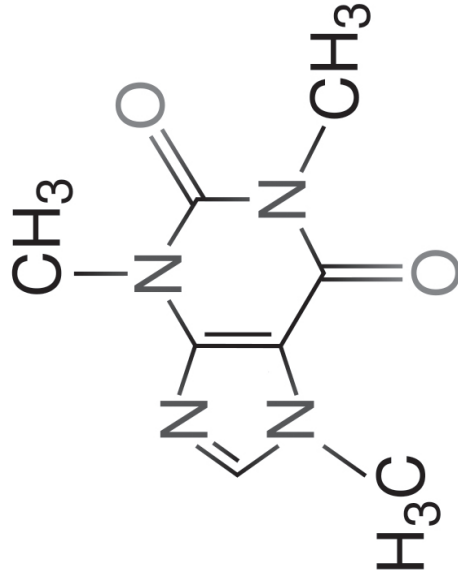


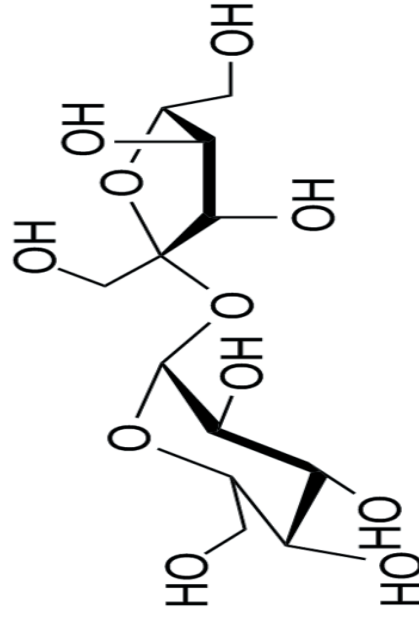
# Chemistry Through Food

## Charlie Abrams

Professor Abrams has taught at Truman College since 2002, and was at Beloit College for five years prior to that. As a graduate student, he used his creative energies to create new molecules in the laboratory, and now pours that energy into teaching and cooking. His students eagerly anticipate his food chemistry demonstrations. The most entertaining and informative of these are presented in this series for the general public.



Caffeine



Sugar

## Joy Walker

Professor Walker has taught at Truman College since 1982 in the areas of Physical Science, Chemistry and Web Development. She loves the lore and beauty of chemistry, delighting in the study of herbs, applying chemistry to baking and cooking and learning about the ways that an understanding of chemical principles can lead to interesting and creative culinary creations.



Charlie Abrams and Joy Walker  
cabrams@ccc.edu, jwalker@ccc.edu  
<http://chemistrythroughfood.com>  
©2010 all rights reserved

*a series of entertaining lectures...*

# Chemistry Through Food

These seven entertaining lectures and demonstrations about chemistry and food are presented by Charles Abrams and Joy Walker. Each session includes fascinating stories about food and its preparation with emphasis on the chemistry that underlies the way we experience food. Optional tasting opportunities are provided. You will learn practical chemical concepts that will change the way you think about food and its preparation. There are seven sessions. The cost of the class is \$149. No prerequisites. Class meets from 6:30 PM to 7:30 PM.

## Emulsions and Foams

**June 16th**

In this presentation we will explore the properties of emulsions and foams and answer questions such as: Do eggs whites beat to a stiffer consistency in a copper bowl? Can chocolate mousse be made without cream? How does soap remove grease?

## Deceptions

**June 23rd**

How can our taste buds be deceived? We will learn about Mock Apple Pie, the Miracle Berry and the fifth taste: umami and the MSG controversy.

## Delightful and Dangerous Spices

**June 30th**

Does "natural" mean "safe"? In this lecture we explore some toxic chemicals naturally present in spices, illustrating how they are detected and examining the relative risks of ingesting them.

## Through the Looking Glass: Mirror Molecules and Their Oddly Different Properties

**July 7th**

Just as your right hand differs from your left, some molecules differ from each other only as mirror images. The implications of this subtle difference can be as benign as different tastes, or as critical as life or death. In this lecture, you will taste and smell this difference and learn how it is exploited by drug manufacturers for profit.

## Brown Apples and Muddy Guacamole

**July 14th** Explore the processes of oxidation with us and we test different ways to keep apples white and guacamole green.

## Enzymes: Gels and Liquids

**July 21st** Can jello contain fresh pineapple? How do they liquefy the centers of cherry cordials (chocolates)? Hear the mysteries of enzymatic action revealed.

## The "Pop" in Soda and the "Rise" in Cakes, Cookies and Biscuits

**July 28th**

Learn the difference between baking soda and baking powder. Learn how acids and bases react in food.

## When and Where

All lectures take place on Wednesday evenings from 6:30 pm to 7:30 pm at Truman College, 1145 W. Wilson Ave. Chicago, Illinois 60640. Call (773) 907-4440 for more information or to register.

