

The Function of Eggs

Lab: 30 Minutes

Zucchini Fries

Ingredients:



- 1 zucchini
- $\frac{1}{4}$ cup bread crumbs
- $\frac{1}{8}$ cup grated parmesan cheese
- 1 egg, beaten

Evaluation:

1. Hypothesize the function of the egg in this recipe.

2. Give reasons for your hypothesis.

3. Compare and describe the outcome of your zucchini fries using the table below:

Zucchini Not Dipped in Egg	Zucchini Dipped in Egg
	

Directions:

1. Preheat oven to 425° F. Line a jellyroll pan with aluminum foil and spray with cooking spray.
2. Cut the zucchini into spears about 2" long.
3. Stir breadcrumbs and Parmesan cheese together in a shallow bowl.
4. In a separate shallow bowl whisk the egg.
5. Take **ONE** zucchini strip and roll in the bread crumb mixture.
6. Dip the rest of the zucchinis into the egg mixture and then roll in the breadcrumb mixture to coat the zucchini.
7. Place coated zucchini fries on the jellyroll pan
8. Bake for 20-24 minutes. After 10-12 minutes turn the zucchini and bake until golden brown.

The Function of Eggs

Lab: 30 Minutes

Vanilla Pudding

Ingredients:



- $\frac{3}{4}$ cup sugar
- 3 T cornstarch
- $\frac{1}{4}$ tsp. salt
- 2 cups milk
- 2 slightly beaten egg YOLKS
- 1 T vanilla extract
- 16 vanilla wafers

Evaluation:

1. Hypothesize the function of the egg in this recipe.
2. Give reasons for your hypothesis.
3. Compare and describe the outcome of your pudding using the table below:

Directions:

1. In a saucepan combine sugar, cornstarch, and salt. Gradually stir in milk. (Pour about $\frac{1}{4}$ cup of milk in at a time mixing completely before you add more milk.)
**While stirring the mixture, scrape the bottom of the pan. Milk will easily burn.*
2. Using a whisk, stir over medium heat until the mixture reaches a boil.
3. Remove $\frac{1}{4}$ cup of mixture and set aside. (This is your pudding without egg.)
4. In a mixing bowl add the 2 egg YOLKS and $\frac{1}{2}$ cup of hot pudding mixture from the saucepan, mix well. (This is call tempering the egg.)
5. Once eggs are mixed, Immediately return them to the saucepan; cook for 2 minutes stirring constantly. Add vanilla extract.
6. Remove from heat and serve with vanilla wafers.

Pudding without Egg	Pudding with Egg
	

The Function of Eggs

Lab: 30 Minutes

Puffed Pancakes

Ingredients:

- $\frac{3}{4}$ cup milk
- $\frac{1}{2}$ cup flour
- 2 large eggs
- $\frac{1}{8}$ tsp. salt
- $\frac{1}{4}$ cup powder sugar (topping)



Evaluation:

1. Hypothesize the function of the egg in this recipe.
2. Give reasons for your hypothesis.

Directions:

1. Place a nonstick mini muffin pan in the oven at 400° F.
2. In a small bowl place 1 Tbsp. of milk, $\frac{1}{4}$ cup of flour, and a dash of salt. Mix and set aside. (This is your eggless puffed pancake. Take it from the $\frac{3}{4}$ cup milk and $\frac{1}{2}$ cup flour listed in the ingredients of this recipe.)
3. While muffin pan is heating, place remaining flour, milk, eggs, and salt in a blender and blend until smooth.
4. Carefully remove the HOT pan from the oven and quickly spray the muffin wells with non-stick spray. Fill each well $\frac{1}{2}$ full of batter. Don't forget the eggless mixture!
5. Bake for 12-18 minutes until the batter puffs and is slightly golden on top.
6. DO NOT OPEN THE OVEN to check on the puffed pancakes.
7. Remove from oven and sprinkle with powder sugar.

3. Compare and describe the outcome of your zucchini fries using the table below:

Puffed Pancakes without Egg	Puffed Pancakes with Egg
	

The Function of Eggs

Lab: 30 Minutes

Meatballs

Ingredients:

- ½ lb. ground beef
- 1 egg
- ½ tsp. salt
- ½ tsp. pepper
- 1 T water
- ¼ cup breadcrumbs
- 3 T parmesan cheese

Sauce:

- ½ cup ketchup
- ¼ cup brown sugar
- 2 T seasoned vinegar
- 1 tsp. mustard

Evaluation:

1. Hypothesize the function of the egg in this recipe.
2. Give reasons for your hypothesis.
3. Compare and describe the outcome of your zucchini fries using the table below:

Directions:

1. Preheat oven to 350°. Line a cookie sheet with tinfoil. Place a cooking rack on top of the tin foil.
2. Place all the meatball ingredients in a bowl EXCEPT the egg and mix together.
3. Using about 2 Tbsp. of ground beef, form a meatball. Place it on the baking rack and fold down one corner of the tin foil to help you remember which meatball doesn't have egg.
4. Add egg to the remaining ground beef mixture and form into 1" meatballs.
5. Place remaining meatballs on cooking racks and bake at 350° for 15-20 minutes.

Sauce:

1. While meatballs are cooking prepare sauce.
2. Place all ingredients into saucepan and cook on med-high heat until warm.
3. Combine cooked meatballs with sauce and serve.

Meatball without Egg	Meatball with Egg
	