Original Slide	Original Slide Evaluation	Revised Slide	Revised Slide Assessment
	Hot Spot assessment revealed focus on pizza slice and little attention on family members		Assessment revealed revisions successfully directed attention to family members and the message

End of Survey Comments

At survey closure respondents were asked to provide additional comments not addressed in the body of the survey. Themes emerging from these comments indicated a belief that simple meals are not healthy meals; requests for recipes or links to healthy recipes; simple recipe sites; and that responsibility for meal preparation and scheduling should be shared. Comments included statements of program support: “Great presentation”, “Very good program!!! We sit down to meals almost every day. My kids don’t realize that so many others do not do this,” “This was a nice presentation and easy to read and follow”, and “shopping is usually the most stressful time for me. I didn’t think about using it as a learning experience for them to actually teach them about the food.” Negative comments and program improvement suggestions were also given, “Most quick meals are not healthy,” “Kids who eat with their families are a healthier weight? I don’t believe that to be true-there are too many obese parents who feed the kids as they would eat themselves”, “maybe share a few simple recipes and add information for families of children with food allergies.” These suggestions were incorporated in program revision by providing suggestions to incorporate family meals into each lifestyle.

Conclusions

Eating as a Family is Worth It is a digital photo frame-based program shown to be useful and of interest to the target audience based on a two-stage evaluation plan that included evaluation of revisions made from findings in Stage 1. Evaluation outcomes indicated that revisions improved the program and supported retention of one original slide. Evaluation, revision, and re-evaluation of the *Worth It* program verified usefulness, comprehension, and interest for low-income women.

Table 1. *Worth It* Stage 1 Evaluation Demographics ^{a, b, c}

		Full Sample (n=73)	Completers (n=47)	Attriters (n=26)	Low Income ^d (n=37)	Program Assistance (n=23)	Eating Competent (n=20)	Not Eating Competent (n=30)
Mean Age y (SD)		35.5 (9.4)	35.4 (9.4)	36.4 (10.0)	34.2 (9.4)	32.8 (7.7)	35.3 (10.2)	34.2 (8.6)
BMI	Underweight	1	2	N/A	3	4	5	10
	Normal	17	23	4	24	26	20	20
	Overweight	32	36	23	24	22	65	23
	Obese	27	36	12	41	35	10	47
Assistance Program Use	Supplemental Nutrition Assistance Program	22	23	17	35	57	5	37
	Women, Infants, and Children	24	19	42	38	61	10	37
	Cash Assistance Benefits	2	2	N/A	3	4	0	3
	Temporary Assistance for Needy Families	2	2	N/A	3	4	0	3
	Medical Assistance Benefits	24	28	8	38	61	10	30
	Medicaid	14	13	17	22	35	0	27
	Medicare Part D-Prescription Drug Coverage	7	9	N/A	11	17	0	13
	Low Income Home Energy Assistance Program	7	9	N/A	11	17	0	10
	Expanded Food and Nutrition Program	2	2	N/A	3	4	0	3
	Food Bank or Food Pantry	15	13	25	24	39	0	27

		Full Sample (n=73)	Completers (n=47)	Attriters (n=26)	Low Income^d (n=37)	Program Assistance (n=23)	Eating Competent (n=20)	Not Eating Competent (n=30)
Education	Less than high school	2	2	N/A	3	5	0	0
	High School Graduate or GED	18	17	20	23	19	15	18
	Some college or 2-year degree	28	28	30	31	29	15	39
	4-year college degree	30	26	50	23	24	40	25
	Post-graduate college	23	27	N/A	20	24	30	18
Number of children per household	1 child	36	37	33	32	27	27	43
	2 children	44	50	22	41	33	73	38
	3 or more children	18	13	33	27	40	--	19
Eating Competence	Not Eating Competent	60	55	80	83	90	N/A	N/A

^a Numbers may not sum to 100 due to missing data

^b All column data is from full sample with exception of Evaluation Non-Completers

^c Table entries are percent with exception of Row 1

^d Low-income defined as sometimes, often or always worry about money for food OR any program use

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Table 2. *Worth It* Stage 2 Evaluation Demographics ^{a, b, c}

		Full Sample (n=109)	Completers (n=74)	Attriters (n=35)	Low Income ^d (n=55)	Program Assistance (n=32)	Eating Competent (n=30)	Not Eating Competent (n=49)
Mean Age Y (SD)		36.14 (11.9)	36.7 (12.0)	24.7 (1.3)	36.3 (11.8)	35.4 (11.4)	35.3 (10.2)	39.9 (11.9)
BMI	Underweight	0.9	1	N/A	4	0	3	0
	Normal	25	34	75	33	41	43	29
	Overweight	14	20	25	22	9	10	25
	Obese	29	45	N/A	42	47	37	43
Assistance Program Use	Supplemental Nutrition Assistance Program	28	27	50	40	69	31	27
	Women, Infants, and Children	21	19	50	29	50	28	16
	Cash Assistance Benefits	9	8	25	13	22	14	6
	Temporary Assistance for Needy Families	6	7	N/A	9	16	10	4
	Medical Assistance Benefits	23	22	50	33	56	24	23
	Medicaid	12	11	25	16	28	17	8
	Medicare Part D-Prescription Drug Coverage	8	7	25	11	19	7	8
	Low Income Home Energy Assistance Program	17	16	25	24	41	17	16
	Expanded Food and Nutrition Program	3	3	N/A	4	6	7	0
	Food Bank or Food Pantry	12	11	25	16	28	17	8

		Full Sample (n=109)	Completers (n=74)	Attriters (n=35)	Low Income ^d (n=55)	Program Assistance (n=32)	Eating Competent (n=30)	Not Eating Competent (n=49)
Education	Less than high school	0	0	0	0	0	0	0
	High School Graduate or GED	21	20	25	26	28	10	27
	Some college or 2-year degree	50	51	25	49	59	66	41
	4-year college degree	22	20	50	22	6	14	27
	Post-graduate college	8	8	N/A	4	6	10	6
Number of children per household	1 child	41	39	67	46	47	43	40
	2 children	32	32	33	35	26	21	40
	3 or more children	21	22	N/A	15	22	29	15
Eating Competence	Not Eating Competent	73	62	60	69	63	N/A	N/A

^a Numbers may not sum to 100 because of missing data

^b All column data is from full sample with exception of Evaluation Non-Completers

^c Table entries are percent with the exception of Row 1

^d Low-income defined as sometimes, often or always worry about money for food OR any program use

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Table 3. *Worth It* Responses^b

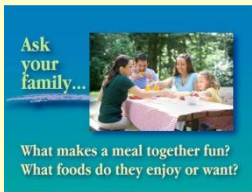


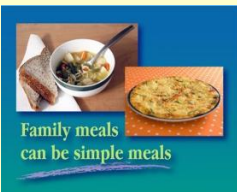


	All program viewers (n=47)	Low income^a (n=37)	Program Assistance (n=15)	Eating Competent (n=19)	Non-Eating Competent (n=20)
The program is easy to read	94	73	65	95	67
I learned a lot	30	22	22	40	17
The program was helpful	57	35	30	65	37
This show was interesting	47	32	35	55	30
I understood the information	57	68	61	95	60
I liked the pictures in the program	55	38	44	60	33
I would like to see more programs like this one	30	24	26	40	13

^a Low-income defined as sometimes, often or always worry about money for food OR any program use

^b Table entries are percent

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Table 6. Slide Preference Reported by Participant Characteristics ^a

Participant Characteristics	Original	Revised	Original	Revised	Original	Revised
						
Full Sample	43 (61%)		34 (47%)		41 (58%)	
Low Income	32 (65%)		23 (47%)		29 (60%)	
Not Eating Competent	13 (50%)		14 (52%)		18 (64%)	
Not Food Secure	28 (68%)		19 (46%)		24 (60%)	
Age						
32 years or younger	61% (19)		19 (58%)		20 (65%)	
33 years or older	59% (23)		15 (40%)		21 (54%)	
Education						
High school/some college	31 (62%)		24 (47%)		28 (56%)	
4 year degree/post grad	12 (57%)		10 (48%)		13 (62%)	
Overweight/Obese BMI	33 (72%)		22 (49%)		25 (57%)	

^a Table entry is n (%) of cell sample that chose the revised version.

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