Animal Health & Nutrition

Grade Level

Grades 5

Objective

This activity is designed to start your at-home student(s) in recognizing themselves as scientists and in thinking critically about problem-solving. The goal is to teach concepts through discovery and to encourage using scientific thought processes. Feel free to adapt the lessons provided to better suit your students' abilities. Take these ideas, make them your own, and your students will have a greater chance of success.

Background Information

The Zoo has a responsibility to make sure their animals stay healthy. The Zoo provides excellent care through the food the animals are fed, the items they're given to enrich their daily lives, the training the animals do with their keepers, and the veterinary care they receive.

Eating right is just as important for animals as it is humans. The right foods with the right nutrients help bodies grow, be active, and function properly. The Zoo feeds over 3,000 animals representing 600 species, each with a unique diet! Diets are prepared using the freshest and highest-quality ingredients – the same you get in a restaurant! A team of animal keepers prepare the food daily and deliver it to the different areas of the Zoo. Their diets are monitored very closely and as animals grow and get older, the veterinary team will make suggestions on what to change to address their changing bodies.

- Link to review animal information sheets which include their Zoo diets – https://resourcelibrary.clemetzoo.com/Animal/Details

Procedure

1. Discuss how zoos care for animals with your at-home student. Discuss how their basic needs (food, water, shelter, space) are met.
2. When it comes to food, explain that different animal bodies have different requirements for staying healthy. Carnivores are animals that eat primarily meat, herbivores are

animals that eat primarily plants, and omnivores are animals that eat both plants and animals.

3. Review several animal information sheets from the Zoo's Online Resource Library. Discuss what those animals eat at the Zoo. Do all of the animals need the same type of food? Would a lion prefer to eat what an orangutan eats? Here is a small sample to get you started:
    - Orangutan – primarily fruit and vegetation, some insects, and maybe some small amount of meat
    - Koala – eucalyptus
    - Peregrine falcon – birds and small mammals
    - Flamingo – algae and small invertebrates that live in the water
    - Tree frog – insects
    - Snow leopard – meat (specifically blue sheep, marmots, ibex, musk deer, pika, markhor, hare, and birds)
    - Ball python – small mammals
    - Sea lion – fish and octopus
4. Ask what type of food humans need to stay healthy. Are humans carnivores, herbivores, or omnivores? Humans are omnivores – our bodies can survive on both plants and animals.
5. Explain that some animals survive by only eating one type of food. For example, koalas will only eat eucalyptus for their entire life. Human bodies require a lot of different types of food in order to stay healthy. This is because different types of food have different types of nutrients. For instance, milk is high in calcium, which we need to keep our bones healthy. Meat has a lot of different types of proteins which are necessary to help us grow. Fruits and vegetables have lots of different vitamins that help our bodies to work properly.
6. Explain that for the next day, your student will be keeping a food journal (you could extend this for multiple days, if you wish). In this journal your student should keep track of everything they eat during the day.
7. After they have recorded what they ate, help your student search online to see what types of nutrients are in each of the foods they ate. Have the student choose one nutrient and write a few sentences in their food journal as to how that nutrient helps their body. See the attached worksheet below.

Standards

Ohio Academic Content Standards
Grade 5 Life Science Topic: Interconnections Within Ecosystems All of the processes that take place within organisms require energy.

My Food Journal

What I ate:	One nutrient found in this food:	How it helps my body:
Example: 4 baby carrots	*Vitamin A*	*Vitamin A is important for keeping my eyes healthy.*

What I ate:	One nutrient found in this food:	How it helps my body: