

# SCIENCE AND OUR FOOD SUPPLY

Using the **Nutrition Facts Label**  
to Make Healthy Food Choices

Education Standards by Activity								
	Serving Size and Calories	Sugar in Beverages	Sodium in Snack Foods	Meal Planning	Interactive Label Research	Grease Spot Test	Eating on the Go!	✓ Your Snacks
NGSS – Physical Science: Structures and Properties of Matter			✓		✓	✓		
NGSS – Life Science: Matter and Energy in Organisms and Ecosystems	✓	✓	✓	✓	✓	✓	✓	✓
NGSS – Life Science: Growth, Development, and Reproduction of Organisms	✓	✓	✓	✓	✓	✓	✓	✓
NGSS – Engineering Design				✓			✓	
NSFCSE: Food Science, Dietetics, and Nutrition	✓	✓	✓	✓	✓	✓	✓	✓
NSFCSE: Nutrition and Wellness	✓	✓	✓		✓	✓	✓	✓
National Health Education Standards (1)	✓	✓	✓	✓	✓	✓	✓	✓
National Health Education Standards (2)		✓					✓	✓
National Health Education Standards (3)	✓	✓	✓	✓	✓	✓	✓	✓
National Health Education Standards (4)				✓			✓	✓
National Health Education Standards (5)				✓			✓	✓
National Health Education Standards (6)				✓			✓	✓
National Health Education Standards (7)				✓			✓	✓
Common Core, ELA/Literacy	✓	✓	✓	✓	✓	✓	✓	✓
Common Core, Math	✓	✓	✓	✓	✓	✓	✓	✓

See next pages for full standards: NGSS, NSFCSE, National Health Education Standards, and Common Core Math and ELA/Literacy

## NGSS – Next Generation Science Standards Arranged by Topics

### Structure and Properties of Matter:

- MS-PS1-1 Develop models to describe the atomic composition of simple molecules and extended structures.

### Matter and Energy in Organisms and Ecosystems:

- MS-LS1-7 Develop a model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism.
- MS-LS2-1 Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.
- MS-LS2-3 Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.

### Growth, Development, and Reproduction of Organisms:

- MS-LS1-5 Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.

### Engineering Design:

- MS-ETS1-2 Evaluate competing design solutions using systematic process to determine how well they meet the criteria and constraints of the problem.

## NSFCSE – National Standards for Family and Consumer Science Education

### Food Science, Dietetics, and Nutrition Competencies:

- 9.3.1 Analyze nutrient requirements across the life span addressing the diversity of people, culture, and religions.
- 9.3.2 Analyze nutritional data.
- 9.3.6 Critique the selection of foods to promote a healthy lifestyle.
- 9.4.1 Analyze nutritional needs of individuals.
- 9.7.1 Explain the properties of elements, compounds, and mixtures in foods and food products.
- 9.7.4 Explain the impact of molecular structure of simple and complex carbohydrates on digestion, nutrition, and food preparation procedures.
- 9.7.5 Relate the composition of lipids and proteins to their functions in foods and their impact on food preparation and nutrition.

### Nutrition and Wellness Competencies:

- 14.2.1 Analyze the effect of nutrients on health, appearance, and peak performance.
- 14.2.2 Analyze the relationship of nutrition and wellness to individual and family health throughout the life span.
- 14.2.4 Analyze sources of food and nutrition information, including food labels, related to health and wellness.
- 14.3.1 Apply various dietary guidelines in planning to meet nutrition and wellness needs.

### National Health Education Standards (CDC/American Cancer Society)

- (1) Comprehend concepts related to health promotion and disease prevention to enhance health.
- (2) Analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.
- (3) Demonstrate the ability to access valid information and products and services to enhance health.
- (4) Demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
- (5) Demonstrate the ability to use decision-making skills to enhance health.
- (6) Demonstrate the ability to use goal-setting skills to enhance health.
- (7) Demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risk.

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### Common Core, ELA/Literacy

- W.8.1 Write arguments to support claims with clear reasons and relevant evidence.
- W.8.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to the task, purpose, and audience.
- SL.8.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade-level topics, texts, and issues, building on others' ideas and expressing their own clearly.
- L.8.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- L.8.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.
- L.8.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.
- RH.8.7 Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.
- RST.8.3 Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.
- RST.6-8.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.

### Common Core, Math

- 5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.
- 5.MD.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m) and use these conversions in solving multi-step, real world problems.
- 6.NS.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithms for each operation.