

# Preparing and Evaluating a Commodity Food Recipe in the Elementary School Setting

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## BACKGROUND

- ❑ School nutrition programs in the United States are key providers in feeding nearly 74 million children living in the nation.<sup>1</sup>
- ❑ Schools that participate in the National School Lunch Program are required to meet certain guidelines.
- ❑ These guidelines limit fat and sodium and ensures access to appropriate protein, fruits, and vegetables for optimal child growth.
- ❑ Children can be picky eaters and it can be a challenge to create food choices that are pleasing to the students and meet the guidelines.
- ❑ In this project, students from the senior dietetics class at Middle Tennessee State University (MTSU) worked with foodservice staff from Erma Siegel Elementary School (ESES) to create a menu item utilizing commodity foods.
- ❑ There were twenty-one participants, both male and female between the ages of 10 to 42.

## METHODS

- ❑ After meeting with the food service manager, we made a list of potential recipes we could use that would meet the cost and nutrient guidelines, use at least one commodity food, and have a high degree of acceptability with the students.
- ❑ After a cost analysis was conducted, a chicken salad with grapes and apples recipe was determined to be optimal for the experiment.
- ❑ The participants were asked to sample the recipe and answer a short survey.
- ❑ A nutrient analysis was performed using the FoodWorks 17 software program to compare the nutrients to the guidelines.
- ❑ The survey data was complied and analyzed using Microsoft Excel 2016.

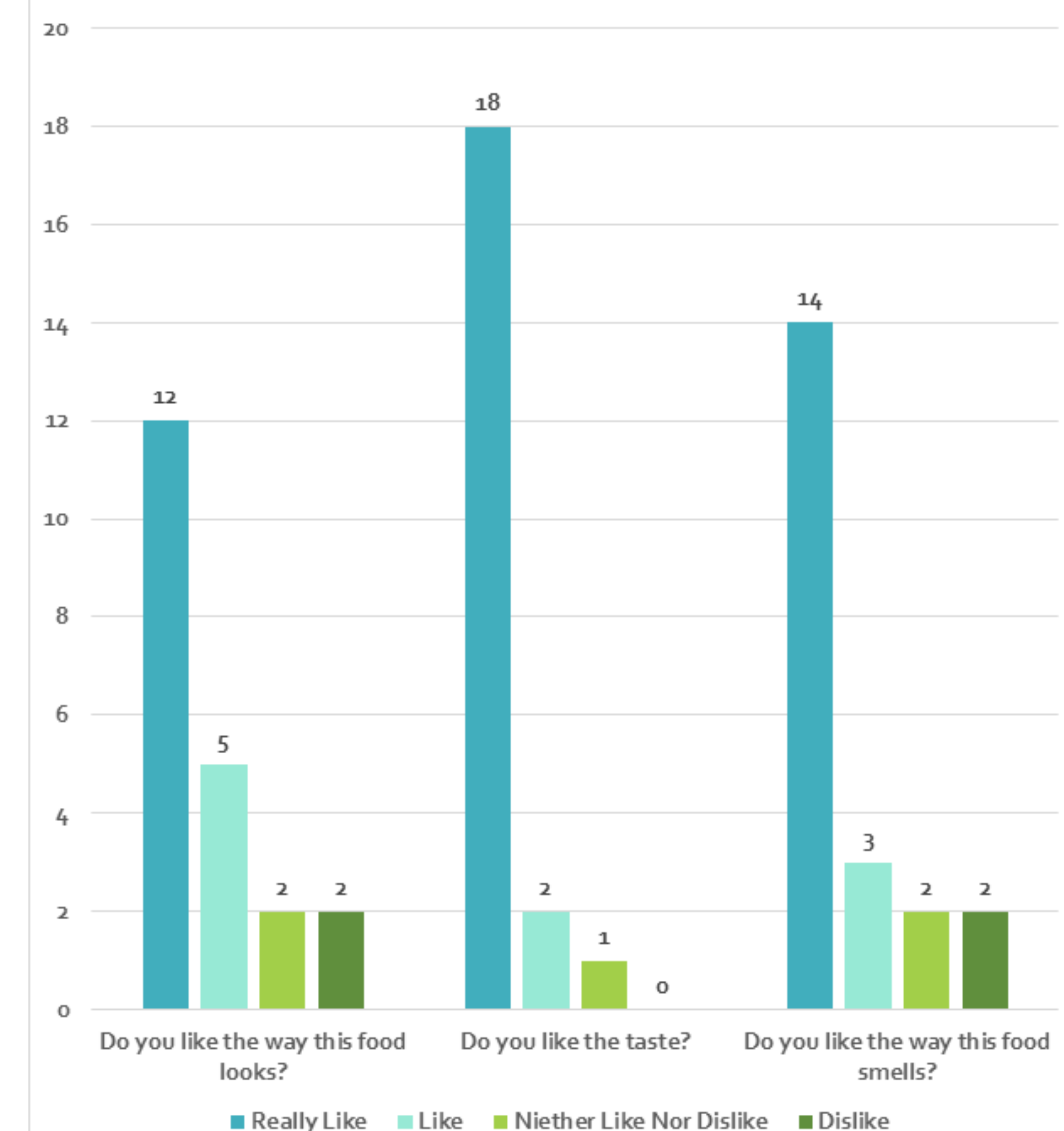


## DISCUSSION AND CONCLUSION

- ❑ Based on the results, most of the participants either “really like” or “like” the chicken salad according to its appearance, taste, and smell.
- ❑ Since the cost per portion was only \$0.34, it would be a good recipe for schools on a tight budget.
- ❑ The recipe fell below the guidelines for calories, sodium, and trans-fat, but for saturated fat it was 3% over.
- ❑ Chicken salad with apples and grapes is a good candidate for school entrées because it includes two food groups (meat and fruit), meets most of the nutrient and cost guidelines, and children like it.
- ❑ Overall this was a very easy recipe to prepare, with only four steps and eight ingredients.
- ❑ Our recommendation to ESES was to use a light mayonnaise in the recipe to fix it being over in saturated fat and we hope it will one day be featured on the official lunch menu.

## SURVEY RESULTS

Responses to Like or Dislike Questions



## RESULTS

- ❑ The average response to whether the participants liked the way the food looked, tasted, and smelled were 4.3, 4.8, and 4.4 out of a 5-point scale, respectively.
- ❑ The recipe met the cost guideline, but the nutrient analysis showed that the recipe was a little over in saturated fat.

## REFERENCE

1. Number of Children. Child Trends. <https://www.childtrends.org/indicators/number-of-children>. Published September 13, 2019. Accessed November 22, 2019.