

# The Influence of CSA/ Farmers Market Membership On Cooking Literacy and Skills

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## INTRODUCTION

Community Supported Agriculture (CSA) are memberships that allow community members to share in the risks and rewards of farming by purchasing farm goods at the beginning of the growing season. (1) Farmer's Markets (FM) are public assemblies that occur on a regular and defined basis and are made up of farmers or their representatives selling farm made goods directly to consumers.(2) Both FM and CSAs give community members an opportunity to purchase locally and may impact their personal food environment.

Cooking interventions are one method that show positive outcomes in increasing food group consumption and overall health. One research study found that cooking program interventions that targeted changes in food knowledge, preparation and skills produced positive effects on dietary intake. (3) Higher self-efficacy in food knowledge, preparation and skills has also been linked to more fruit and vegetable intake regardless of environment or economic status. (4) This research looks to CSA's and FMs and their influence on eating patterns and cooking literacy.

This research aims to shed light on how people are using their current knowledge as well as obtaining new knowledge to prepare foods that are unfamiliar to them. The authors hypothesize that people who have higher self-efficacy towards preparing healthy foods, will be able to find new ways to prepare foods or to try foods they are not familiar with.

## METHODS

This project utilized a survey created in REDCap (5,6,7) and sent to individuals who participate in CSA and/or FM. The survey assess frequency of use, familiarity of foods, ability to find resources, and perceived benefits of participation. Figure 1 represents the frequency of use. Participants were recruited by researching CSAs listed on localharvest.org in the local Nashville, Tennessee area and including a link to the online survey in an email requesting voluntary member participation. Participants were also found via researching CSA and FM groups on Facebook and sharing a link to the survey for members of the group to voluntarily fill out. Finally, a link to the survey was shared with family and friends of the authors for voluntary participation. Between February 22nd-March 12th, 28 participants completed the survey. Data was exported from REDCap into Excel for analysis using a chi square test. Finally, for our qualitative answers, we used transcription and coding to describe our qualitative data.

**The Influence of CSA Memberships on Cooking Literacy and Skills**

Please complete the survey below.

Thank you!

1) Select gender

Female  
Male  
Prefer not to say

2) What is your race/ ethnicity? (select all that apply):

Hispanic/ Latino  
African American/ Black  
White  
American Indian/ Alaska Native  
Asian  
Native Hawaiian/ Pacific Islander  
Other  
Prefer not to say

3) Select your highest level of education:

No formal education  
High School  
Some college  
Associate's degree  
Bachelor's degree  
Master's degree  
Doctoral degree/ PhD  
Other  
Vocational

4) What has your experience with Farmer's Markets / CSA (Community Supported Agriculture) memberships been? (select all that apply)

Frequently use Farmer's Markets / CSA  
Prefer to get most of my groceries from Farmer's Markets / CSA  
Prefer to supplement/ occasionally participate in Farmer's Markets / CSA  
Tried a Farmer's Markets / CSA box one time  
Am interested in Farmer's Markets / CSA but have never participated

5) How do you use the food from your Farmer's Markets / CSA once you get it? (select all that apply)

Plan meals according to what you get for that week/ month  
Incorporate foods purchased from Farmer's Markets / CSA into what you already had planned to eat  
Prepared some of the foods as meals and prepared the rest for storage  
Prepared the foods into meals and then froze the extra  
Some of the foods spoiled and were not used  
Forgot to use the food  
Didn't know how to use the food

6) Were you familiar with the foods you received in your Farmer's Markets / CSA box?

Yes  
No  
Sometimes

7) If you were not familiar with the foods, were you able to find a resource to use/ cook the food?

Yes  
No  
Not applicable

8) If you were not familiar with a food but found a resource for how to cook it, were you able to then cook it?

Yes  
No

9) Do you feel that your Farmer's Markets / CSA membership helped you learn new ways to cook food?

Yes  
No  
Sometimes  
Never  
Not applicable

10) Did your Farmer's Markets / CSA membership inspire you to try new foods?

Yes  
No  
Sometimes  
Never  
Not applicable

11) Did your Farmer's Markets / CSA membership inspire you to try new cooking methods?

Yes  
No  
Sometimes  
Never  
Not applicable

12) What benefits do you see to participating in a Farmer's Markets / CSA programs?

Expanded

13) How has being part of a Farmer's Markets / CSA program affected your cooking?

## REFERENCES

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## RESULTS

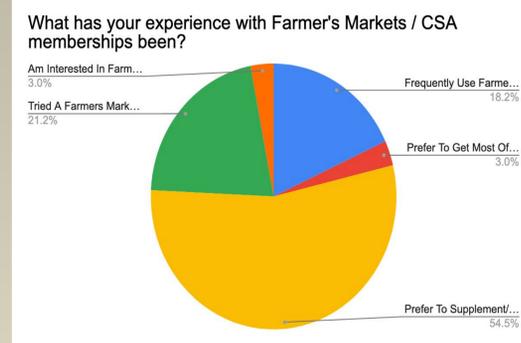


Figure 1

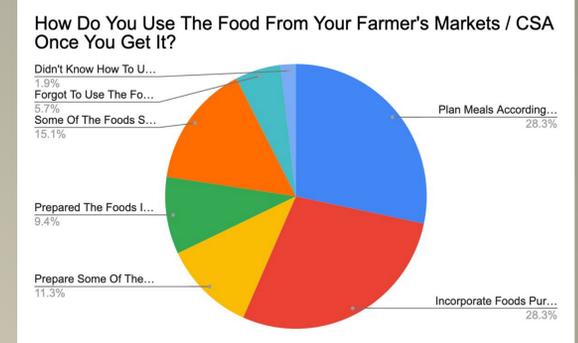


Figure 2

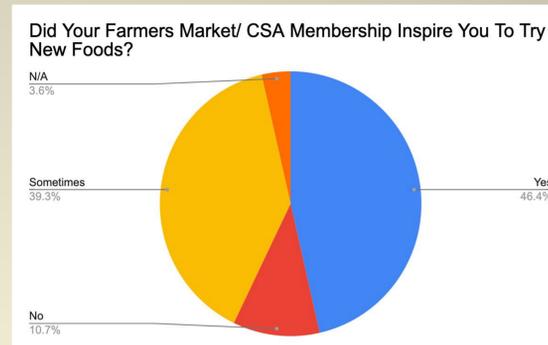


Figure 3

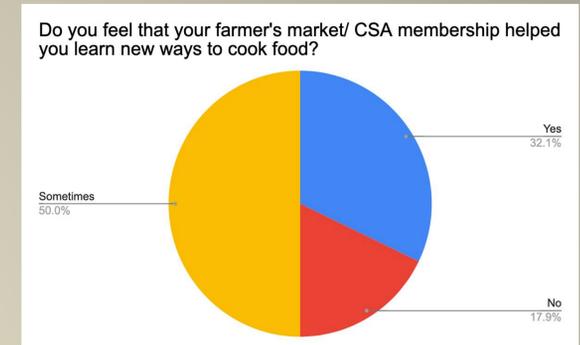


Figure 4

**Demographics:** 82.1% of participants were female and 7.9% were male, 89.3% of the participants were White and 14.3% were Hispanic/Latino. One participant identified with both races/ethnicities. Out of the 28, 50% have a bachelor's degree, 25% have a Master's Degree, 14.3% have some college, 7.1% have an Associate's degree, and 3.6% has a high school education.

### Data Analysis:

- Frequency of participation in CSA/FM does significantly impact familiarity of foods.
- Frequency of FM/CSA program use and the impact on how the participants use the foods purchased indicate no significant relationship, as represented in Figure 2.
- Familiarity with foods and ability to find a resource, have a significant relationship.
- Familiarity with foods and ability to find a resource then skill to prepare the food, were not significantly correlated
- Frequency of use and learning how to cook had no significance or impact on each other
- Frequency of use and inspiration to try a new food were found to have a significant relationship, as represented in Figure 3.
- Frequency of use and trying a new cooking method, were not significant, as represented in Figure 4.

**Free Response:** 6% of participants felt the benefit of CSA/ FM was supporting local farmers, 36% felt the food was fresher, 21% felt the benefit was trying new food, 7% felt the food at these programs were perceived as healthier, and 32% of the responses were un-answered. 32% of participants felt these programs helped them cook healthier, 29% felt the programs influenced them to try new cooking methods, 21% felt the programs made them try new foods in general, 11% commented these programs allow them to "do more", 7% felt that "it hasn't" influenced their cooking, and 32% of the responses were un-answered.

## SUMMARY/CONCLUSIONS

A meaningful relationship was seen between participation in CSA/FM and familiarity with the foods received. Additionally the frequency of participation in CSA/FM has a meaningful association with the ability to find resources to help them learn how to cook or prepare the foods. Finally, frequency of participation in CSA/FM was significantly associated with increased feelings of inspiration to try new foods.

This project demonstrated a nonsignificant relationship between frequency of participation and how respondents use their food. The ability of respondents to find and utilize resources were also not significantly associated. Finally, frequency of CSA/FM use and learning how to cook or trying a new cooking method were not significantly associated. This may have been impacted by survey design, lack of diversity in survey respondents, sample size, or a narrow distribution method.

This data can be used to support the need for improved access to CSA/FM as they have been shown to have an impact on participants' food familiarity and interest in trying new foods. They also had an impact on an individual's self-efficacy with resources to increase their knowledge of food. Altogether, this can create a stepping stone to improving overall diet quality.