



FDA/NSTA Symposium: Teaching Nutrition Science and the Food Label Friday, November 13, 2009

8:00 AM – 8:25 AM

Welcome, Introductions, Goals for the Symposium

Flavio Mendez, Acting Assistant Executive Director, Gov't Partnerships and e-Learning, NSTA
Louise Dickerson, Project Officer for FDA's Professional Development Program in Food Science
Paul Tingler, Acting Senior Director, The NSTA Learning Center, NSTA

- About NSTA Symposia
- Agenda/Goals/Forms/Logistics/Introductions

Crystal Rasnake, M.S., Office of Nutrition, Labeling, and Dietary Supplements, CFSAN, FDA
Blakely Denkinger, Office of Nutrition, Labeling, and Dietary Supplements, CFSAN, FDA
Mimi Cooper, Master Teacher – Middle School Science
Elena Stowell, Master Teacher – High School Science

8:25 AM – 9:00 AM

Introduction to Nutrition

Crystal Rasnake

Learning Outcome:

After participating in the presentation,

- Participants will be able to distinguish between a micronutrient and a macronutrient
- Participants will be able to identify the food categories of the Dietary Guidelines for Americans as depicted in the food pyramid

9:00 AM – 9:40 AM

Understanding and Using the Food Label

Blakely Denkinger

Learning Outcomes:

After participating in the presentation,

- Participants will explain how to identify serving size and calories on the label.
- Participants will identify nutrients to limit and nutrients of which to get enough.
- Participants will describe how to use the %DV to help construct a healthy total daily diet.
- Participants will identify two nutrients that do not have %DVs.
- Participants will describe how to compare the amount of sugars in products.

9:40 AM – 10:30 AM

Activity 1: On the Label!

Mimi Cooper, Elena Stowell, and Crystal Rasnake

Learning Outcomes:

After participating in the activity,

- Participants will explain the relationship between serving size and calories.
- Participants will describe how to use the label to compare the amount of saturated fat in two products.
- Participants will describe how to use the ingredient label to supplement information found on the Nutrition Facts Label.



10:30 AM – 10:45 AM

Break

10:45 AM – 11:45 AM

Activity 2: Sugar in Beverages.

followed by LabelMan Demonstration & Other Nutrition Teaching Resources

Blakely Denkinger, Crystal Rasnake, Mimi Cooper, and Elena Stowell

Learning Outcomes:

After participating in the presentation, participants will be able to:

Participants will be able to demonstrate how much sugar is in a variety of beverages

11:45 AM – 12:00 PM

Q&A Discussion

Crystal Rasnake, Blakely Denkinger, Mimi Cooper, and Elena Stowell

12:00 PM – 12:30 PM

Final Words

- Post-assessment form
- Evaluation form/Survey/Credit info
- NSTA Web Seminars
- Drawing of prizes; Deliver Handouts

Benchmarks and National Science Education Standards Addressed:

From the *Benchmarks for Scientific Literacy* Grades 6 through 8

Chapter 5 The Living Environment

By the end of 8th grade, students should know that
Flow of Matter and Energy

- ◆ Food provides molecules that serve as fuel and building material for all organisms. (5E/M1a)

Chapter 6 The Human Organism

By the end of 8th grade, students should know that

Human Identity

- ◆ Like other animals, human beings have body systems for obtaining and deriving energy from food and for defense, reproduction, and the coordination of body functions. 6A/M1

Basic Functions

- ◆ For the body to use food for energy and building materials, the food must first be digested into molecules that are absorbed and transported to cells. (6C/M2)

Physical Health

- ◆ The amount of food energy (calories) a person requires varies with body weight, age, sex, activity level, and natural body efficiency. (6E/M1a)
- ◆ Viruses, bacteria, fungi, and parasites may infect the human body and interfere with normal body functions. A person can catch a cold many times because there are many varieties of cold viruses that cause similar symptoms. (6E/M3)

The Designed World

By the end of 8th grade, students should know that
Health Technology

- ◆ Sanitation measures such as the use of sewers, landfills, isolation, and safe food handling are important in controlling the spread of organisms that cause disease. Improving sanitation to prevent disease has contributed more to saving human life than any advance in medical treatment. (8F/M1)

From the *National Science Education Standards*

Content Standards, 5-8

Content Standard C:
Life Science

As a result of their activities in grades 5-8, all students should develop an understanding of

Structure and Function in Living Systems

- ◆ Cells carry on the many functions needed to sustain life. They grow and divide, thereby producing more cells. This requires that they take in nutrients, which they use to provide energy for the work that cells do and to make the materials that a cell or an organism needs. #3
- ◆ Disease is a breakdown in structures or functions of an organism. Some diseases are the result of intrinsic failures of the system. Others are the result of damage by infection by other organisms. #6
- ◆ All living organisms must be able to obtain and use resources, grow, reproduce, and maintain stable internal conditions while living in a constantly changing external environment. #12

Content Standard F:

Science in Personal and Social Perspective

As a result of their activities in grades 5 – 8, all students should develop an understanding of

Personal Health

- ◆ Food provides energy and nutrients for growth and development. Nutrition requirements vary with body weight, age, sex, activity, and body functioning. #5

Risks and Benefits

- ◆ Students should understand the risks associated with natural hazards (fires, floods, tornadoes, hurricanes, earthquakes, and volcanic eruptions), with chemical hazards (pollutants in air, water, soil, and food), with biological hazards (pollen, viruses, bacterial, and parasites), social hazards (occupational safety and transportation), and with personal hazards (smoking, dieting, and drinking). #14