

# Southeast Region Unbranded Pictures Validation Study



## Report Authors:

Brian Petrie, MA

Jamie Frederick, MSW, MPH

Celeste Doerr, PhD

Amy DeLisio, MPH, RD



## Table of Contents

Background.....	1
Methods.....	1
Participants and Procedure.....	1
Questions and their Branded/Unbranded Images .....	2
Results.....	3
Descriptives .....	3
Inferential Statistics.....	3
Discussion .....	4
Limitations.....	4
Recommendations.....	4
References .....	5

# **SOUTHEAST REGION UNBRANDED PICTURES VALIDATION STUDY**

## **Background**

The Supplemental Nutrition Assistance Program Education (SNAP-Ed) is an evidence-based program that provides health education to people using or eligible for Supplemental Nutrition Assistance Program (SNAP). The health programs teach about good nutrition and how to stretch their food dollars. SNAP-Ed is administered by the United States Department of Agriculture's (USDA) Food and Nutrition Service (FNS), and FNS is divided into regions. The Southeast Region (SER) includes eight states: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee. The SER conducts its regional work through a contract held by Georgia's Department of Family & Children Services.

In Federal Fiscal Year 2020, FNS clarified the requirement that surveys used to evaluate SNAP-Ed direct education interventions must not include images with or references to brand name (branded) items (USDA-FNS, 2021). Some existing nutrition education survey questions included pictures and references to brand name items and required updates to replace branded pictures with unbranded pictures. The primary aim of this study was to determine if replacing branded images with unbranded images would affect how individuals respond to the survey questions.

## **Methods**

### **Participants and Procedure**

Participants were from the SNAP-Ed eligible population in the SER and were at or below 185% of the federal poverty level.

Eligibility was determined by previous participation in SNAP-Ed programs. Implementing agencies notified individuals who were current or prior program participants about the study. When individuals expressed interest in the study, their email address was forwarded to the Public Health Institute Center for Wellness and Nutrition (PHI CWN) who then provided additional information about the study and emailed links to participate in the survey.

Participants were asked to respond to two surveys, one with branded images and one with unbranded images. The surveys were spaced three days apart to mitigate issues with response periods being too close together or too far apart. If the response period was too short, participants may have responded primarily based on the memory of what they had responded to on the pre-survey. And if the time were too long, then participants' eating behaviors may have changed. Therefore, three days were selected as the ideal time between pre- and post-survey for this study. Additionally, participants were asked to answer questions based on typical eating and shopping behaviors over the last seven days.

Participants were randomly assigned to either take the branded version first or the unbranded version first. Three days after completion of the first survey, participants would receive an email with a link to the other survey to complete. Following completion of the second survey, participants received a \$10 gift card to reimburse any expenses incurred for use of internet data while responding to the surveys. The surveys consisted of 10 questions; however, only four questions had images with brand name products that were tested. Below are each of the questions and the branded and unbranded versions of the images. A full list of unbranded survey questions can be found in Appendix A.

## SOUTHEAST REGION UNBRANDED PICTURES VALIDATION STUDY

### Questions and their Branded/Unbranded Images

Do you eat more than one kind of fruit each day?



(Branded)



(Unbranded)

Do you eat more than one kind of vegetable each day?



(Branded)



(Unbranded)

Do you drink fruit drinks, sport drinks, sweet tea or punch?



(Branded)



(Unbranded)

Do you drink regular soda?



(Branded)



(Unbranded)

**SOUTHEAST REGION  
UNBRANDED PICTURES VALIDATION STUDY**

**Results**

**Descriptives**

The implementing agencies provided 100 email addresses to PHI CWN for inclusion in the validation study. A total of 54 participants completed both pre- and post-surveys and were included in analyses. Of those that completed both surveys, the majority were female (90.7%), not Hispanic or Latino (83.3%), and primarily White (50.0%) and Black/African American (33.3%).

**Table 1**

*Demographics*

Demographics	Categories	n (%)
Ethnicity	Hispanic or Latino	6 (11.1%)
	Not Hispanic or Latino	45 (83.3%)
	Did not report	3 (0.05%)
Race	Black/African American	18 (33.3%)
	White	27 (50.0%)
	More than 1 race	7 (13.0%)
	Did not report	2 (3.7%)
Sex	Female	49 (90.7%)
	Male	5 (9.3%)

**Inferential Statistics**

All four questions were analyzed using Spearman’s rank-order correlation which measured the strength of the relationship between responses on the pre- and post-survey. The results found significant positive correlations for all four questions when comparing pre- to post-survey responses. As seen in Table 2, correlations range in strength from moderate ( $r_s = 0.62$ ) to very strong ( $r_s = 0.82$ ) (Dancey & Reidy, 2007).

**Table 2**

*Results from Spearman’s rank-order correlation*

Question	n	p-value	Correlation coefficient	Correlation strength
Do you drink regular soda?	54	< .001	0.82	Strong
Do you drink fruit drinks, sport drinks, sweet tea or punch?	54	< .001	0.79	Strong
Do you eat more than one kind of fruit each day?	54	< .001	0.70	Strong
Do you eat more than one kind of vegetable each day?	54	< .001	0.62	Moderate

# **SOUTHEAST REGION UNBRANDED PICTURES VALIDATION STUDY**

## **Discussion**

This study aimed to evaluate the possibility of replacing existing branded images with unbranded images. The results support the use of unbranded images in place of the branded images on existing SNAP-Ed dietary questions. The strength of the relationships reflects very similar responses on the two versions suggesting that the unbranded images cued participants to think of the pictured food items in the same way as the branded pictures.

## **Limitations**

While the results support the use of unbranded images, some limitations should be considered. First, the sample size is much smaller than originally planned. A power analysis was conducted before the study began and identified a sample size of 240 participants would be needed to detect an effect should one be present. The actual sample size ( $n = 54$ ) is much smaller than the one identified so the results should be interpreted cautiously. As a result, the findings cannot be generalized to a broader population. However, moderate to strong correlations were still observed which suggests an effect does exist. If possible, the study should be replicated with a larger sample size to confirm the findings.

Next, the participants were drawn from a convenience sample. Implementing Agencies (IAs) contacted current and previous SNAP-Ed program participants. This limited the pool of possible participants. Additionally, participants were required to have an email address to participate. During the study, IAs provided feedback that they did not always retain contact information for previous participants and that individuals from the SNAP-Ed-eligible population do not always have or use email frequently enough to be included in the study. This, too, limits the extent to which the results can be generalized.

## **Recommendations**

Based on the findings, there are several recommendations:

First, based on the results of this study, it is recommended that the unbranded images tested in the study be used to replace their branded counterparts for future surveys so agencies may evaluate their program in compliance with guidelines set forth by USDA FNS. Second, while the recommendation is to use the unbranded images, there should still be an effort to replicate these findings. Replications should aim to obtain a larger sample size as well as test the images in other FNS regions of the United States. This will help support the use of unbranded images as well as their appropriateness for use in other FNS regions. Third, the results should be replicated with other methods for removing brand names from images. For example, another option could include blurring out brand names from products in existing images. This would provide agencies with more options for adopting USDA FNS's policy. Finally, USDA FNS should investigate the possibility of hosting a webpage with a library of unbranded images for agencies to use in their surveys. This could be particularly helpful for smaller states and agencies that lack the resources to take new photos or visually modify existing photos. It will also provide high-quality ready-to-use photos that can be consistently used across the country by SNAP-Ed implementors.

**SOUTHEAST REGION  
UNBRANDED PICTURES VALIDATION STUDY**

**References**

Dancey C.P., Reidy J. (2007). *Statistics without maths for Psychology*. Pearson Education.

United States Department of Agriculture, Food and Nutrition Services. (2021). FY 2022 Supplemental Nutrition Assistance Program Education (SNAP-Ed) Plan Guidance: Nutrition education and obesity prevention program. Retrieved from [https://snaped.fns.usda.gov/sites/default/files/documents/FY%202022%20SNAP-Ed%20Plan%20Guidance\\_0.pdf](https://snaped.fns.usda.gov/sites/default/files/documents/FY%202022%20SNAP-Ed%20Plan%20Guidance_0.pdf)