Unit 08: Dairy Products

Content Area: **Family and Consumer Sciences**
Course(s):
Time Period: **Marking Period 1**
Length: **2 Weeks**
Status: **Published**

Brief Summary of Unit

In this unit, students will explore the nutritive value of all dairy products. They will use dairy products in a variety of recipes to learn the principles of cooking with dairy. As they study this unit, students will understand and discuss osteoporosis and lactose intolerance. In this course, students are provided with opportunities to develop skills that pertain to a variety of careers. When completing this course, students can make informed choices and pursue electives in the FCS program that further their study and contribute toward the formation of career interest.

Reviewed Summer 2026

Standards

National Standards for Family and Consumer Sciences Education

Standard 8.0 Food Production and Services Comprehensive Standard: Integrate knowledge, skills, and practices required for careers in food production and services.

8.3.6 Identify a variety of types of equipment for food processing, cooking, holding, storing, and serving, including hand tools and small ware.

8.5.4 Apply the fundamentals of time, temperature, and cooking methods to cooking, cooling, reheating, and holding a variety of foods.

Standards for Mathematical Practice (2023)

MATH.K-12.1 Make sense of problems and persevere in solving them

MATH.K-12.5 Use appropriate tools strategically

Practices of English Language Arts (2023)

ELA.K-12.1 Developing Responsibility for Learning: Cultivating independence, self-reflection, and responsibility for one’s own learning.

ELA.K-12.2 Adapting Communication: Adapting communication in response to the varying demands of audience, task, purpose, and discipline.

Comprehensive Health and Physical Education Practices (2020)

HE.K-12.P.3 Communicating clearly and effectively (verbal and nonverbal)

Career Readiness, Life Literacies and Key Skills

9.3.IE.9-12.1 Develop and execute discipline-specific research processes appropriate to the complex prompt, question, task, or self-driven inquiry

9.4.KC.9-12.1 Work effectively in teams by adapting to roles, valuing diverse perspectives, and using strategies and tools to achieve shared goals.

ELD standards:

Standard 1: Language for Social and Instructional Purposes

English language learners communicate for social and instructional purposes within the

school setting.

Essential Questions

- What are important tips to remember when cooking with dairy products?
- Why are dairy foods essential to optimal health?

Students Will Know

- how to store and prepare milk, yogurt, and cheese products.
- key terms: curds, whey, lactose, homogenized, pasteurized, scum, scorching, roux, and curdling.
- various ways to enjoy milk, yogurt, and cheese in meals and snacks.
- how to prevent osteoporosis

Students Will Be Skilled At

- cooking with dairy and following the critical techniques to make homemade macaroni and cheese
- identifying a dairy recipe appropriate for their skill level and time limitations
- identifying which foods within the dairy group are more healthful
- understanding lactose intolerance and how it is treated.
- understanding osteoporosis and how it is prevented and treated.
- understanding the importance of dairy in bone health

Evidence/Performance Tasks

FCS courses are designed to promote skill attainment. Student progression and pace through which they proceed through the performance tasks is based on their affinity for and ability to reach skill attainment. The teacher will determine formative and summative skill attainment; alternative assessments will be incorporated for each student based on their strengths and challenges.

Students will:

- actively and meaningfully participate in performance tasks
- be evaluated by the teacher through observation of performance.
- complete a self evaluation rubric of performance.
- complete reflection(s) on foods experiment: ripened or processed? (re: cheese), write comparisons and make conclusions
- complete the unit quiz: dairy.
- meaningfully participate in guided question and answer sessions, group and individual discussions
- participate in related labs.
- read Nutrition Fact Sheet on Lactose Intolerance and summarize important points / interesting ideas presented.
- read Osteoporosis article from MayoClinic. In groups, answer and discuss answers to questions based on personal perspectives.
- show an understanding of the purpose of the unit lesson(s), and the key terms and concepts.

Learning Plan

- Administer Quiz: dairy
- Engage students in a Food Experiment. Ripened or Process Cheesed? Cut two small, same size slices: one of ripened cheese, such as natural cheddar, and one of processed cheese, such as American. Place each on a cracker or a crusty bread slice. Put both in a toaster oven at 300*F. Watch closely until both melt. Engage students in discussing observations and differences in taste, appearance and overall qualities
- Engage students in a Reading Activity: Nutrition Fact Sheet on Lactose Intolerance where they summarize the important points, present and discuss with a partner.
- Engage students in discussion: Ask students “What are some of your favorite foods made with dairy products? Why are dairy products especially important to teens?” Record responses on board.
- Engage students in Reading Activity: “Osteoporosis.” Students will read multiple articles individually and then discuss and answer questions in groups of four comparing and contrasting the viewpoints of each article

- Facilitate Dairy Lab #1: Have each lab group prepare Macaroni and Cheese from scratch in order to understand how to make a roux and a white sauce.
- Facilitate Dairy Lab #2: Cheesecake Bake-Off. Each group is to make a different type of homemade cheesecake to be judged. A suggestion is to involve the staff in charging a fee for participation where the money raised may be given to a local charity determined by the students
- Facilitate Milk activity: Using the textbook resource containing the Guide to Good Food, help students complete the dairy study guide.
- Facilitate Taste Testing: Have students taste four different types of milk: whole milk, skim milk, 2 % milk, and buttermilk. Students record the look of the milk and the taste of the milk.
- Have students complete Calcium questionnaire to help them calculate how much calcium they get in a day. Support students in understanding how to determine the quantity of calcium they intake as needed
- Preview the essential questions and connect to learning throughout the unit.

Materials

The materials used in this course allow for integration of a variety of instructional, supplemental, and intervention materials that support student learners at all levels in the school and home environments. In addition to the materials below, the link connects to district approved textbooks and resources utilized in this course: CORE BOOK LIST

- Interactive use of SmartBoard
- Software programs
- Topic related videos or DVDs
- Virtual Field Trips
- Web sites
- Necessary kitchen equipment
- Necessary recipes and ingredients

Suggested Strategies for Modifications

This link includes content specific accommodations and modifications for all populations: https://docs.google.com/spreadsheets/d/1ZSDsCUamViCaBpr1lPOB7FJEC-jx4KnDjZzegIUKeMg/edit?usp=sharing