



Healthy Menus from the Periodic Table

By: Lamont Moore

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Science
Grades 9–12



Introduction

Students will learn about how many elements on the periodic table are found in the foods we eat every day. They will then utilize the periodic table to create an authentic-looking menu for healthy eating.

Learning Objectives

Students will:

- ([CCSS.ELA-LITERACY.RST.9-10.1](#)) Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.
- ([CCSS.ELA-LITERACY.RST.9-10.7](#)) Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.

Materials Needed

- [Periodic Table](#)
- [Food Chemistry Periodic Table](#)
- Laptop/computer with menu template or other publishing software
- Sample restaurant menus (online or print)

Procedure

1. Prior to this lesson make sure that the students have a working prior knowledge of the periodic table.
2. Begin the lesson by having a dialogue with the students regarding whether or not they have wondered which elements from the periodic table are in the foods we eat each day. Guide the students to think of some easy examples that come to mind (i.e. potassium in bananas, calcium in milk, etc.).
3. Take a moment to introduce the students to the Food Chemistry Periodic Table. Be sure to highlight how the table reveals which foods contain certain elements.
4. Provide the students with sample menus from area restaurants (online or print versions). In small groups, have the students choose items from the menu and identify which elements from the periodic table make up the menu item. You may want to demonstrate this for the students prior to them doing it with their groups. Afterwards talk about the patterns that they noticed in the menu (commonly used elements, elements that are rarely used, etc.).

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5. Challenge the students to create a healthy menu that will be written using the element names as opposed to the traditional food names. The students should utilize publishing software or other publishing tools to make the menu look authentic and eye-catching.

Evaluation

The completed menus will serve as evaluation of this lesson. A rubric should be used to evaluate the menus. The rubrics should measure for how accurately the students matched the element to the menu item, how eye-catching and realistic the menu looks, and the level of collaboration between team members.