

Nutrition Through the Life Cycle

Media Type: Microsoft® PowerPoint® Presentation

Duration: 63 slides

Goal: To understand the various nutritional requirements needed through each stage of the life cycle.

Description: Did you know in each stage of life our bodies need different amounts of the six essential nutrients? With this interactive presentation students will learn the states of life and the importance of nutrition in each stage. They will go step by step through the nutritional needs of infants to childhood, middle childhood to adolescent, young adult to middle adult and old age.

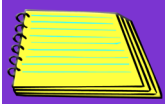
Objectives:

1. To learn the six essential nutrients needed during infancy, childhood, adolescence and adult life.
2. To identify specific nutritional requirements and concerns for each stage of the life cycle.

Horizontal Alignment

Core-Subject Area	Foundation Concept	Basic Understanding
Math	<i>Math</i>	<ul style="list-style-type: none">• Real-life applications• Problem solving
Science	<i>Scientific Thinking and Investigating</i>	<ul style="list-style-type: none">• Food safety and sanitation• Temperature control• Equation development and solution• Physical and chemical reactions• Analytical skills• Collecting data• Evaluating conclusions

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Lesson Plan

Student and Teacher Notes are available to print in outline format. You can access these documents under the “Printable Resources” section. If student licenses have been purchased, an interactive version of the Student Notes is available in the “Interactive Activities” section. If printing the full PowerPoint® is desired, you may download the file and print the handouts as needed.

Class 1: Ask students how nutritional needs vary for individuals throughout their life. Discuss student opinions on the different nutritional needs for men and women. Distribute the *Nutrition Through the Life Cycle Vocabulary Handout*. Show slides 1 to 16 of the *Nutrition Through the Life Cycle* presentation. Instruct students to complete the *Nutritional Needs and Concerns Activity*.



Slides
1-16

Class 2: Show slides 17 to 24 of the *Nutrition Through the Life Cycle* presentation. Remind students to use the *Vocabulary Handout*. Have the students complete the *Baby Formula Activity*. Provide students instructions to start the *Toddler Meals Project* which is due on Class 6.



Slides
17-24

Class 3: Show slides 25 to 35 of the *Nutrition Through the Life Cycle* presentation. Remind students to use the *Vocabulary Handout*. Assign the *Cafeteria Food Project* which is due on Class 7.



Slides
25-35

Class 4: Review the material covered in the previous class. Show slides 36 to 49 of the *Nutrition Through the Life Cycle* presentation. Remind students to use the *Vocabulary Handout*. Instruct students to complete the *Compare & Contrast Activity*.



Slides
36-49

Class 5: Review the material covered in the previous class. Show slides 50 to 63 of the *Nutrition Through the Life Cycle* presentation. Remind students to use the *Vocabulary Handout*. Instruct students to start the *Elderly Brochure Project* which is due on Class 7.



Slides
50-63

Class 6: As a review, begin class with the *Nutrition Through the Life Cycle Word Search*. Afterward, administer the

Nutrition Through the Life Cycle Final Assessment. Have students turn in the *Toddler Meal Project*. Allow students the remainder of class to work on their *Projects*.

Class 7: Have the students complete the *Cafeteria Food and Elderly Brochure Projects*.

Class 8: Discuss nutritional requirements for people with specific needs, such as women who are pregnant or adults who are diabetic. Distribute the *Adulthood Scenario Activity* for students to complete by the end of class.



Lesson Links

ChooseMyPlate.gov

- <http://www.choosemyplate.gov>

Nutrition.gov

- <http://www.nutrition.gov>



Career & Technical Student Organizations

FCCLA

- Culinary Arts
- Food Innovations

FFA

- Agricultural Communications
- Food Science and Technology



Career Connections

Using the *Career Connections Activity*, allow students to explore the various careers associated with this lesson. See the *Activity* for more details. *If student licenses have been purchased:* Students will select the interviews to watch based on your directions. *If only a teacher license is purchased:* Show students all the career interviews and instruct them to only complete the interview form for the required number of interviews.

- iCEV50983, Gary Taubes, Author, Co-founder of Nutrition Science Initiative
- iCEV50910, Eric Hentges, Ph.D., Executive Director, USDA Center for Nutrition Policy & Promotion
- iCEV50538, Kerri Mikulik, Academic Advisor, Nutrition & Food Science, Texas A&M University

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Lab Activities

Nutritional Needs and Concerns

Directions:

Pass out the *Nutritional Needs and Concerns* worksheet. Have students complete the chart by listing the nutritional needs of the different age groups listed. When the students are finished, discuss what the students wrote, and create a master list based on their findings.

Compare & Contrast

Directions:

Bring in examples of foods found eaten during different stages of life. For instance, you could bring baby food, toddler food, peanut butter, and meat products. Have the students compare and contrast the information provided on the nutrition labels and discuss why certain foods have different nutritional values than others.

Baby Formula

Directions:

Compare the nutritional values and content of at least five different baby formulas. Develop a chart or graphic organizer which illustrates the most nutritional source of each vitamin or mineral. For example, which of the formula contains the most vitamin B? Breast milk may also be included.

Adulthood Scenario

Directions:

Lead a class discussion regarding special nutritional requirements for certain adults. For example, adults who are diabetic or women who are pregnant. Using the Internet, library or any other available resources, students will fill in the table provided by researching specific nutritional requirements for those with specific needs.



Projects

Toddler Meals

Directions:

Create a meal calendar for a young toddler. Include a list of foods, vitamins and minerals needed for one week. The calendar should consist of at least three meals and one snack for each day.

Cafeteria Food

Directions:

Create a cafeteria food list for one week. The list must include options for a main cafeteria line, as well as a snack or ala carte line, such as a soup and salad bar.

Elderly Brochure

Directions:

Create a brochure about healthy eating habits and practices for adults over the age of 65. The brochure must include the basic nutritional needs of adults over the age of 65, an example of a day's worth of meals fitting these guidelines, websites listing healthy eating tips, images, etc.