

## Teaching cooking through the lens of science increases confidence

### AT A GLANCE

Higher confidence in cooking is an important to improving later health. Teaching cooking skills through the lens of science helps increase this confidence.

### The Situation

In 2018, a needs assessment was performed in Bannock County. This needs assessment identified a need for more cooking classes for youth, adults and families to help increase confidence in cooking. It was also requested that these cooking classes relate to science, technology, engineering and math (STEM) activities.

Increased confidence in cooking has been linked to better health down the road. This series of classes highlights the importance of helping individuals increase their cooking confidence.

### Our Response

In response to the needs assessment performed in the county, the Science of Cooking series was developed for youth. Later, based on requests from the community, this series was adapted for families and adults. The youth series was taught to 4-H youth groups and in school settings (middle school and high school). The family and adult series were taught as classes at the UI Extension office and through community partners.

The series consisted of four, five or six class sessions. The specific topics and length of the class depended on the partner needs, but included topics such as:

- Flavors/Spices



Youth applying cooking skills that they learned. Photo credit: Laura Foist.

- Meat
- Baking/Bread
- Plant-Based Proteins
- Candies
- Fruits/Vegetables

For all topics, participants were taught the basic scientific principles behind cooking each food type, with a demonstration or experiment to demonstrate the scientific principle, and a hands-on cooking activity.

In 2019 the series was taught to a total of 239 individuals (138 youth and 102 adults). A post-class survey was given to participants to determine changes in behavior and knowledge, as well as to determine amount of

monetary savings from applying principles (for adult classes) and applicability of the classes.

## Program Outcomes

At the conclusion of these classes, participants increased in knowledge and improved behaviors. Results can be seen in the tables. This included increased knowledge and confidence in:

- Using spices and senses while cooking (to help improve flavor of foods)
- Food safety practices
- Scientific principles behind cooking
- Cooking variety of foods

Participants included the following as skills they learned from this class series:

- I learned how to apply seasoning to my food.
- Cook by myself, help mom in shopping.
- One skill is to be more open to different foods. Another skill is to use better food safety practices.
- Putting more fruits and vegetables in my meals.
- Cooking meats to the right temperature and using all senses when tasting food.

Participant comments about the class series included:

- It was well done! I felt like I learned a lot and it was very interactive.
- I had a fun time and learned a lot about foods. I also learned how to cook a lot more foods.
- I enjoyed it; useful lessons were taught. I liked how we actually got to engage in activities.

Overall 68% of participants rated this class as very useful or extremely useful, and as a result of attending the training participants planned to cook at home three to five times more per week. Participants estimated, on average, over \$1,000 saved per year

from applying what they learned in the class. That would equal a total savings of \$102,000 as a result of adults participating in this UI Extension program.

This class helped both adults and youth become more confident in cooking which will result in more cooking at home, saving money and eventually greater health in Bannock County.

Table 1: Participant Knowledge	Before	After
Scientific principles behind food	2.34	3.72
Benefits of cooking at home vs. eating out	3.57	4.21
Use of spices and senses	2.68	4.18
Cooking skills for variety of foods	2.81	4.00
Food-safety practices	3.31	4.11

Scores are the average based on a five-point scale, with one being very low understanding and five being very high understanding.

Table 2: Participant Behavior	Before	After
Using all five senses while cooking	2.67	3.97
Using spices without a recipe	2.63	4.00
Using food safety practices	3.27	4.20
Cooking different meats using temperature control	2.69	3.93
Using plant-based proteins in your diet	2.40	3.40
Using a variety of fruits and vegetables in your diet	3.21	4.14

Scores are the average based on a five-point scale, with one being not confident and five being completely confident.

## FOR MORE INFORMATION

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