

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	Get the Facts about Fat	Saturated and Unsaturated Fat Modeling	Two Meals on the Go	✓ Your Snacks
NGSS – Physical Science: Structures and Properties of Matter			✓		✓	✓		
NGSS – Physical Science: Chemical Reactions			✓		✓	✓		
NGSS – Life Science: Matter and Energy in Organisms and Ecosystems	✓	✓	✓	✓	✓	✓	✓	✓
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

- HS-PS1-1 Use the periodic table as a model to predict the relative properties of elements based on the pattern of electrons in the outermost energy level of atoms.
- HS-PS2-6 Communicate scientific and technical information about why the molecular-level structure is important in the functioning of designed materials.

Chemical Reactions

- HS-PS1-2 Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties.

Matter and Energy in Organisms and Ecosystems

- HS-LS1-6 Construct and revise an explanation based on evidence for how carbon, hydrogen, and oxygen from sugar molecules may combine with other elements to form amino acids and/or other large carbon-based molecules.
- HS-LS1-7 Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules and oxygen molecules are broken and the bonds in the new compounds are formed, resulting in a net transfer of energy.

Engineering Design:

- HS-ETS1-2 Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.

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.11-12.1 Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient information.
- W.11-12.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to the task, purpose, and audience.
- SL.11-12.1 Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11-12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
- L.11-12.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- L.11-12.6 Acquire and use accurately general academic and domain-specific words and phrases sufficient for reading, writing, speaking and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.
- RH.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.
- RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
- RST.11-12.4 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 11-12 texts and topics.

Common Core, Math

- N-Q Reason quantitatively and use units to solve problems.