

Ohio Standards

Science Inquiry and Application:

1. Identify questions that can be answered through scientific investigations:
 - a. Design and conduct a scientific investigation using proper laboratory safety techniques.
 - b. Use appropriate mathematics, tools and techniques to gather data and information
 - c. Analyze and interpret data
 - d. Develop descriptions, models, explanations and predications
 - e. Think critically and logically to connect evidence and explanations
 - f. Communicate scientific procedures and explanations.

CTE Standards:

Agricultural and Environmental Systems Career Field

Science & Technology of Food

Subject Code: 011010

Strand 7. Food Science

Learners apply principles of biology, chemistry and physics to the research, development, production, processing and distribution of food products meeting quality assurance standards in a system that is safe and secure.

Outcome: 7.1. The Science of Food

Differentiate the structures, functions and sources of basic functional ingredients and the roles they play in the development and manufacturing of food products for human nutrition.

Outcome: 7.5. Food Product Development

Apply principles of nutrition and human behavior to create a new food prototype that meets a specific dietary need or demand for consumption, design packaging and seek label approval.

Competencies

- 7.5.1. Conduct a sensory evaluation of food products.
- 7.5.2. Identify consumer preferences, trends and opportunities affecting food product development.
- 7.5.4. Calculate nutrient values, serving sizes and nutrient variability for a food product.
- 7.5.6. Develop a food product package and label according to industry standards.
- 7.5.7. Estimate the shelf life and potential changes in attributes over time.