**Project:** *How the Cookie Crumbles*

**FNS Course 1**

**Essential Question:** Can we bake a healthier sugar cookie that tastes like the original recipe?

**Engagement Scenario**: With obesity rates in the United States among the highest in the world, increasing from 13% in 1962 to 35.7% in 2010[[1]](#footnote-1), the head of baking at the \_\_\_\_\_\_ Foods Company has decided to offer a new version of the company’s best-selling sugar cookie using a healthier recipe. To accomplish this, the company has decided to hold a competition among teams of its bakers to determine which new recipe will be accepted and marketed.

Your team is to develop a new recipe while trying to maintain the desirable qualities of the current popular cookie. You are also responsible for designing a new package for the cookies – one that will help maintain the current sales level of the cookie. Develop a package on which all claims meet FDA standards. You will also design a food label that meets FDA standards.

A very important component of the competition is a sensory evaluation to determine if your new cookie tastes good enough to market. Your team will design and conduct a sensory evaluation as well.

To accomplish your task, you and your team will research the roles different ingredients play in cookie recipes and what can be done to make a cookie healthier. In addition, you will research the regulations regarding food labels and attributes of quality, marketing-friendly packaging. In order to judge the palatability of the new cookie, you will need to research how to design a sensory evaluation and quantify and analyze the results. You will keep your research notes, plans, and sensory test results in a research notebook.

After researching on-line resources and other informational texts on healthier recipes and sensory evaluation, and after participating in enabling activities in class, write a report to the officials of your company that compares the new cookies to the original cookies and argues for the inclusion of the new, healthier cookie in the company’s product line. Be sure to support your position with evidence from the texts and results from the sensory evaluation. You will research via the internet and will organize and treat data using an MS Excel spreadsheet with appropriate mathematical procedures. You will investigate how to experimentally determine caloric content of foods and calculate experimental error.

A presentation, based upon your report, will be presented to bakers and marketing officials in a format of your design. You will need to include data from the sensory evaluation and other supporting evidence from your research.

1. <http://www.reuters.com/news/pictures/slideshow?articleId=USRTXT3DK#a=1> - Reuters.com [↑](#footnote-ref-1)