



Make it Fresh with Cooking Counts Lesson Plans for: *Measuring Techniques*

Course Description:

This hands-on training will introduce you to the concept of Measuring Techniques and help you to better apply these principles when using standardized recipes.

Estimated class time: 2 hours

Preparation:

Equipment Needed:

Basics at a Glance Poster
Gourmet Crispito Recipe
Scales
Measuring cups
Measuring spoons
Liquid measuring picture
Scoops, ladles, spoodles

Grocery List:

Flour
Honey
Sliced ham or turkey
Salt
Brown sugar
Sugar
Rice
Wheat flour
Coconut flakes

Opening Remarks:

Today's lesson is Measuring Techniques. There are two important kinds of measurement in the kitchen, ingredient measurement and portion measurements. Both are important for food quality, accurate meal pattern contribution and controlling food costs.

Measuring Methods:

Weight is a measurement of an object's heaviness which varies by density. Most recipe ingredients are measured by weight, so accurate scales are important for your kitchen. Portion scales are used for measuring ingredients as well as for portioning products for service. Tractional portion scales are spring-operated and usually have a dial to indicate weight. Digital scales are electrically operated and provide a digital readout which can be more precise than a spring scale.

Volume is a measure of the amount of space something takes up. Measures in volume are expressed in units such as gallon, quart, pint, cups and teaspoons. Fluid ounce is a unit used to measure volume of liquid ingredients and abbreviated as fl. oz.

[Basics at a Glance Poster](#) - Share with participants and point out features.

*This project was funded using U.S. Department of Agriculture grant funds.
The USDA is an equal opportunity provider and employer.*



Portion Control:

Portion control actually begins with the measuring of ingredients. If this is not done correctly, the yield of the recipe will be wrong. Portion control is also the measurement of portions to ensure the correct amount of an item is served. In order for portion control to be carried out, cooks and service personnel must be aware of proper portion sizes. These are indicated on the standardized recipes and on the production records. All scoops, ladles, spoodles and other utensils used for service have a serving size stamped on the utensil.

Show video:

[Measuring Techniques](#)

Lab:

Procedure for weighing ingredients:

1. Place the receiving container on the scale.
2. Press the "tare" button or set the dial to "0."
3. Add the item being weighed to the container, add until the scale reads the desired weight.

Activity: Have class participants practice by weighing:

- 10 oz of flour
- 3 oz of honey
- 2 oz sliced ham or turkey

Procedure for volume measure:

1. Select the appropriate measuring device.
2. Fill the measuring device to heaping.
3. Level with a flat edge.

Activity: Have class participants practice by measuring:

- 1 tsp salt (fill tsp and level with a flat surface)
- 1 cup brown sugar (pack brown sugar in cup)
- $\frac{1}{4}$ cup sugar
- 1 qt water

One cup does not always equal 8 oz.

Activity: Have class participants first measure 1 cup of the following ingredients, then weigh the 1 cup of product.

- Uncooked rice
- Milk
- Wheat flour
- Coconut flakes

Portion Control: Proper portion control requires accuracy when measuring ingredients and when serving food.

*This project was funded using U.S. Department of Agriculture grant funds.
The USDA is an equal opportunity provider and employer.*



Activity: Using the *Gourmet Crispito* recipe, gather all of the tools that you will need to properly measure at each step of preparation and service of this menu item. (Hint--don't forget to measure the ingredients in your recipe!)

The number on a scoop represents the number of scoops it takes to fill 1 quart.

Activity: Using the #8 scoop, see how many scoops it takes to fill 1 quart with water.

Discussion and Evaluation:

1. What observations did you have when measuring by volume?
2. What observations did you have when measuring by weight?
3. Do you typically use weights or volume to measure recipes in your kitchen?
4. Which method (weight or volume) do you think is better? Why?
5. What observations did you have when weighing 1 cup of rice, milk, flour and coconut? Did they all weigh 8 ounces?
6. Did you have all of the measuring devices needed for the *Gourmet Crispito* recipe?
7. Were you able to read the number stamped on the scoops, ladles and spoodles and understand what they mean?

*This project was funded using U.S. Department of Agriculture grant funds.
The USDA is an equal opportunity provider and employer.*