

**Alabama Department of Public Health
Mother's Milk Education Package for Grades K-12**

Level: 3

Adapted from New York State Department of Health

BABY'S FIRST FOOD

LEARNING OBJECTIVE FOR LEVEL 3

The student will explain what mammals are, and know that they feed their newborn with milk from their body.

SCIENCE CONTENT STANDARDS:

8. Identify how organisms are classified in the Animalia and Plantae kingdoms.
13. Describe ways to sustain natural resources, including recycling, reusing, conserving and protecting the environment.
 - Recognizing the impact of society on human health and the environment

HEALTH CONTENT STANDARDS:

2. Identify sources of health-related information and services.
3. Compare a variety of health-related advertisements regarding "truth in advertising".

SOCIAL STUDIES CONTENT STANDARD:

6. Explaining different viewpoints on contemporary issues at the local, state, national, and international levels

Using BABY'S FIRST FOOD

In this unit, students begin to identify mammals, and the characteristics they have in common. Mammals, including humans, produce milk as a first food source for their newborns. As the mammal matures, it needs different foods in increased amounts in addition to milk.

In Lessons 1 and 2, students review animal classification (reptiles, birds, etc.) and begin to focus on the characteristics of mammals. Through observation and discussion, they learn about and record the feeding behaviors of a baby mammal.

Lesson 3 continues to discuss mammals, specifically human babies, and the foods they need for health and well being during their first year of life.

Resources for BABY'S FIRST FOOD

Jeremy Isn't Hungry, Barbara Williams. New York: E.P. Dutton, 1978.

Eat Up Gemma, Sarah Hayes, Lothrop, 1988.

Mammals of the North American, Adrian Forsyth, Camden House, 1985.

Mammals, Donald Hoffmeister & Herbert Zim, Golden Books, 1987.

What Do You Call a Baby Rhino: and other baby mammals, Emma Nathan, Hardcover, 1999.

Before you start:

By third grade, students already know there are many, many kinds of animals. They are also beginning to identify classifications and animals within those groups, (reptiles-lizards, snakes or birds-swans, ducks, etc.). This unit specifically addresses the mammal and the way the newborn mammal is fed. By having students look at and record the feeding, growth and development of a mammal they will begin to see how complete the milk diet of a newborn is. This unit may best be taught as part of an in-depth unit on mammals, or included in a lesson on infant feeding, or childcare.

Lesson 1 M IS FOR Mammal's MILK

Concept: Mammals are warm-blooded animals whose offspring are fed with milk secreted by female mammary glands.

Vocabulary Words

offspring: refers to the babies of humans and animals.

vertebrate: a large group of animals that have a spinal column.

mammary: relates to the milk-secreting glands in mammals.

Advance Preparation

- Gather books/pictures of animals with their young.
- Infant growth chart (pediatrician can provide these).
- Copy blank growth chart for recording classroom observation.

ACTIVITIES

Review classifications of animals, i.e. reptiles, birds, mammals, etc.

- Write the definition of mammal on the board or newsprint for students to read.
- "Mammal: A large class of warm-blooded, usually hairy vertebrates whose offspring are fed with milk secreted by the female mammary glands."
- Read aloud each piece of the definition and underline key terms to be discussed.
- Spend time discussing with students key terms and clarifying characteristics of mammals.

Evaluation

When students understand the definition, brainstorm with class different types of mammals. Use the following example of a checklist on the board as each animal is named.

Subject	Warm Blooded	Usually Hairy	Vertebrate	Fed with Mother's Milk	Mammal
Dog	✓	✓	✓	✓	yes
Pig	✓	✓	✓	✓	yes
Fish					no
Gerbil	✓	✓	✓	✓	yes
(Others may include: baboon, goat, cat, human, cow, rabbit, whale.)					

Lesson 2 WHAT IS MOTHER'S MILK?

Concept: All mammals, including humans, produce milk as a complete first food for their newborn.

Activities:

Ask & Discuss:

- How many students have a pet that is a mammal?
- Call on students to tell what kind of pet they have and have class decide if it is a mammal or not (help by referring back to definition on the board).
- How many have had pets that have had babies (kittens, puppies)?
- Remember how tiny they were when they were born?
- How did your cat/dog take care of new kitten/puppy?
 - Kept it warm
 - curled up close, found warm dry spot.
 - Protected it from harm
 - bark, snarl, and bite anyone coming near.
 - Fed it
 - fed with milk from mother.

Observation

Have students observe a mammal with new offspring. Many classrooms will already have mascots, i.e., mice, rats, rabbits, gerbils, etc. If not, have child bring pet from home or visit a farm or zoo. Using [worksheet Mammal Observations](#), record the activities of the nursing gerbil, hamster, etc. This can be done individually or as a group project.

- Using a blank chart and an infant growth chart, have students record and answer the following:
 1. Look at a human infant growth chart. How long does it take for an average infant to double its birth weight?
 2. Chart the weight of a mammal you observed (or ask veterinarian or farmer for information). How long did it take for the mammal you observed to double its birth weight?
 3. Did the mammal you observed take a longer or shorter amount of time to double its weight? Why do you think this happens?
- Using [worksheet Mammal Word Find](#), have students circle names of animals that are mammals. Words can be up, down, diagonal or backwards.

Evaluation

Have students draw a picture of an imaginary mammal and write a descriptive paragraph about it. Be sure to keep in mind the definition of a mammal discussed in this lesson -- warm blooded, hairy, etc. Their paragraph should include the habits of the mammal, environment, where it lives, and how it cares for its young.

Lessons 3 FOODS TO GROW ON

Concept: Like all mammal babies, human infants need special foods to help them grow.

Vocabulary Words

breastfed: babies suck on breasts to receive breast milk.

nutrients: substances in food needed to keep us alive and healthy.

Advance Preparation

- Make copies of "My Feeding History" Worksheet for each child. Bring in old magazines (Parents, Good Housekeeping, etc.) for cutting up.
- Borrow copy of "Jeremy Isn't Hungry" by Barbara Williams, or similar book from library.

ACTIVITIES

Explain and ask:

- Mother's milk is the first food source for newborn mammals. As the animal matures, it needs additional foods in greater amounts.
- The following mammals all drink their mother's milk as a baby. What other foods do they eat as they get older?
 - Cow (grass)
 - Rabbit (carrots, lettuce)
 - Horse (hay)
 - Lion (smaller animals/meats)
 - Dog (dog food)
 - Elephant (grass/leaves)
 - Humans (baby food)
- Invite a zookeeper, farmer, or veterinarian to speak to the class about the kinds of foods animals eat. Have him/her bring in samples if possible for students to look at, feel, smell, and taste.
- Human infants also drink their mother's milk. Mother's milk has all the nutrients the baby needs during the first months of life. Like other mammals, as the newborn gets older, it begins to need some additional foods.
- In addition to mother's milk or formula, what other foods do babies eat?
 - infant cereal (about 4-6 months of age)
 - juice, fruit, cooked vegetables (about 5-8 months of age)
 - meat, egg yolk (about 8-10 months of age)
 - "table foods" (10-12 months of age)
- It is important for a baby to only eat foods that are right for him/her at the right age.
- Think about the foods you eat for lunch (sandwiches, pretzel, apple). Why would it be difficult and even dangerous for a baby to eat those foods?
- Chart food needs for a newborn to 1 year old. Draw a time line on newsprint or black board. Have students complete the following:
 - a. Color red the area on the time line where the baby would only be drinking breast milk or formula (birth to 4 months).
 - b. Place a star about the time the baby could begin eating infant cereal (4 months).
 - c. Put an X on the month the baby would probably start on juices, vegetables and fruits (6 months).
- Have students take home worksheet "My Feeding History" to be filled out with help from a parent, relative or someone who knew them as a baby.
- Follow-up "My Feeding History" by making a pie graph of the number of students breastfed vs. bottle-fed. Make another showing favorite baby foods.

- Have students bring in pictures of themselves as infants eating (i.e. first solid food, first birthday cake, etc.). Make a bulletin board display of the pictures "Our First Foods".
- Read, "Jeremy Isn't Hungry" by Barbara Williams or another story about feeding babies.
- Cut out pictures from magazines of babies eating and drinking. Make a collage of the pictures. Have students look at the pictures and food the baby is eating, and from that information, guess the baby's age.

Evaluation

Have students draw a picture of the optimal feeding for a baby at ages one month, six months and one year.

Mammal Observations

Name: _____

Type of mammal: _____

Number of babies: _____

How do the babies stay warm?

How do the parents protect the babies from harm?

What do the babies eat?

What do the babies do?

Mammal Word find

Name: _____

CAT

COW

ZEBRA

DOG

HORSE

CAMEL

HAMSTER

GOAT

LION

N N B C E H I L H A M S T E R
O A S X F U T E V C M B T J I
I D T B K O L H F D C B I R D
L O K Y G E C F G K O R C N T
E C E W X G Y U O K T G W A A
B M A B D A Y U I B T K O N L
A W B M E Q C A T O P G L N K
O P C R E D E Y V N M I Y M E
I I P M U L B X O S W L I A R
H X W L M Y O R N G F E C I W
W O C N E C R E I L A S O F W
P T R S S C Y V J K J T W I K
N E G S C N A C H Y N N U S W
Q A Z X E H T V Y J M U I H T
P L M K Z E B R A L R E S B K

"My Feeding History"

Name: _____

Directions:

Take this worksheet and interview someone with a young child, like a friend, relative or neighbor.

1. When was the child born?
2. When did s/he begin eating?
3. Was s/he nursed or bottle-fed?
4. For how long was s/he nursed or bottle-fed?
5. What was his/her first solid food?
6. How did s/he react when s/he first tasted it?
7. What was his/her favorite food as a baby?