



# Make it Fresh with Cooking Counts

## Lesson Plans for: *Apple Cinnamon Crumb Muffin*

### Course Description:

This hands-on training will introduce you to the Apple Cinnamon Crumb Muffin recipe and help you better understand the process of making the muffins following the standardized recipe.

Estimated class time: 3 hours

### Local Ingredients:

This recipe features the following local ingredient(s): apples, eggs and flour.

[Choose Iowa Food of the Month Resources](#)

### Preparation:

Equipment Needed	Grocery List
Large mixing bowl	Oat flour or quick oats
Medium mixing bowl	Whole grain flour
Grater or food processor	Baking soda
Spoon or rubber spatula	Ground cinnamon
#12 scoop	Brown sugar
Peering knife or vegetable peeler	Eggs-6 oz
Muffin tins	Vegetable oil
Paper muffin liners	Vanilla extract
	Granny smith apples

### Opening Remarks:

Today's lesson is muffins, which is a form of quick bread. Quick breads are the perfect solution for food service operations that want to offer students fresh homemade bread products with ingredients that are readily available. Today's recipe is a fruit filled muffin with scrumptious crumb topping.

### Understand the Ingredients and Methods:

The recipe we are using today uses the muffin method. This mixing method is used for muffins, pancakes, waffles and many loaf-type quick breads. This method is fast and easy. However, the danger is the dough can quickly become overmixed, resulting in toughness and tunneling. Muffin batter should be mixed only until the dry ingredients are just moistened. Do not attempt to achieve a smooth batter.

This recipe uses whole grain flour which is made by grinding the entire wheat kernel, including the bran and germ.

- Pass a container of whole grain flour and a container of all purpose, white flour around the class.
- Encourage participants to look at, touch and smell the two flours.
- Discuss the differences observed.



Because it is made from wheat, the flour contains gluten forming proteins. These proteins are what helps to form elasticity that is desirable in yeast breads, but not in muffins. This recipe balances the wheat flour with oat flour. The oat flour does not contain gluten and has the added benefit of additional absorption of liquid created by the apple. The end product will be a tender and flavorful muffin.

## Show video:

[Apple Cinnamon Crumb Muffin](#)

## Lab:

Remember your mise en place!

Prepare recipe

(This can be done in teams, individually or as a demonstration)

## Discussion and Evaluation:

1. Did you achieve the yield identified in the recipe? Why or why not?
2. Review the appearance of the finished product. Do the muffins have a consistent shape and color? Do they have a nice rounded top and not pointed or knobby?
3. Cut a muffin in half. Do you see any signs of tunneling (irregular, elongated holes inside the muffin)? This is a sign of overmixing the batter.
4. Take a bite of the muffin. Does it have a soft, tender bite?
5. Evaluate the flavor.
6. What potential challenges and solutions do you see when making this recipe for a large number of students?
7. When customizing this recipe for your operation what modifications need to be made to the standardized recipe to make it work in your facility with your staff and your equipment?