



Curriculum Units by Fellows of the Yale-New Haven Teachers Institute  
2009 Volume III: Science and Engineering in the Kitchen

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## **Edible Transformations**

Guide for Curriculum Unit 09.03.11  
by Melissa Talarczyk

Imagine ice cream, chocolate and gelatin teaching your students about science. This two-and-a-half-week unit designed for students in kindergarten to second grade allows you to do just that. Students will discover how transformations or changes occur in the kitchen. Students will discover how flour and baking soda react as they are mixed with a variety of liquids. They will observe the changes that occur as a liquid, colored sugar water, freezes, melts and evaporates. Students will see demonstrations of the three phases of matter, leading into discussion of the water cycle or weather patterns. Students will make and compare two types of gelatin. To discover how temperature transforms solids and liquids, the students will follow a recipe to make ice cream and chocolate sauce. Finally, they will observe the growth of a seed as it transforms and becomes something completely different, a radish. This unit is a great way to teach hands-on science activities using food while incorporating writing and math. Students will be able to write about the changes they observe using their five senses, the steps to each mixture, following directions and counting how much of each ingredient is added.

(Developed for Science and Writing, grade K; recommended for Science and Writing, grades K-2)

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