

Washington State Farmers
Market Association
Food Access Forum
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www.saferecipeguide.org

What have you been told about how to encourage people to use good food safety practices?



Research Note

Recipe Modification Improves Food Safety Practices during Cooking of Poultry

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ABSTRACT

Many consumers do not practice proper food safety behaviors when preparing food in the home. Several approaches have been taken to improve food safety behaviors among consumers, but there still is a deficit in actual practice of these behaviors. The objective of this study was to assess whether the introduction of food safety instructions in recipes for chicken breasts and ground turkey patties would improve consumers' food safety behaviors during preparation. In total, 155 consumers in two locations (Manhattan, KS, and Nashville, TN) were asked to prepare a baked chicken breast and a ground turkey patty following recipes that either did or did not contain food safety instructions. They were observed to track hand washing and thermometer use. Participants who received recipes with food safety instructions ($n = 73$) demonstrated significantly improved food safety preparation behaviors compared with those who did not have food safety instructions in the recipe ($n = 82$). In addition, the majority of consumers stated that they thought the recipes with instructions were easy to use and that they would be likely to use similar recipes at home. This study demonstrates that recipes could be a good source of food safety information for consumers and that they have the potential to improve behaviors to reduce foodborne illness.

Key words: Food safety; Hand washing; Instructions; Poultry; Recipe; Thermometer

Multiple studies show that when consumers follow recipes that incorporate basic food safety instructions, they significantly increase food safety behaviors. This style guide provides easy edits to any recipe to improve food safety practices.

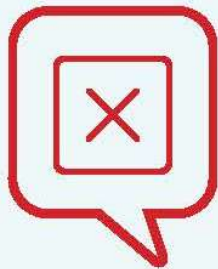
HANDWASHING BEFORE COOKING

Observed Consumer Behavior



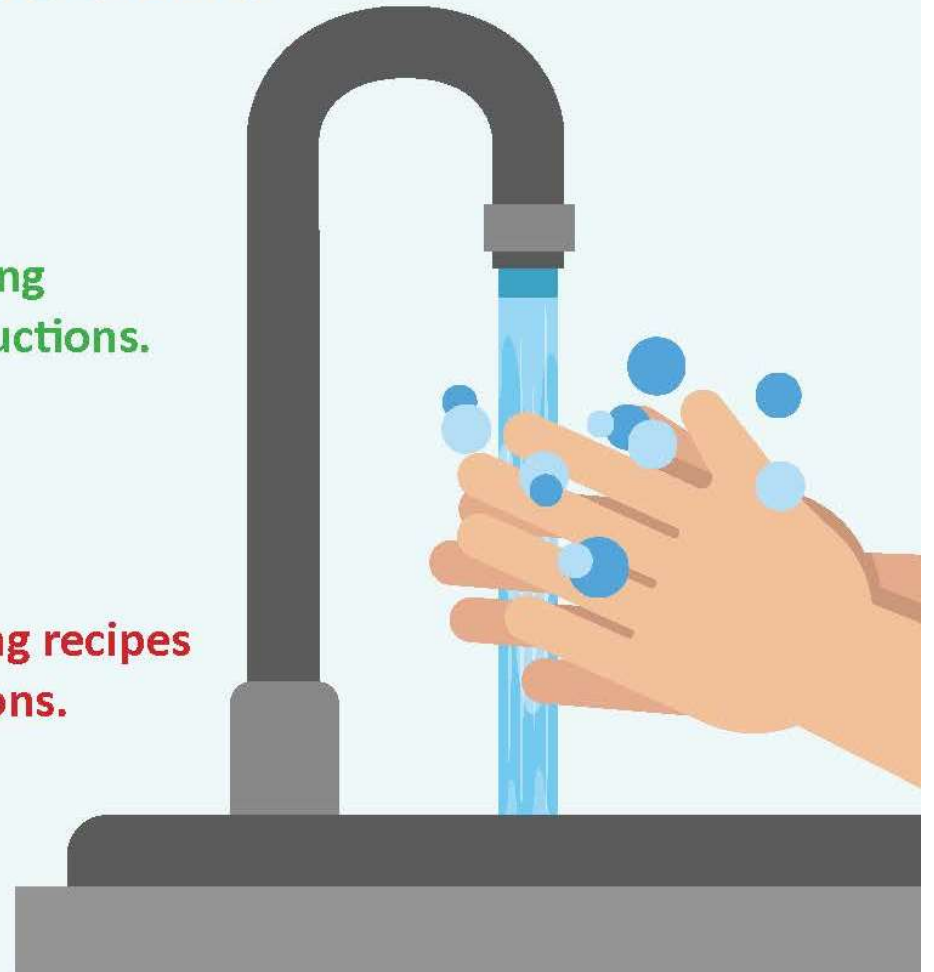
90%

of people wash hands using recipes **WITH** safety instructions.



59%

of people wash hands using recipes **WITHOUT** safety instructions.



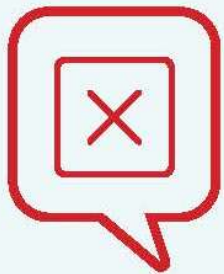
THERMOMETER USE

Observed Consumer Behavior



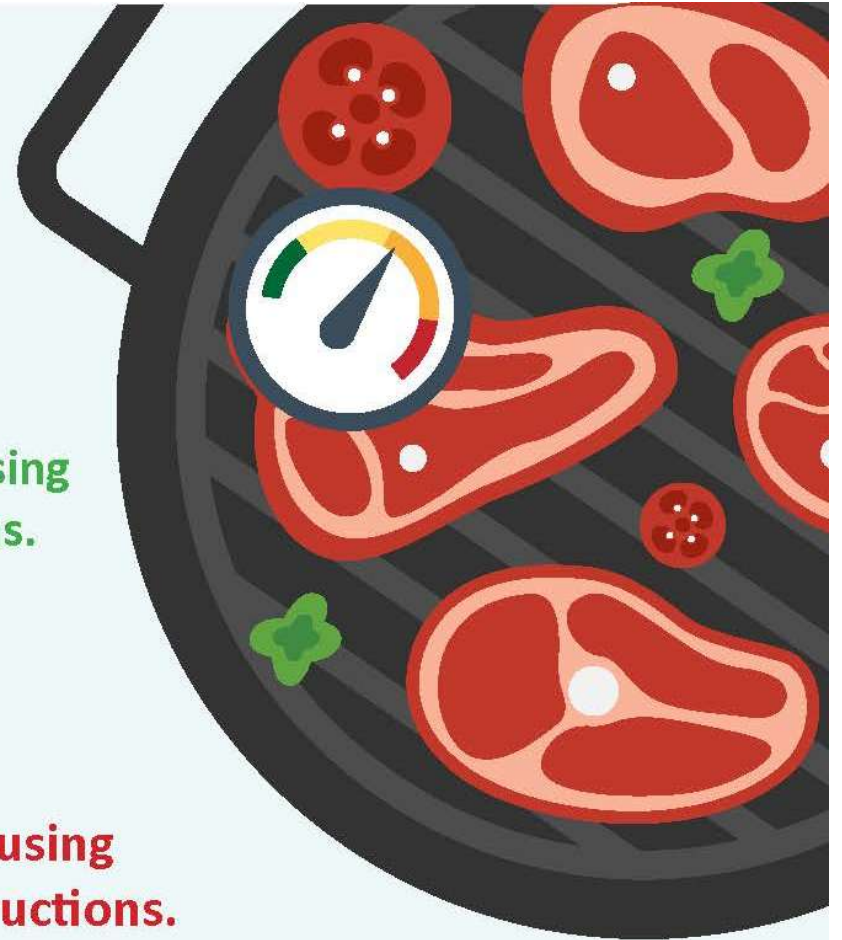
86%

of people use thermometers using recipes **WITH** safety instructions.



20%

of people use thermometers using recipes **WITHOUT** safety instructions.





SAFE RECIPE STYLEGUIDE

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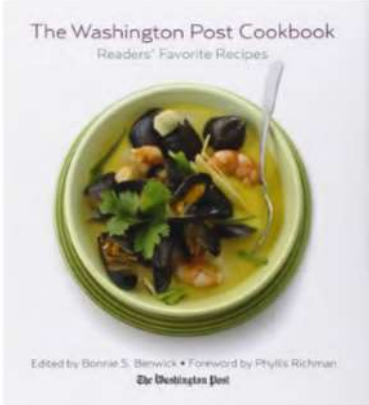
Partnership for
Food Safety
Education



The exact wording was crafted under the guidance of food safety experts and honed with the direction of leading food journalists.

FamilyCircle

The Washington Post



Arlington
MAGAZINE

Orlando
Sentinel

Bethesda
MAGAZINE



The Safe Recipe Style Guide provides recipe text to address the four major areas of *most critical* food safety violations in home kitchens.



TEMPERATURE



HAND WASHING



CROSS
CONTAMINATION



PRODUCE



HAND WASHING

Wash hands with soap and water. *(Include this at beginning of recipe and after each touch of raw meats, poultry, seafood or eggs).*

Instructions

1. **Wash hands with soap and water.**
2. Gently rub the tomato and lettuce under cold running water. Do not rinse raw meat.
3. Slice tomatoes and lettuce.
4. Add ground turkey to a medium mixing bowl. Sprinkle in breadcrumbs, salt, pepper, garlic powder, and onion powder. Add mayonnaise and drizzle in Worcestershire sauce.
5. Gently toss and break up meat mixture to evenly blend. Divide into 4 equal portions and shape into patties about 1/2-inch thick.
6. **Wash hands with soap and water. Wash utensils after touching raw meat.**



TEMPERATURE

Cook until internal temperature reaches XX *(fill in the blank and include chart with specific foods)* on food thermometer.

SAFE MINIMUM INTERNAL TEMPERATURES

as measured with a food thermometer

Beef, pork, veal and lamb
(roast, steaks and chops)

145° F

With a three-minute "rest time" after removal from the heat source

Beef, pork, veal and lamb
(ground)

160° F

8. Add turkey patties and sear until golden brown on bottom, about 4 - 5 minutes, flip and continue to cook until cooked through, about 4 - 5 minutes longer. **Cook until internal temperature reaches 165 °F on a food thermometer.**
9. Serve warm in hamburger buns with toppings of choice.



CROSS

CONTAMINATION

Wash (*insert cutting board, counter, utensil, serving plate*) after touching raw meats, poultry, seafood or eggs).

Do not reuse marinades used on raw foods.

Do not rinse raw poultry or meat.

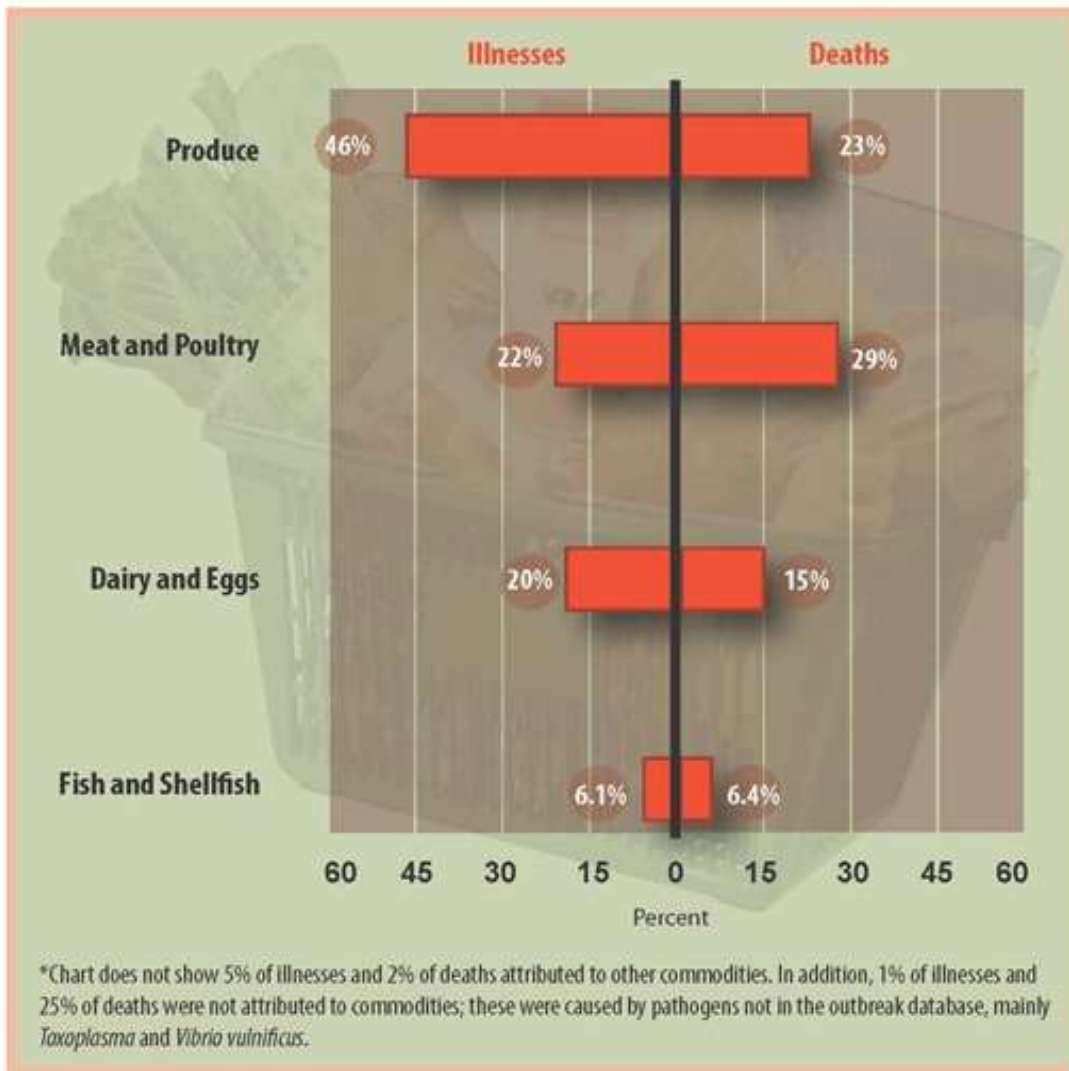
4. Cut the chicken into bite size chunks. **Do not rinse raw poultry or meat. Wash utensils after touching raw meat.**
5. Place the meat and vegetables into a large bowl. Sprinkle with oil, Cajun seasoning, Italian herbs, salt and black pepper. Toss to coat evenly.
6. **Wash large bowl after touching raw meats. Wash utensils after touching raw meat.**
7. **Wash hands with soap and water.**
8. Place the chicken and vegetables on a metal baking pan.

What is the most common source of foodborne illness?

1. Fish & Shellfish
2. Dairy & Eggs
3. Meat and Poultry
4. Produce



[Attribution of Foodborne Illness, 1998-2008 - Images | Estimates of Foodborne Illness | CDC](#)





PRODUCE

Gently rub produce under cold running water.

Scrub firm produce with a clean vegetable brush under running water.

Help

Ingredients

1 mango, diced (or 1 cup thawed frozen [chunks](#))*

1 tablespoon minced onion (optional)

1 tablespoon chopped fresh cilantro (optional)

¼ teaspoon salt

2 tablespoons lime juice

Baked Tortilla Chips from the *Eating Smart • Being Active Let's Cook!* cookbook

Directions

1. Wash hands with soap and water

2. Gently rub fresh mango and cilantro (if using) under cold running water.

3. Scrub onion with a clean vegetable brush under running water.

4. Collect, prepare, and measure all ingredients before starting to prepare the recipe.

5. Combine all ingredients in a medium bowl (or in two bowls if you want to have some without onion).

6. Serve with *Baked Tortilla Chips* from the *Eating Smart • Being Active Let's Cook!* cookbook.

7. Refrigerate leftovers within 2 hours. Eat within 3 to 5 days.

Nutrition Facts

8 servings per container

Serving size 2 Tablespoons (31g)

Amount Per Serving

Calories **15**

% Daily Value*

Total Fat 0g 0%

Saturated Fat 0g 0%

Trans Fat 0g

Cholesterol 0mg 0%

Sodium 75mg 3%

Total Carbohydrate 4g 1%

Dietary Fiber 1g 4%

Total Sugars 4g

Includes 0g Added Sugars 0%

Protein 0g 0%

Vitamin D 0mcg 0%

Calcium 4mg 0%

Iron 0mg 0%

Potassium 50mg 2%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Basic Recipe #5: Pesto Salmon and Veggies

Creating Safe Recipes Activity

Ingredients (makes 4 servings)

- 1 pound salmon, skin and bones removed
- 1 pound zucchini or summer squash
- ½ pound cherry tomatoes
- 1 cup spinach leaves
- 1 cup fresh basil leaves
- ½ cup pine nuts
- ¾ cup grated parmesan cheese
- 3 tbsp olive oil
- 2 cloves minced garlic

Instructions

1. Cut the zucchini and cherry tomatoes.
2. Preheat oven to 400°F.
3. On a sheet pan, arrange the salmon in the middle with the cut veggies and cherry tomatoes in a circle around it. Set aside.
4. In a food processor combine the spinach, basil, Parmesan, pine nuts, olive oil and garlic. Blend until smooth. Spread the pesto on top of the salmon and spoon the remainder on top of the veggies.
5. Bake until the salmon is done and the zucchini/squash can easily be pierced with a fork, about 18 to 20 minutes. Serve warm and enjoy.

*Recipe adapted from 100 Days of Real Food, "Pesto Salmon Sheet Pan Dinner"

Basic Recipe #5: Pesto Salmon and Veggies

Creating Safe Recipes Activity

Ingredients (makes 4 servings)

- 1 pound salmon, skin and bones removed
- 1 pound zucchini or summer squash
- ½ pound cherry tomatoes
- 1 cup spinach leaves
- 1 cup fresh basil leaves
- ½ cup pine nuts
- ¾ cup grated parmesan cheese
- 3 tbsp olive oil
- 2 cloves minced garlic

Instructions

1. **Wash hands with soap and water.**
2. **Gently rub produce under cold running water.**
3. Cut the peppers and potatoes into bite size chunks
4. Cut the chicken into bite size chunks. **Do not rinse raw poultry or meat. Wash utensils after touching raw meat.**
5. Place the meat and vegetables into a large bowl. Sprinkle with oil, Cajun seasoning, Italian herbs, salt and black pepper. Toss to coat evenly.
6. **Wash large bowl after touching raw meats. Wash utensils after touching raw meat.**
7. **Wash hands with soap and water.**
8. Place the chicken and vegetables on a metal baking pan.
9. **Wash hands with soap and water.**
10. Roast in a 425 °F oven for 35 to 45 minutes. Toss a couple times while roasting. **Cook until internal temperature reaches 165° F on a food thermometer.**

Northwest Apple Salad

Serves: 4, 3/4 cup serving
Preparation Time: 10 minutes
Cook Time: 5 minutes



Ingredients:

- 2 medium Granny Smith apples, cut into 1" thick slices
- 2 Tbs dried fruit of preference
- 3 Tbs plain low-fat yogurt
- 1 Tbs whole walnuts, chopped
- Optional: 1 Tbs honey

Allergens: Contains dairy, tree nuts

Equipment:

- Cutting board
- Knife
- Medium bowl
- Measuring spoons
- Small skillet (optional)
- Mixing spoon

Source:

Adapted from Cooking Matters by Share Our Strength

Clark County Food Bank—Nutrition Education Programs — nutrition@clarkcountyfoodbank.org

Directions:

1. Wash hands with soap and warm water for 20 seconds.
2. Gently wash produce under cold running water.
3. Add dried fruit and yogurt to bowl. Mix well.
4. Add chopped nuts to bowl. If using, add honey. Toss and serve.

Notes:

- Use any kind of apple in this recipe.
- Use any kind of nuts in place of walnuts.
- Toasting nuts can make them more flavorful. In a small skillet over medium heat, toast nuts until golden brown and fragrant, about 2 minutes. Watch closely so they do not burn. Remove from pan and let cool before using

Handwashing prompt

Produce washing prompt

"We have moved to putting all of our recipes in a CCFB template – and as we add recipes to the template, we update with the safe recipes guidelines.

So not all at once, but any new recipes we are printing/distributing we are updating with the guidelines.

It is hard to tell how many exactly have been updated, but probably 50+ recipes."

Alison Lauderdale
Director of Community Programs | Clark
County Food Bank

"I did all of these recipes at once. It was a simple process using the style guide and I probably spent an hour to an hour and a half making the changes.

When I made these changes, we were only teaching online with a 7 lesson series.

These were the only recipes we were using for these classes so they were the only ones I modified."

Scott 'Scotty' Parrish

Expanded Food and Nutrition Education Program (EFNEP)
Washington State University Extension



Mango Salsa

Makes: 8 servings (2 tablespoons per serving)
Preparation Time: 10 minutes

Ingredients

1 mango, diced (or 1 cup thawed frozen chunks)*
1 tablespoon minced onion (optional)
1 tablespoon chopped fresh cilantro (optional)
¼ teaspoon salt
2 tablespoons lime juice
Baked Tortilla Chips from the *Eating Smart • Being Active Let's Cook!* cookbook

Directions

1. Wash hands with soap and water
2. Gently rub fresh mango and cilantro (if using) under cold running water.
3. Scrub onion with a clean vegetable brush under running water.
4. Collect, prepare, and measure all ingredients before starting to prepare the recipe.
5. Combine all ingredients in a medium bowl (or in two bowls if you want to have some without onion).
6. Serve with *Baked Tortilla Chips* from the *Eating Smart • Being Active Let's Cook!* cookbook.
7. Refrigerate leftovers within 2 hours. Eat within 3 to 5 days.

Be creative! Substitute peach, papaya, or avocado for mango. Serve as a garnish for chicken or fish.

* To cut a fresh mango:

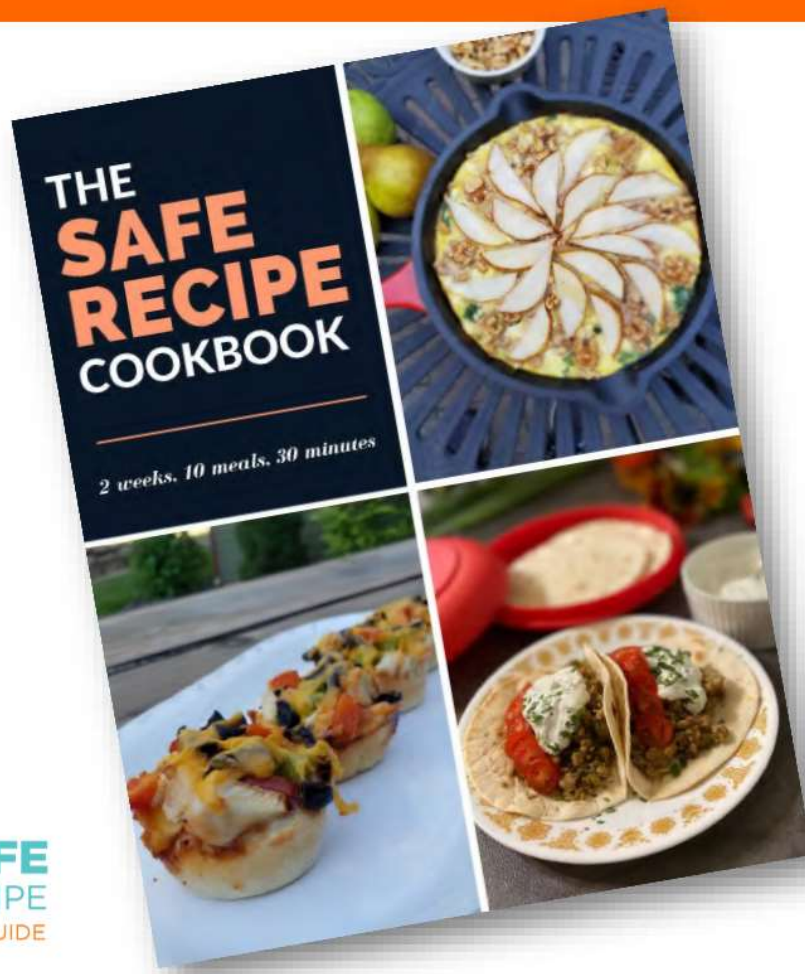
1. Stand it on its end, place the knife about ¼ inch from the center (which is where the pit is), and cut from top to bottom. Repeat on the other side.
2. Discard the center with the pit.
3. With the peel side down, slice the flesh of the mango in parallel lines from top to bottom, about ½ inch apart, and then side to side to create bite-sized pieces, making sure not to cut through the peel.
4. Then, use a spoon to scoop out the flesh. Repeat on the other half.

Extension programs and employment are available to all without discrimination. Evidence of noncompliance may be reported through your local Extension office.

Nutrition Facts	
8 servings per container	
Serving size 2 Tablespoons (31g)	
Amount Per Serving	
Calories	15
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 75mg	3%
Total Carbohydrate 4g	1%
Dietary Fiber 1g	4%
Total Sugars 4g	
Includes 0g Added Sugars	0%
Protein 0g	0%
Vitamin D 0mg	0%
Calcium 4mg	0%
Iron 0mg	0%
Phosphorus 50mg	2%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

New Cookbook Online Now!



30-Minute Safe Recipes

- 10 meals
- 2 weeks of inspired simple meals

fightbac.org/cookbook

fightbac.org/saferecipes



Kids Build Safe Recipes Activity

Middle School Activity:

- Aligns with National Health & Science Education Standards
- Includes lesson plan, activity guide and objectives
- Five sample recipes

<https://www.fightbac.org/safe-recipe-activity>



How will you use the
Safe Recipe Style Guide
for farmer's market recipes?

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